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Technology and Theology, as Artificial Intelligence Comes of Age

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Abstract

This article addresses the theological implications of Artificial Intelligence (AI) within the broader Catholic theology of technology. The emergence of AI challenges the traditional theological accounts of technicity and human action and demands a renewed reflection capable of engaging current technological developments and transformations. The study first examines artificial intelligence through the point of view of postphenomenology, highlighting the mediating role of technology in human perception, agency, and world-formation. It then revisits the theological concept of the *imago Dei*, central to Christian reflections on human activity and technology, by placing in dialogue different theological interpretations of the image of God and their anthropological implications. Offering a brief bibliographic and interdisciplinary review, the article analyses how current debates on AI and the *imago Dei* reshape questions concerning human uniqueness, creativity, embodiment, and moral responsibility. A renewed theological interpretation of the image of God, integrated with contemporary philosophies of technology, offers valuable insights into the nature of human action and human nature within technologically mediated contexts. The article concludes that Catholic theology can contribute a distinctive and critically constructive perspective to current discussions on artificial intelligence by articulating a more dynamic and relational understanding of humanity, human activity and technological mediation.

Keywords: artificial intelligence; Magnifica Humanitas; theology of technology

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1. Introduction: Between Weak and Strong AI

Artificial Intelligence in recent months has been invading and claiming its place in many cabinet meetings and governance summits both in the First World (Dudley 2026; Scroxton 2026; Le Figaro and AFP 2026; Permanent Mission of France to the United Nations 2026) and elsewhere (African Business 2026; Fisher Phillips 2025; Campos Ríos 2025). The emergence of AI—particularly the long-awaited Generative AI—has inspired many fields of research, theology included, to re-examine concepts that were more or less taken for granted. The relationship between theology and technology demands urgent attention.

On 25 May 2026, Pope Leo XIV (2026a) published his first encyclical, *Magnifica Humanitas* (MH), stating explicitly that he intended to "add my own voice to this living tradition" that is "the Social Doctrine of the Church": "a legacy of wisdom, … principles for thought, criteria for discernment and judgment, and concrete guidelines for action" (MH 3). Leo addresses the impact of Artificial Intelligence on various dimensions of human existence. This papal document joins other recent statements within the Catholic Church that have

been gradually engaging the world around AI: stands by Pope Francis (22 January 2018 [Davos]; 28 February 2020 [Rome Call for AI Ethics]; 14 January 2024 [Davos]; 24 January 2024 [58th World Day of Social Communications]; 14 June 2024 [G7summit]) and *Antiqua et Nova* by the Dicastery for the Doctrine of the Faith and Dicastery for Culture and Education (2025).

This is a clear demonstration of the importance Catholic theology and the Catholic Church at large attribute to the current stage AI has already gained and claimed in many fields. The theological literature on AI touches on the Theological Anthropology (key to MH), the Ethics of Technology (MH's primary concern), the Philosophy of Mind (pre- and post-AI), the Fundamental Theology (the crossroads between reason, faith and human activity), and the Church's Social Doctrine (see MH 3, 17, 28ff).

Consequently the debate can no longer be limited to a moral evaluation of certain issues in technology: it should rather address the core dimensions of Christian self-understanding (intelligence, freedom, conscience, moral agency), human existence coupled with equity and justice (corporeality, relationality, creativity, finitude, and equal access to economic, labor, and educational resources), as well as a unique access to the Divine in person (salvation, the person in God's image and likeness, and the mediation of the holy). The emergence of generative AI systems capable of producing language, suggesting images, creating poetry and music, or suggesting seemingly autonomous decisions has underscored and intensified the distinction of the difference between what is truly human and what seems to be human (the anthropological, moral, and potentially theological status of intelligent actions produced by machines).

A preliminary review of recent publications on the above reveals five main themes:

i. An ontological clarification of AI (AI Research Group for the Centre for Digital Culture of the Dicastery for Culture and Education of the Holy See 2024, pp. 17–23, 65–105; AI Research Group for the Centre for Digital Culture of the Dicastery for Culture and Education of the Holy See 2025, pp. 1–12, 47–62; Lambert 2025; Jiménez-Rodríguez 2026).
ii. The specificity of the human person (AI Research Group for the Centre for Digital Culture of the Dicastery for Culture and Education of the Holy See 2024, pp. 43–64, 106–30; AI Research Group for the Centre for Digital Culture of the Dicastery for Culture and Education of the Holy See 2025, pp. 14–29, 30–46, 47–60; Biancu 2025; Palazzani 2025).
iii. The imago Dei, divine grace and salvation (Lumbreras 2017, 2022; Dorobantu 2022; Jiménez-Rodríguez 2026; Sols 2026; Kuznetsov 2026).
iv. A critique of certain idolatrous, transhumanist, and technocratic peculiarities (Sols 2026; AI Research Group for the Centre for Digital Culture of the Dicastery for Culture and Education of the Holy See 2024, pp. 24–40, 147–253; AI Research Group for the Centre for Digital Culture of the Dicastery for Culture and Education of the Holy See 2025, pp. 63–123, 133–87; Magnin 2025; Biancu 2025)
v. The development of social and ecological ethics, as well as bioethics, that keep the common good in focus (AI Research Group for the Centre for Digital Culture of the Dicastery for Culture and Education of the Holy See 2024, pp. 24–40, 147–253; AI Research Group for the Centre for Digital Culture of the Dicastery for Culture and Education of the Holy See 2025, pp. 63–123, 133–87; Lambert 2025; Magnin 2025; Palazzani 2025).

For centuries, the Christian tradition has maintained that human beings are not restricted by the boundaries of their own nature; rather, they are called to self-transcendence, not through some escape from reality or a contempt for their limitations, but through their fulfillment in love (MH 127).

Once "digitalization, artificial intelligence (AI) and robotics are" "rapidly and profoundly" "transforming our world" (MH 4), Leo XIV discerns a call to clarify "principles for thought, criteria for discernment and judgment, and concrete guidelines for action" (MH 3). Such a powerful technology and such an accelerated rhythm of change at many a level require multifaceted evaluations, that such technology does not dehumanize humanity (transhumanism) and/or subjugate it (posthumanism).

Throughout the recent encyclical, Leo XIV develops a twofold train of thought as regards AI: an ethical evaluation of the social impact of AI, which he centers on the concept of technocracy (MH 92–96); and the other, more theological, in which he addresses several anthropological queries that can lead toward a renewed theology of technology. This paper will follow the second line of inquiry suggested by Leo XIV in MH, reflecting on the theology of technology in light of AI.

The Catholic Church laid the foundations for a theology of technology in Part 1, Chapter III, of *Gaudium et Spes* (GS), the Pastoral Constitution of the Second Vatican Council (1965). This document, a first-ever in its kind, situates technology within the context of human action and creativity, two dimensions of human existence inextricably linked to the human status of *imago Dei* (God's image). Recalling Benedict of Nursia's *Ora et Labora*, Leo XIV understands the "works" and activity of humanity "created in the image of the Creator" as "in some way" an extension of God's (MH 148). With these words, the Pope invites 21st-century Christian and Jewish theology to uphold the concept of *imago Dei* in close conjunction with AI technology, so that it may serve as a fundamental guideline to the many interactions between AI and the human subject.

On the other hand, studies in the philosophy of AI do not offer researchers a uniform picture (Amo Usanos 2026, pp. 94–104; Amo Usanos and Lumbreras Sancho 2026, pp. 70–75). The Pope himself acknowledges that it is difficult to have a clear concept of what the nature of AI can be (MH 98). Although Leo XIV seems to engage with a concept of AI that imitates human intelligence (HM 99), he refrains from equating the two; he recognizes that, in the collective imagination of many (especially in posthumanism), technology ideologically can and will surpass human capabilities (MH 116) at least in theory. That means: the idea of a strong AI model is still very much with us.

The theological literature—within which this current study situates itself—continues to follow the distinction that John R. Searle (Searle 1980) established between weak AI and strong AI, though at first sight it may appear outdated. It was further developed in recent studies (Bory et al. 2025; Martinez 2019). As Ximian Xu explains, "weak AI" as "a powerful tool" performs "certain functions of the mind in limited domains", as he equates "strong AI" with Artificial General Intelligence (AGI). The latter's goal is "human-level intelligence, fully reproducing human intelligence and having human cognitive ability." It is called 'general', as it includes the possibility of applying the knowledge learned in one field to any other, completely different field.

Beyond AGI, Xu goes on to postulate a third possible "artificial superintelligence" (ASI). Xu understands his own research as a way in which "the theological idea of the *imago Dei* presents us with an ontological tool for addressing issues surrounding the interaction between real-life AI and humans" (Xu 2025, pp. 19–20).

Examining the impact AI has on human uniqueness, this study—counting on the concepts of *imago Dei* and human activity—will first address three basic concepts: (a) the relationship between theology and technology, (b) the current state of research on the biblical context of *imago Dei* (a key concept in the more than bi-millennial Jewish and Christian traditions; for further analysis, see Umar 2004), and (c) a reflection on the nature of AI as technology (counting on the advances of post-phenomenology). Finally, in light of the first two sections and the concepts as outlined, it will attempt a reflection on the relationship

between the concept of *imago Dei* and artificial intelligence. This last section intends to lay the groundwork for a theology of technology, in the light of Leo XIV's direction, as it tries to engage fully with AI in all its veracity and actuality.

2. Technology and Theology

In theology and philosophy, an interest and a concern regarding technology emerged at the beginning of the 20th century with the technological developments that came to be during World War I. Theologians in the Evangelical and the Catholic traditions, as well as the Magisterium of the Catholic Church, quickly took up the issue, trying to understand technology and the 'new way of existence' it was ushering in. In Reformation theology, the reflections of Barth, Bultmann, and Bonhoeffer stand out, while Guardini was the first-ever Catholic theologian to broach the topic.

2.1. Technology and 20th-Century Theologians

Barth, in his *Ethics of the Doctrine of Creation* and in *The Christian Life*, starts from the sovereignty of God and from the logic the Kingdom demands: in this context, Barth interprets technology in the light of the doctrine of sin and of what he refers to as *Gewalten* (or powers). For Barth, technology is one of the *Herrenlose Gewalten* (or 'masterless powers') that acquire a quasi-objective autonomy and impose themselves on humanity. Consequently, technology cannot be seen as something neutral, as it can augment and intensify the human capacity to take a stand against its Lord. Barth's conclusion is theological: regulating technology ethically can never be enough; one must discern its underlying soteriological repercussions (Trowitzsch 2002).

Bultmann, on the other hand, analyzes technology through his hermeneutical–existential point of view: one approaches the issue of technology as one comprehends reality. Bultmann shows that the scientific–technical worldview reduces reality to what is objectifiable and calculable, neglecting the ontology of meaning, which can lead to a crisis of faith. Bultmann is not turning scientific–technical results into a theological problem: what is problematic is their claim to handle and deal with the question of meaning: "Belief never has to struggle against the findings of natural science, but solely against its possible claims, as a *Weltanschauung*, to understand the purpose of being" (Bultmann 1955, pp. 17–18).

Alternatively, Bonhoeffer reflects on technology from the perspective of the doctrine of creation and from that of Christ's lordship over the world. Consequently, he interprets modern technology as a historically new phenomenon that has ceased to be at the service of humanity and has instead converted itself into a force of dominion and control. Technology turns back on itself as a 'tool' and assumes characteristics that are quasi-redemptive. From there comes Bonhoeffer's forceful statement: "The benefits of technology pale beside its demonic powers" (Bonhoeffer 2005, p. 116).

Within Catholic theology, Guardini addresses the issue from an anthropological perspective, as he works his way starting from a Catholic *Weltanschauung*. In 1925, he wrote his Ninth Letter from Lake Como, entitled "Technology and Man" (Guardini 1994). For Guardini, in the brutal First World War seven years earlier, humanity had witnessed new capabilities of technology, never seen before, placed at the service of incommensurable destruction. Humans, according to Guardini, had to reflect on technology and devise ways to place it fully at their service; only in that way could humanity ensure that technology would neither dominate nor, still less, destroy humanity (Arroyo Martínez Fabre 2024, pp. 104–10).

2.2. Technology and 20th Century Catholic Magisterium

The Magisterium of the Catholic Church addressed the theology of technology during the last three sessions of the Second Vatican Council (1963–1965) as it dealt with the Church's place and role in the 'modern' world (this has been explored in greater detail by Tanzella-Nitti 2015). Chapter III in Part I of *Gaudium et Spes* carries the unique key to the Council's view on technology as it deals with human activity within the world. Unlike Evangelical Theology, the Catholic perspective on technology proceeds directly from the Christian understanding of the human person.

In *Gaudium et Spes*, Chapter III follows the same creation–redemption structure that runs through the other chapters of Part I. The Chapter understands the human being as God's own creation, made by God in God's own image and likeness. As if the two concepts were some clear logo, these two qualifiers carry an asymptotic orientation toward fulness of life and union with God. This constitutes a humanizing process in which human activity and dominion over creation have a unique role to play (GS 34) (Steiner 2025, p. 83).

However, to bring to completion such a dominion over creation, the human being resorts to technological progress. The ethical criterion for this progress coincides fully with the fulfillment of the call to be and live as the one and only creature made in the image of God:

> "Hence, the norm of human activity is this: that in accord with the divine plan and will, it harmonize with the genuine good of the human race, and that it allow men as individuals and as members of society to pursue their total vocation and fulfill it [the process of living and acting in God's likeness]" (GS 35).

Conciliar theology on technology rests on two major supports. The first concerns the nature of technology, while the second deals with technology's goal.

The Council speaks of technology as a means by which man "has extended his mastery over nearly the whole of nature and continues to do so" (GS 33). In addition, the Council positively looks on technology as a way to live out God's given mission and uphold God's work in new ways (GS 33). In this way, *Gaudium et spes* frames its theology of technology in a subject–object dialectic characteristic of Modernity. Technology is an object external and extrinsic to the human being: it lies "at hand" (*Vorhandensein*), at humanity's disposal, as Heidegger would say.

The second point is anthropological in nature and unfolds in three stages. In *Gaudium et Spes*, human action is first the means by which the biblical mandate to subdue creation and care for it (*Gen* 1:28 and 2:15) goes into effect: "Thus, by the subjection of all things to man, the name of God would be wonderful in all the earth (cf. Sir. 17:3–10)" (GS 34).

In addition, Besides, "human activity … just as it proceeds from man, so it is ordered toward man. For when a man works, he not only alters things and society, he develops himself as well" (GS 35). Humanity thus fulfills its call to be, and live as, the image and likeness of God through work, following "the basic law of human perfection, … the new command of love" (GS 38).

Thirdly, according to conciliar teaching, "technical advances" are at the service of human progress and perfection (cf. GS 35 and 38). Technology, consequently, is a means through which the *created-creatorcreated creator* fulfills in God's name the biblical mandate to have dominion over nature; at the same time, this implies the development and completion of creation and of the human being (Ruiz de la Peña 1988, p. 223). In the work of creation, the human person collaborates with God as God's image (Herzfeld 2022) through the exercise of dominion over creation, to which technology contributes in a preeminent manner (Jiménez-Rodríguez 2019).

Ultimately, the conciliar reflection on human techno-scientific activity—as Tanzella-Nitti suggests—outlines an anthropology that looks at humanity not just as one amid so

many elements within the cosmos: as the subject of its own activity, humanity is capable of transforming that universe. Technology is not some secondary addition to human history: rather, it expresses humanity's 'ontological structure' as a being created in the image of God and called to exercise dominion responsibly over creation. One could even speak of "active creatureliness" and of a radical dependence on God coupled with authentic operativity within history, as Tanzella-Nitti (2015) argues.

In doing so, Vatican II's understanding of technology establishes a strong link between technology itself and the biblical concept of the *imago Dei*, a position carried on in Leo XIV's encyclical with reference to AI (MH 148): tough refraining from referring to *Gaudium et spes'* Chapter III, the encyclical comprehends the link as the foundation (or the starting point) for any subsequent reflection on technology. Affirming that technology is not alien to human existence (MH 4) and acknowledging its ambivalent nature with reference to the progress of humanity (MH 9), Leo adds that "technological innovation can be, in a certain way, a human form of participation in the divine act of creation" (MH 111). The connection with *Gaudium et spes* 35 and 38 is quite clear. He develops this further when dealing with the nature of work: commenting on John Paul II's *Laborem exercens,* he states: "Created in the image of the Creator, through our works we in some way prolong his" (MH 148).

3. Imago Dei

For some two millennia, Christian Theology has depended upon and worked around *Gen* 1:26–27—as a normative, 'sacred' text—in terms of a foundational 'hypothesis' that continues to sustain Judaism and Christianity. That text represents, together with multiple, ever-changing cultural and linguistic variables during some 2500 years, a unique treasure chest: in that millennial tradition, the *imago Dei* becomes a sort of 'intellectual code', providing accessibility and insight into numinous divine wisdom.

3.1. The Imago Dei Along Millennia

The Church Fathers—from Irenaeus of Lyons through John Damascene—reread the Greek version of the Hebrew text, reinterpreting *Gen* 1:26–27 as the juxtaposition of two distinct concepts, *image* and *likeness*, one that clearly necessitated a καί ('and') to irremediably and irrevocably bind both concepts together into one dynamic, vibrant understanding of an active subject. Accordingly, 21st-century theology must decide whether it continues to go the way of the original Hebrew text (two phrases in apposition) or that of the Greek patristic reading (two components that somehow combine together).

Ever since the formation of the biblical Canon (through Athanasius and Augustine), the teaching Church has consistently espoused the assumption–deduction claim that the process of revelation reached completion with the sub-apostolic generation of believers. Irenaeus, Tertullian and Augustine, as well as the Cappadocians—Basil, Gregory of Nyssa and Gregory Nazianzen—determined and codified the theological content of *image* and *likeness*, advocated and subscribed to during two millennia (Schmidt 2022, p. 52).

Their take held true until 20th-century theology revisited and revamped the two biblical concepts: first, this was conducted within a structuralist (Lévi-Strauss) or a postmodern appraisal (Foucault and Derrida), then through the ethical hermeneutics of suspicion (Ricoeur) or of faith (Buber and Levinas), thirdly in the light of phenomenology (Gadamer and Marion), and lastly as an ontology of Identity and selfhood (Charles Taylor and John Macquarrie). Were it not for the theology of the image as proposed first by Barth and Brunner and later by von Rad, Hefner, and Clines, 20th-century theology could have moved in some other direction. (For further analysis, see Schreiber 1987).

Contemporary research offers various approaches that apply the diverse interpretations of *imago Dei* to technology and to AI, as research works through these same applications.

Noreen Herzfeld distinguishes three different approaches of what constitutes an *imago Dei*: (a) "an individually held property that is a part of our nature, most often associated with reason" (*substantive*—"to be"), (b) the functions humans engage in or are capable of: action and dominion, in the case of the *imago Dei* (*functional*—"to do"), or (c) relations persons set up, elaborate and maintain (*relational*—"to encounter"). Herzfeld concludes, "artificial intelligence is bound to be a disappointment if we look toward it to find the I-Thou relationship that will make us whole" (Herzfeld 2002, pp. 303–11, 313; Campbell and Garner 2016; Bonino 1975). In other words, technology and AI can never be a substitute for human relations: "Substantive interpretations view the image as an individually held property that is a part of our nature … Functionally, humans can be thought of as God's deputies on earth … Barth posits that to be in God's image means to be in relationship, with God or with other humans" (Herzfeld 2022, p. 4).

Marius Dorobantu distinguishes four interpretations of the *imago Dei*: (a) ontological/substantive ("the image of God is a certain quality or set of capacities that reside within humans"), (b) functional ("the *imago Dei* consists of our election by God to represent God in creation by exercising dominion and stewardship over nature"), (c) relational (this "locates the image of God in the relations we establish and maintain with God and with each other"), and (d) eschatological ("the ideal relationship of human beings to God should not be located in the paradisiac past, nor in the present, but instead in the eschatological future") (Dorobantu 2022, pp. 25–27). Vatican II itself links human dignity with human destiny (*Gaudium et Spes* 12).

The first three interpretations—substantive, functional, and relational—coincide in explaining human uniqueness within creation, though they differ as to whether that uniqueness resides in some human quality, in a type of function humans exercise within the world, or in a dynamic, relational construct.

Only the eschatological interpretation sets the two authors apart. The substantive—or ontological—interpretation generally identifies the image of God with mental faculties such as rationality or self-awareness. Common to many Church Fathers and linked to the Aristotelian tradition on human rational capacity, it conceives of the imago Dei as the rational trait inherent in human nature. In line with biblical studies and the recent teaching of the Church (humanity as imago Dei "is capable of knowing and loving his Creator, and was appointed by Him as master of all earthly creatures that he might subdue them and use them to God's glory"(*Gaudium et Spes* 12); "Man becomes the image of God not so much in the moment of solitude as in the moment of communion" (John Paul II 1979); God "created us not only with His word, but also with His hands and His vital breath, almost as if to say that God's whole being was involved in giving life to the human being" (Francis 2016)). Human dignity surpasses its traditional linkage with human rationality, which presupposes a dualistic understanding of humankind; embodiment and relationality uniquely express all that is rational and spiritual in humanity.

Magnifica Humanitas threads therefore the path of human uniqueness: resisting the broad spectrum of dualism and its many forms, Leo XIV centers the Church's outlook on human nature in its immediate relationality both with God, its Creator, and with the created universe within which it experiences and expresses itself. Humanity finds its inspiration in its "embodying God's love in the concrete events of life" (MH 47). AI and its expressions can "imitate language, behavior and analytical skills, or even simulate empathy and understanding, but they do not understand what they produce, for they lack the affective, relational and spiritual perspective through which human beings grow in wisdom"

(MH 99); that explains why "the promises of transhumanism and some posthumanist currents of thought … seek an enhanced and almost disembodied humanity" (MH 232).

Pre-Vatican II theology—built as it was on a philosophical rather than a biblical understanding of the imago Dei—has been overly tied to an 'ontology of being', to refer back to Dorobantu's terminology. While at first sight the functional and the relational seem to hold better in the context of AI, the three still run the risk of "another kind of 'theology of the gaps'" (Dorobantu 2022, p. 23), which believes that such a theology cannot weather "the emergence of strong AI". An eschatological interpretation, moving beyond any ontology of existence and inner-worldly relationality, proposes a vocation that moves beyond earthly altercations toward future fulfillment in God.

3.2. Gen 1:26–27—Reading Genesis in the Light of AI

Around the time of the Babylonian captivity, when *Gen* 1:1–2:4a was being restructured as one, closely knit, literary unit, 21st-century linguistic know-how, skilled philological analysis, and etymological inquiry were then unavailable (See Levin 2022, pp. 74–98). Combining two substantives and placing them side by side, the redactor of *Gen* 1 brought many things into play at one go, especially as image and likeness in *Gen* 1:26 are each accompanied by a particular and peculiar preposition that hastily and abruptly reconfigures the original, abstract meaning of both. That concise text opened up—and still continues to—a plethora of possible meaningful interactions.

If, humanly speaking, this can account for a great mind at work, it calls readers/believers to measure themselves with a literary expression—both cultural and religious—that continues to evade easy comprehension. It even beckons 21st-century theology to contemplate further both that literary expression and, with it, the very reality it sketches and portrays: ultimately, it is a perception that surpasses facile comprehension.

As classical Greek and Roman philosophers grappled with what later thinkers would consider a fallacy—post hoc*post hoc ergo propter hoc*—they understood that they could never simply assign causality to a mere succession in timing. *Gen* 1:26–27 constitutes a double verbal image or pictorial description of the human being (more than quadruple, when adding the two prepositions); it can be interpreted both as a clear conceptual outline and as a clear-cut definition. Image and likeness offer a mental breakdown or intellectual outline of what the Creator calls into existence and 'puts into' being. This cannot refer to a mere "ontological tool" (mind or soul), nor cannot it be reduced to a simple metaphysical affirmation of dependence on the Creator. There is nothing static. Humanity's role is at once dependent and autonomous, created and creative.

The rendering of *Gen* 1:26—bə·ṣal·mê·nū and kiḏ ·mū· ṯê·nū—is often simplified by reading "likeness" (dĕmût) as an explanation of "image" (tselem), a tendency reinforced by the Greek tradition (eikōn–homoiōsis) (Alexander and Baker 2003, p. 442). However, philological evidence suggests a more nuanced relationship. *Tselem*, a masculine noun possibly linked to representation or concreteness, derives from a root not attested in Hebrew (Botterweck et al. 2012, p. 397), while dĕmût, feminine and likely an Aramaic loanword, appears mainly in exilic texts and evolves semantically from "copy" toward a weaker, analogical "appearance" (Botterweck et al. 2012, p. 257). Rather than redundancy, the pair reflects a semantic gradation and conceptual tension.

Both terms, possibly borrowed, indicate the difficulty of articulating humanity's unique status within creation in the culture of that time. The expression thus functions less as a precise ontological definition than as an invitation to contemplation. It resists reduction to mere dominion (*Gen* 1:28–30), opening, instead, a relational and dynamic anthropology grounded in the interaction between God and human beings. In this sense, as Dorobantu suggests, the *imago Dei* is not fully located in the past or present but oriented

toward an eschatological future, where human identity unfolds as vocation rather than as some static possession (Dorobantu 2022, p. 27).

Reading *Gen* 1:26–27 through the centuries, theology contemplated God's interaction with humanity (and with creation as a whole); whatever the background they started from, believers (unlike theology) did not attempt any intellectualized reading of the world that encircled them. Referring to the human person as God's *image* and *likeness* was more than either an insight or an oversight: it always was, in truth, an insight or an oversight: it was, in truth, always an exercise in lived faith. *Gen* 1:26 itself goes beyond providing believers with objective definitions of human essence: the latter could and can never be encapsulated in some frame of mind or in someannot and never can be encapsulated in any frame of mind or school of thought. Otherwise, theology would run the risk ofisk abandoning lived life for a conceptual, top-down assessment.

Were this to happen in conjunction with AI, the latter cannot be held for more than just an occasion for such a choice: it can never justify it. Nor can theology ascribe, in the name of weak and/or strong AI, AGI, or ASI, abandoning human life to sustain a renunciation of lived relationalities and their networks. These constitute the world of the *imago Dei*. Were Christian theology to be true to itself, it would need to shy away from 'objective' definitions of what being in God's image and likeness entails, transcending those very concepts it handles.

Conceptual understanding can only belong to logic and epistemology; the unique aspiration of theology is the lived and life-giving encounter that constitutes both the epistemic and the existential world of the *imago Dei*: past, present, and future combined.

According to Schofer (2006, p. 47), "the idea that humans are in the image of the deity is at the same time anthropological and theological". If theology goes the way of a post hoc (*propter hoc*), the first contribution must necessarily be anthropological as the written text applies human language to a discourse about God the Creator in action; at the same time, that same text affirms a divinely inspired faith in a God at work while bringing about a meaningful universe (on a literary grid of 'seven days'). Through the seven-day week and a creature that defines the action of the Creator, theology cannot encounter two procedures that determine being. If the seven-day creation were to provide with an "ontological tool" or some insight, that insight can only be an open-ended call to 'infinite' networking: past, present and future.

Were the theology of the *imago Dei* to renounce the following two operations—theology as anthropocentric, followed by faith divinely inspired—it could be burying an anthropological and theological heritage for a collection of definitions and formulae. To use Ximian Xu's expression, the *imago hominis* needs to "fall heir to the eccentricity of the *imago dei*" (Xu 2025, pp. 197, 219). It must allow *Gen* 1:26–27 with all its poetic, imaginary, highly insightful and imaginative renditions to point the way forward.

The current theology must, therefore, resist *de*finability, *ex*planation, and *re*duction in adopting any thriving framework of AI, weak or strong. It cannot espouse some glossary or *con*cept that it clips onto the biblical text. Were that to happen, the *signifiant* and the *signifié* of *Gen* 1:26–27—to adopt the unique foundation of French semiotics—would have been both wrecked and/or constrained into some lifeless, 'theological' though cosified perception (just a scientific datum, or some machine fixture). Ted Peters knows well that the *imago Dei* theology supersedes definability: "The *imago Dei* is not a superior quality we as a species possess such as reason, freedom, moral capacity, love, or virtue. Rather, we humans bear the divine image because God has promised us an everlasting relationship in the Kingdom of God […] This relationalist model implies that we cannot rely on an innate human quality to distinguish us from other living creatures or from artificially constructed creatures" (Peters 2025; p. 28).

4. Technology and AI

4.1. AI as Technology: Toward a New Theology of Technology

When Vatican II was celebrated in the sixties, the Digital Revolution was not on anyone's mind: it would hit big a few years later. The novel nature of this technology necessarily invites a theological rethinking of what the Council had said on human action and technology (Casalone et al. 2024, pp. 101–7). In the 2020 address delivered to the 26th General Assembly of the Pontifical Academy for Life, Pope Francis offered several pointers for such new reflections. First, he highlighted the substantial novelty of AI technology.

> "The digital galaxy, and specifically artificial intelligence, is at the very heart of the epochal change we are experiencing. Digital innovation touches every aspect of our lives, both personal and social. It affects our way of understanding the world and ourselves. It is increasingly present in human activity and even in human decisions and is thus altering the way we think and act" (Francis 2020).

The Pope then added a reflection on the anthropological novelty of the technology, capable of transforming the very nature of the human act:

> "A personal act is now the point of convergence between an input that is truly human and an automatic calculus, with the result that it becomes increasingly complicated to understand its object, foresee its effects and define the contribution of each factor. … On the personal level, the digital age is changing our perception of space, of time and of the body" (Francis 2020).

Dealing specifically with AI, the Dicastery for the Doctrine of the Faith and the Dicastery for Culture and Education published, in January 2025, the document *Antiqua et nova*. This document clearly states: "AI should not be seen as an artificial form of human intelligence but as a product of it" (Dicastery for the Doctrine of the Faith and Dicastery for Culture and Education 2025, n.35). Consequently, AI belongs to the realm of technology even though, being more powerful than other technologies, it lies at the very center of the current epochal shift (Dicastery for the Doctrine of the Faith and Dicastery for Culture and Education 2025, n. 4). Nevertheless, it continues to be viewed through the conciliar perspective of the subject–object relationship that contributes to the perfectibility of humanity and creation (Dicastery for the Doctrine of the Faith and Dicastery for Culture and Education 2025, n. 2).

> "Human beings are called to develop their abilities in science and technology, for through them, God is glorified (cf. Sir. 38:6). Thus, 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 he has called it" (Dicastery for the Doctrine of the Faith and Dicastery for Culture and Education 2025, n. 25).

Antiqua et nova follows closely on the statements made by Pope Francis to the Pontifical Academy for Life: the latter had invited a reflection on the anthropological scope of AI. Specifically, if AI transforms human action, then one should first reconsider the subject–object model governing humanity's relationship with AI and, subsequently, following in the wake of conciliar logic, the role AI technology can play in the development of the human being as *imago Dei*.

The most recent encyclical thus addresses the following two issues that are crucial to the theology of technology: its relationship to the development of the human being as the image of God (MH 4, 9, 111, 148) and its task to "provide intelligent support for human activity" (MH 152). On this last point, Leo takes up Pope Francis's stance that AI can be part of our understanding of the world to the extent that it can alter and orient human growth.

In Leo's own words, AI, as "a technology that merely classifies and optimizes what already exists can, however unintentionally, become an obstacle to change and growth" (MH 128). Its results are simply "a form of statistical adaptation based on data and feedback, which can be very effective, but does not imply inner growth" (MH 99). Giving a false impression of objectivity, it merely reflects "the cultural assumptions of those who designed and trained them, with all their strengths and limitations" (MH 100).

Leo XIV espouses the idea that AI technology can be applied to and employed in human existence in a way that can possibly alter their way of thinking and acting. Theology needs to "discern, govern and direct such [technological] power toward the common good" (MH 5).

4.2. AI Seen in Post-Phenomenology as Technology

Phenomenology has engaged with technology almost since the earliest works of Husserl. It has been the best philosophical analysis on the subject as it centered its study on intentionality, the key to the phenomenology of technology. Consciousness is always intentional, the consciousness of something:

> "Projecting itself into—and intentionally participating in—its material environment, human subjectivity discovers itself as intersubjectivity. Our experiences (*Erfahrung[en]*) are, therefore, lived experiences fully placed within the world: lived experiences of something" (García-Moncó 2022, p. 256).

However—and this is precisely where technology comes in—"the bigger portion of intentionality operates and activates itself through the tools by which human beings transform, master, and access reality" (García-Moncó 2022, p. 256). Phenomenology's concern with technology, in other words, starts by looking at technology as a means that can access reality. Stated in another way, technology serves from time to time as the medium through which intention becomes operative, a role through which it acquires an essential place in the development of intentional consciousness. Merleau-Ponty explains it in the following way:

> "Once the stick has become a familiar instrument, the synthesis of one's own body, the world of feelable things recedes and now begins, not at the outer skin of the hand, but at the end of the stick. … The stick is no longer an object perceived by the blind man, but an instrument with which he perceives. It is a bodily auxiliary, an extension of the bodily synthesis" (Merleau-Ponty 2002, pp. 175–76).

In its current state, the so-called post-phenomenology studies "instrumental experiences as the primary paradigm of intersubjective development in humans. Moving away from more subjectivist stances, they link continental thought with elements of American Pragmatism and, in this way, the Lifeworld is articulated experimentally through technology" (García-Moncó 2022, pp. 257–58).

4.2.1. Don Ihde's Classification of Human–Technology Relations

One of its key representatives, Don Ihde, identifies four types of relationships that humans operate through technology: embodiment, hermeneutic, alterity, and background relationships (Ihde 2002; Nørskov 2015). These can also form a continuum (Ihde 1990, p. 197; Nørskov 2015, p. 192).

Embodiment relationships are those in which an experience is mediated through an artifact: this becomes one with the user who operates through the technology (Ihde 1990, pp. 73–75). The technological artifact is not merely a simple object placed between the subject and its object; for post-phenomenology, it transcends the traditional subject–object

(human–technology) relation as the artifactartefact expresses the subject's intentionality. Technology becomes an extension of the body that integrates itself functionally (is embodied) into—though not ontologically (at the level of being)—the subject's bodily system, thereby reconfiguring the subject's intentional experience without replacing it. The result is a reconfiguration of intentionality due to the embodiment of technology.

The *hermeneutic* relation occurs when the artifact is the tool through which the subject accesses and reads reality, once this embodiment relation is established; in other words, the user not only reaches out but reads or interprets what he receives from technology (without the need for direct access to the perceived reality) (Ihde 1990, pp. 92–97). We know certain phenomena through the narration perceived through/received from technology. One must consider two aspects: its non-bodily character and its ties to the intentionality of the subject.

Though itself a technology, AI establishes—unlike other man-made systems—a non-bodily embodiment relation. Drawing inspiration from post-phenomenology, it could be characterized as a partial cognitive embodiment, a *quasi-other* (Ihde 1990, pp. 92–97). In the light of Ihde's reflection, artificial intelligence can be understood as a partial cognitive combination: it constitutes a technological mediation—alterity—that, without becoming one with the subject, functionally integrates itself within certain cognitive operations such as comprehension, classification, and anticipation (Ihde 1990, pp. 98, 100–1). It is experienced as an independent entity with which the human subject can interact. Thereby, it reconfigures the epistemic horizon within which the human agent knows and decides. "Technology here becomes the relatum and not a mere means to access the world" (Nørskov 2015, pp. 108–9).

This leads us to a second consideration. Ultimately, the relation between AI and the subject is such that AI intervenes in the subject's intentionality. It could be said that AI, particularly Generative AI, transforms itself into a co-producer of intentionality (*quasi-other*). This is what endows AI as a technology with its singular character. On phenomenological and post-phenomenological grounds, one is aware that AI does not possess its own intentionality; rather, it participates in the very configuration of its subject's intentionality: in that toward which the subject directs the self, in the way intentionality comes across, and in the relevance with which it imposes itself.

From a post-phenomenological perspective, artificial intelligence acts and operates as a background relation and derived co-producer of intentionality (Ihde 1990, pp. 108–9); it does not possess any consciousness or horizon of its own but intervenes in the very architecture of whatever action/activity it comes across. It does not limit itself to the contents the subject needs to interpret; more radically, it contributes to configuring the field within which something becomes meaningful. Even before the subject decides, the scope of what one can decide has already been delimited. Before one comes to something, the contours of what one can search for have already been outlined and delimited.

Recommendation systems determine the weighting of news stories, videos, or products and their order within the digital environment: such a procedure silently shapes the horizon of what is suitable and accessible. When a search engine ranks results and returns certain content as unintentionally important [not front line], it steers the very direction of possible inquiry. When navigation apps organize movements according to precalculated probabilities, anticipation ceases to be a mere subjective expectation and becomes an algorithmically co-configured anticipation. In such instances, technology does not replace human intention, but it frames it and, to some extent, replaces it. Technology structurally precedes it.

A distinction comes in useful: artificial intelligence does not possess any intentionality of its own; it lacks consciousness and a world of its own. Nor does it enjoy the interiority

that makes experience as such possible. Meaning continues to spring exclusively from human life and activity, from its capacity to understand and to decide. The conditions under which such an understanding unfolds are no longer neutral; nor are they merely instrumental. They are modulated and controlled as AI reconfigures the conditions of possibility prior to the exercise of intentionality: in doing so, it is not itself a subject.

This modality differs from hermeneutic relations as described above: a representation that demands an explicit interpretation, as with a thermometer or a diagnostic image. It sustains a thematic distance between the subject and the mediation. In such instances, technology offers a datum that needs to be read and interpreted. With AI, by contrast, algorithmic mediation operates at a deeper level. It does not only present a subject with information: it intervenes by configuring the very range of relevance of the information it provides. It does not simply add content to the world as a subject experience; it participates in the very structure through which the world presents itself and comes across to the subject.

This, therefore, constitutes a silent yet decisive transformation of the world of meaning. The human being continues to be the ultimate source of meaning. However, the process through which that meaning is being articulated now takes place within a relational system where technology is neither external to the process nor purely representational. Technology becomes rather co-constitutive of the very horizon within which humans think, choose, and act.

The fundamental issue cannot be simply formulated as whether a machine can think. Were that the case, the moment AI replicates human thought processes, AI could then be classified as generating 'human' thought. On the contrary, the question is how, as AI structurally mediates human experience, it can effectively participate in the very form of 'human' thinking.

4.2.2. Digital Experience as Technological Praxis

Incorporating artificial intelligence as a co-producer of intentionality demands to be thought through and through thanks to an anthropology that moves deeper into things than technology itself. As García-Moncó points out, "every process of instrumental, computational and productive extension becomes possible through a human capacity closely linked to intentionality: alienation" (García-Moncó 2022, p. 266). That is to say: "extending an intentional ability implies dislocating it [from itself], by alienating it to the tool and thus enhancing its potential [outcome]" (García-Moncó 2022, p. 266). Technology, therefore, does not come across as a negation of human intentionality but, rather, as the fruit of its expansive dynamism. Humans are hence capable of investing—beyond the self—functions that inherently belong to that very self; objectifying them within a system, humans amplify their efficacy through that very same act of exteriorization.

Nevertheless, this possibility harbors within itself a constitutive ambivalence. Instrumental alienation is the basic condition that renders possible any technical progress; and yet, it can also mutate into a hazard. As García-Moncó warns, "while instrumental intentionality is just the projection of human intentionality, it can become detached [from the human] and impose itself upon the very [human] intentionality that originally expressed it" (García-Moncó 2022, p. 267). What was originally an extension of the human subject may evolve into a structure that, acting independently, dominates that very subject. All the more, what started out as derivative may even acquire the veneer of source or origin.

In the case of generative AI, such an inversion proves particularly plausible. We are not dealing with tools that merely execute clearly limited commands: we are rather dealing with systems capable of organizing information, suggesting arguments, standardizing styles, and anticipating responses with a pretense of autonomous coherence. As a

result of countless prior human decisions, intentionality—statistically rooted within the system—reaches out and back to the user as it controls and modifies the user's particular orientation. Structuring outputs, probabilistic logic can be internalized as an implicit criterion of rationality. That which recurs frequently is reinvested with authority; that which is optimized is perceived as relevant and appropriate.

Alienation, therefore, does not consist in attributing to the machine a consciousness it does not possess. Rather, it consists of obscuring the process by which human subjects cease to recognize themselves as the ultimate source of meaning. When the field within which one habitually thinks, writes, or decides has already been preconfigured by some algorithmic architecture—one that is no longer perceived as a mediation but as a given framework—then a silent inversion has taken place. The original projection of data or information returns and comes back to the subject as normative.

Human intentionality does not objectively vanish. It may choose to become less reflective, less conscious, and less accountable for its own primacy. And wherever awareness diminishes, when it comes to one's own mediations, the very freedom that made those mediations possible is being likewiselikewise being weakened and, perhaps, silently put into question.

4.3. AI and the Theology of the Imago Dei

In the aftermath of Vatican II's *Gaudium et Spes*, the theology of technology has been clearly linked to the *imago Dei* theology. As technology, AI should neither question, still less reject outrightly, understanding itself in the light of that *imago Dei* theology. Since AI presents current humanity with "another moment of the long history of the human activity of mediation" (Schmidt 2022, p. 52), theology should rise to the occasion as it connects this new technology with God, the giver of all life, through new paths and innovative language (Schmidt 2022, p. 52).

Accordingly, 21st-century theology needs to re-adopt and relive the stance that in pre-exilic and exilic theology produced the first Genesis account of creation (*Gen* 1:1–2:4a) as it reviewed and revised the older version (*Gen* 2:4b–3). In the words of Nikolai Berdyaev (1874–1948), *The Fate of Man in the Modern World*, as cited by Christopher Ben Simpson (Simpson 2023, p. 6), "man has become a slave to his own marvelous invention, the machine … Dehumanization is, first of all, the mechanization of human life, turning man into a machine". Simpson continues: "we have allowed one of our mere inventions drastically to reduce our self-understanding" by "becoming shaped in the image of the machine". Christian tradition calls this "self-degradation idolatry, the enslavement of ourselves by entities we first invented and end up worshiping as superior beings" (Simpson 2023, p. 6). Along similar lines, Wales (2023, p. 96) argues that "at best, a robotic image of personhood can serve as an 'icon,' directing us back to the relationality by which humans echo God. At worst, robots serve as 'idols' when they become substitutes for human companions, drawing their users into a utilitarian frame that excludes self-gift by simply mirroring back to the user his or her own aims".

Rather than following the path of AI research or simply reacting to that path, current theology needs to assume its own hermeneutical stance responsibly, as it approaches the issues that currently challenge human self-identity. Unlike AI professionals, theologians need to rescue humanity from being engulfed in networks of its own making, campaign for humanity's radical freedom, sustain the living milieu of the *imago Dei* and promote the continuous call to "be fruitful and multiply, fill the earth and subdue it" (*Gen* 1:28).

While, as regards weak AI applications, theology can choose to limit itself, weigh and anthropologically evaluate possible ethical and interpersonal implications (Young 2022; Xu 2025), as humanity currently measures itself up to transhumanism (H+), theology should

subscribe to the proactive, networking world of the *imago Dei* upheld in the three millennia of Biblical Tradition. It cannot sit back, as humanity runs the risk—to return to Christopher Ben Simpson's words—of "worshiping as superior beings" and relinquishing its own freedom to the very AI processes humanity itself sets up and sustains.

Beside In addition to simply following along—or, even worse, just reacting to—the path traced by artificial intelligence, contemporary theology needs to assume its God-given challenge and take up its hermeneutical and critical responsibility regarding anything that questions and challenges human self-understanding today. AI, with its multifaceted dimensions, presents professionals, philosophers, theologians, and those in whatever field/s they follow closely, with an urgent need to safeguard humanity against the menace of being absorbed into (and by) its own artifacts, by technological inventions, by algorithmic decision-making, and by pseudo-mythological self-aggrandizement (Peters 2022, pp. 3–30).

Leo XIV's (2026a) *Magnifica Humanitas* reminds its readers that "in practice, … technology is never neutral, because it takes on the characteristics of those who devise, finance, regulate and use it" (MH 9). Humanity cannot limit itself to measure the limits and the scope of AI; rather, it needs to discern whether AI advances and expansions truly serve human dignity and uniqueness, especially as inscribed into the God-given mandate accompanying the biblical theology of *imago Dei*: that is, to cultivate, care for, and govern the earth as responsible participation in God's creative work (rather than as arbitrary dominion: see Genesis 3 and the 'sin' of the 'first humanity').

With reference to AI applications, Leo XIV is concerned with "the misuse of certain technologies" as well as what he calls "the risk" "to normalize an anti-human vision", that is, equating the fullness of human life "with having more, reducing weakness, eliminating uncertainty and exerting total control" (MH 110). Society cannot remain indifferent to the anthropological, ethical, and relational implications of existing and future systems. The biblical tradition of the *imago Dei* and the implied 'dominion' (*Gen* 1:28) cannot simply be read as some naive authorization of any technical development: it is truly an invitation to collaborate with the Creator and discern ways and methods through which humanity cultivates and cares for all of creation, doing so in responsibility, communion, and justice (MH 9, Young 2022; Xu 2025).

As regards transhumanist and posthumanist projections into a probable future, whether one speaks of strong AI, Artificial General Intelligence (AGI), or some as yet currently unattainable outcomes ("a futuristic vision of an 'enhanced human being' or 'human–machine hybrid'"—MH 115), should systems be "superior" to humans? Can progress bypass or surpass "the human condition" (MH 115)?

Transhumanism envisions the enhancement of human beings through technologies—such as biomedicine, body engineering, devices and algorithms—with the aim of increasing performance and capabilities. Posthumanism, especially in its more radical forms, goes further: it challenges anthropocentrism and envisions a hybridization of human beings, machines, and the environment, even anticipating a threshold where humanity surpasses itself in a new evolutionary stage (MH 117).

Leo succinctly adds: "the key issue is not the use of technology as such, but the vision that underlies it" (MH 117). Several theologians from different faiths, engaging themselves with transhumanism and posthumanism, have already concluded that both challenges deeply the human condition as it is (Gouw et al. 2022). Those belonging to the monotheistic Religions of the Book conclude that transhumanism and posthumanism directly challenge the *imago Dei* theology. This is why theology truly needs to revisit this context, to safeguard humanity itself (MH 15, 237).

Human beings are tempted to see themselves as a project to be optimized rather than as persons called to relationship and communion (MH 112).

4.4. The Impact of AI on the Theology of Technology

After Vatican II, there were at least two significant developments: first, when describing the relationship between humanity and technology, certain advancements in post-phenomenology urge a move beyond the subject–object paradigm; second, there is an onset of AI as a form of technology disruptive of the known human condition.

In light of the foregoing reflections, the theology of technology must rethink some of its essential elements. Specifically, two points come to the fore. First, given the singular nature of this technology, one needs to reassess the relation between AI and the concept of *imago Dei*, as well as the way that relation presents itself; one needs to see whether and how the emergence of AI affects our understanding of human nature and originality. Second, after *Gaudium et spes* linked human action to the *imago Dei*, technology necessarily plays a role in human development; the resulting query, then, would be whether and how one can see that it affects the anthropology of human action.

To address both issues, a dual framework becomes necessary: the first is Searle's distinction between weak AI, strong AI, and superintelligence; the second is articulating the eschatological dimension of the concept *imago Dei*. If Searle's distinction outlines the playing field, the latter defines the scope of the concept.

5. Humanity and AI

5.1. Nature, Human Uniqueness, and AI

The theological tradition understood human nature and its uniqueness through the 'concept' *imago Dei*, which, at certain points in history, has been identified with human intelligence. Some authors view AI as a threat to that human uniqueness, a threat they try to overpower by moving away from an ontologistic interpretation of the *imago Dei*.

On one hand, Sara Lumbreras seeks to situate her work within a relational interpretation of the image of God in line with Barth and Brunner (Lumbreras 2017, 2022), as she distances herself from functionalist readings—like J. Richard Middleton's—that see humans as God's representatives on earth (Middleton 1994). She also keeps her distance from classical interpretations of an intellectualist nature (a category to which, she thinks, St. Augustine belongs, with no reference to Thomas Aquinas) (Lumbreras 2022), interpretations that identify the divine image primarily with rationality or with specific higher-order cognitive powers.

Lumbreras argues that the advancement of artificial intelligence shifts, precisely, the foundation of human uniqueness away from intelligence—the very nature of which is computational—toward subjective experience and interpersonal relationality.

Pursuing this line of reasoning, she counts on the phenomenology of consciousness as she proposes superseding intelligence as the justification of the *imago Dei*, replacing it instead with subjective experience (*qualia*) and its inherent corporeality (Tye 2025): these are qualities that render the human being constitutively relational. In this regard, she states: "Accepting the relational view of *Imago Dei* should lead us precisely to de-emphasize intellectuality and computation in favor of subjective experience instead of the rationality exalted by the Augustinean view. This focus on subjective experience should have several key implications. First, the importance of *qualia* and embodiment should be stressed" (Lumbreras 2022, p. 996).

Two foundational elements lie at the core of her line of reasoning. The first is a highly incisive critique of the functionalist philosophy of mind, the very framework that underpins current AI technology: "Functionalist approaches to consciousness do not account

for the key importance of subjective experience" (Lumbreras 2022, p. 980). Functionalist-based AI reduces intelligence to a mere combination of data, thereby foregoing subjective experience: "applying the rules of grammar flawlessly is not the same as understanding the meaning of a book. Producing a poem is not the same as enjoying it" (Lumbreras 2022, p. 972). Lumbreras is entirely correct in highlighting that AI systems can replicate intelligent behaviors without there being necessarily any subjective experience.

The second dimension concerns the essential embodied nature of experience in view of its encompassing comprehension. Subjective experience is both invariably phenomenal and necessarily embodied; this very embodiment constitutes the basis of relationality. Embodiment serves as both condition and cause of subjective experience, as it simultaneously underpins the relational openness of every human being. In this sense, relationality does not stem from some abstract mental faculty, but rather from the concrete manner in which the embodied subject is situated within the world and in relation to others. Welcoming a relational understanding of the *imago Dei* entails "de-emphasizing intellectuality in favor of experience" (Lumbreras 2022, p. 963), for the relationship with God and with other subjects is grounded in lived interiority rather than in mere cognitive performance. In this light, embodiment emerges as the mediation that renders both experience and relationality possible.

Precisely because it lacks this embodied dimension, artificial intelligence remains radically alienated from human consciousness, a fact that decisively limits the anthropological scope of AI.

5.2. Which Way Forward: Lumbreras or Dorabantu?

Lumbreras's intuition proves to be philosophically evocative as it accurately identifies the distinction between a substantive rationality—conceived as an abstract intellectual faculty—and factual human rationality, which is always phenomenic, experiential, and embodied. However, depending on this critical aspiration, Lumbreras is unable to fully escape the very conceptual framework she seeks to transcend.

Indeed, although she rejects the classical identification of the *imago Dei* with intellectual rationality, she effectively reformulates that same substantial model by substituting the "intellectual-rational" with an "experiential-embodied and relational". Formally, she remains within a substantive structure: she continues to identify a constitutive feature of the human being that should serve as the foundation for its ontological uniqueness. The difference is that this feature is no longer formulated as a metaphysical property of the intellect, but rather as a phenomenological characteristic linked to subjective experience and relationality. Thus, while Lumbreras does not revert to a classical substantive theology of the *imago Dei*, she retains a reformulated substantive structure in which rationality is supplanted by embodied subjective experience as the constitutive criterion of what is human.

On the other hand, Marius Dorobantu suggests an analysis of whether the eventual emergence of human-level artificial intelligence (strong AI) would pose a genuine threat to Christian theological anthropology, especially to the doctrine of the *imago Dei* (Dorobantu 2022). The problem arises, the author argues, when the *imago Dei* is interpreted as a specific property or capacity inherent in human beings, such as rationality, consciousness, or relationality. If these human potencies could be replicated by artificial systems, human uniqueness would appear to be compromised. In this regard, he asserts that "the main problems do not come from the concept itself, but from its ontological, or substantive, interpretation" of the image of God (Dorobantu 2022, p. 25).

In the face of these difficulties, he proposes reinterpreting the image of God from an eschatological point of view. Drawing inspiration from authors such as Wolfhart Pannenberg and Ted Peters, he maintains that the *imago Dei* should not be understood as a

capacity already fully possessed by human beings, but rather as a call directed to the future and to fulfillment in Christ. Thus, "*imago Dei* is thus both a gift already given and a future destiny for humankind" (Dorobantu 2022, p. 28). His solution consists of shifting the understanding of the image of God toward an eschatological interpretation. This proposal has the merit of preventing human uniqueness from depending on empirical traits that could potentially be replicated by technology: "One of its advantages is that it does not locate the image of God in a capacity that humans possess, as the ontological interpretation, or in something that they are able to do, as the functional and relational interpretations"; he adds, "from this point of view, we can very easily imagine strong AI that would outsmart humans all across the board, and still lack the exocentricity and vocation to fulfilment in Christ". Dorobantu further explains exocentricity as "an intrinsic disposition of human nature that points humans towards a destiny that has not yet been reached" (Dorobantu 2022, p. 27).

This position appears to be more appropriate. First, it aligns with a long-standing method of interpreting the two creation narratives, as outlined in this paper. Second, such an interpretation would allow the preservation of human uniqueness even within a world where highly advanced artificial intelligences co-exist.

However, neither author—Lumbreras nor Dorobantu—takes into account the developments in post-phenomenology, that the technical artifact is more than just an external instrument. It is rather a mediation incorporated into the subject—and not simply an object—that reconfigures the relationship between the subject and the world. Thereby, it modulates the opportunities for perception, action, and decision-making. Technology expands or displaces the subject's operational horizon, transforming the historical (ingrained) conditions of human action. As already noted, artificial intelligence systems can be understood as co-producers of intentionality: they participate in the selection of pertinent realities, in the orientation of attention, and in the configuration of that toward which the subject directs itself. In other words, they intervene in the co-production of experience and meaning. Nevertheless, this participation does not imply that technology shares the ontological foundation of human agency. What gets modified is the historical modality through which human action is exercised, rather than the ontological structure that makes it possible.

In this perspective, it becomes evident that the stand Lumbreras assumes fails to consider the fact that technology—and AI is but an instance—can be incorporated into the very form of relationality (becoming, for her, a refuge of the *imago Dei*). Conversely, by opting for an eschatological promise, Dorobantu's understanding wards off the danger that AI might call into question the concept of the *imago Dei*; yet it might also suggest that the human being, the recipient of this promise, remains unaffected by AI.

Lumbreras's approach fails to take into account that the integration of AI with human action can only manage to reach the level of the co-production of intentionality: that is, the phenomenological level of technological mediation. Artificial intelligence can intervene in the selection of pertinence and applicability, in the orientation of a subject's attention, and in the configuration of that subject's field of action: in that way it can modulate the experience and the exercise of human agency. However, this mediation implies neither the emergence of a new subjectivity nor the possession of an interiority of its own; it solely calls for a historical transformation of the conditions under which the human subject perceives, decides, and acts.

Consequently, the theological challenge posed by artificial intelligence lies not in discerning whether a machine could ever come to participate in the *imago Dei*, but rather in understanding how the new technological mediations historically transform the modes in which human action is exercised within creation. From this perspective, theological re-

flection should be less oriented toward the ontology of the machine and more toward the ethics and phenomenology of technologically mediated human action.

Dorobantu's choice of an eschatological interpretation of the *imago Dei* appears to be the more sound of the two; however, it should not be the irruption of AI into our lives that compels us toward this understanding by means of which we can preserve human singularity. First, strong AI will never be the bearer of eschatological promise. It can never move towards full union with and in Christ, especially on the lines through which Teilhard de Chardin envisaged the Omega Point as the fullness of all evolutionary processes. Second, weak AI can and will serve only as a co-producer of intentionality, capable perhaps of modifying the historical modality of the exercise of human action; it will never be capable of carrying God's promise into the future.

5.3. The Nature of Human Action and the Impact of AI—Biancu

The second issue to be addressed is the impact AI has on human action. To this end, theology must elaborate upon the insight suggested in Pope Francis's message to the Pontifical Academy for Life, when he addressed the convergence of human action and AI.

The starting point is constantly the theology of Vatican II, operating along a subject–object dialectic; endowing technology with great potency, theology associates it with human action, integrating it within the development of the *imago Dei* and human enhancement. From the conciliar perspective, human enhancement is not equivalent to the maximization of technical power, but rather to growth in freedom and relational responsibility. The Council acknowledges that technology can contribute to the human calling to "cultivate and care for" creation; and yet, technical progress—it cautions—is not identical with moral progress.

Phenomenology—as Stefano Biancu points out—recalls that "intentionality is the condition of possibility, at the ethical level, of responsibility" (Biancu 2025, p. 48) and, hence, the condition of technology's contribution to the development of the *imago Dei*. Thus, one can explain the nature of the convergence of which Pope Francis speaks between technology and human action: he centers the issue on the responsibility of human action.

However, when the technology in question is weak AI—the only form of AI that humanity can handle at present –, one should consider how that technology intervenes in human action.

First, it is important to remember the gap between AI and natural intelligence. Biancu argues that "intentionality […] constitutes the missing link between AI and natural intelligence" (Biancu 2025, p. 49). The difference is not quantitative, signifying more or less computational capacity: it is qualitative. Human consciousness is always "consciousness of" something, a meaningful presence of the world and of others to the knower. Therefore, the problem arises when AI, lacking its own intentionality, participates in shaping the subject's horizon of meaning. If algorithmic systems were to select what is relevant, if they prioritize certain interpretations or shape our decisions, they can influence the exercise of intentionality:

The adjective 'intelligent', when applied to these new technologies, offers us the opportunity to raise the philosophical question regarding the nature of our intelligence and, indeed, of our very humanity. This adjective has as its effect caused us to easily overlook 'the specific technological nature' of this technology, instead assigning it and instead assign it the role of a model in an attempt to understand and explain the human being. Employing human language, AI appears to produce statements in their fullest sense about reality; yet, in fact, it possesses no awareness of what it is discussing: it commands the syntax, but not the semantics, of discourse (Biancu 2025, pp. 43–44).

Second, in this sense, the contributions of post-phenomenology reduce the power of AI to being a co-producer of intentionality, something that distances AI from the capacity to integrate itself into the role of co-creator with which God has endowed humanity. This philosophy of technology does not allow for the endowment of a technological tool with so much power as seemingly conferred upon it by conciliar theology. The co-production of intentionality does not permit AI to attain the nature of a *created-creatorcreated creator*; that is, AI does not turn into a co-creator alongside the human being, with whom it integrates itself.

However, if AI were to impose itself as a normative horizon, as an authority that organizes and decides, it could generate a form of alienation that disorients human beings with regard to their typical way of being and existing in God's image: that is to say, being and existing as subjects called to and capable of response.

A prime example of such an alienation is the ecological question. The mandate to "have dominion over the earth" (*Gen* 1:28) was historically interpreted by some as an authorization to limitless exploitation. That technocratic paradigm, denounced by the recent Magisterium, absolutizes efficiency and reduces nature to a merely available resource. When technology is elevated and converted into an ultimate criterion, the relationship with creation is stripped of its ethical and spiritual dimensions. Contemporary environmental degradation—climate change, loss of biodiversity, resource depletion—is the sign of such a rupture. It is not merely the consequence of technical errors or wrong decisions: it is rather a disordered, deliberated, and intentional new orientation: creation ceases to be an interlocutor and becomes, instead, an object of control and manipulation.

This very scenario could unfold thanks to AI if, whether consciously or unconsciously (as may be the case in autonomous AI systems), AI is allowed to become the primary co-producer of intentionality in the domain of human action.

5.4. Transhumanism and Technology in the Wake of Magnifica Humanitas

The most recent Encyclical introduces transhumanism and posthumanism as "a range of currents and sensibilities, … [that] can be likened to an archipelago of conceptual 'islands', distinct yet connected by a common 'sea' of assumptions, namely the central role of technology and the aspiration to transcend the limits of the human condition". If transhumanism "envisions the enhancement of human beings through technologies—such as biomedicine, body engineering, devices and algorithms—with the aim of increasing performance and capabilities", posthumanism "challenges anthropocentrism and envisions a hybridization of human beings, machines and the environment, even anticipating a threshold where humanity surpasses itself in a new evolutionary stage" (MH 116).

The above description turns to metaphor (currents, archipelago, sea, islands) to briefly but effectively describe the path that has led research to what the transhumanist movement has come to represent. As Steven Foertsch points out, "transhumanism is undoubtedly an eschatological epistemology that sees itself as humanity's only hope" (Foertsch 2023, p. 76). It does not merely denote some generic confidence in the progress of technology itself; it rather constitutes an anthropological orientation defined by the goals of transhumanism: that is, prolonging life, eradicating disease, eliminating suffering, enhancing the intellectual, physical, and emotional capabilities of individuals, colonizing 'outer space', and developing superintelligent machines and procedures. All this is well underway in many formats and directions.

Artificial intelligence, therefore, should not be interpreted primarily as some device or tool external to human beings themselves: it should rather be seen as part of a broader logic, the main goal of which is to expand and potentially transcend the current human condition as it is. Starting from the technical enhancement of certain abilities and moving to-

ward a more radical development of technology as a means of transcendence, transhumanism thrives in extending life and human agency, in broadening intelligence and sensibility, and, ultimately, in boosting, furthering, and enhancing human identity itself. For this very reason, transhumanism cannot be solely assessed as some mere technical or scientific program, research, project and/or investment: rather it needs to be comprehended—especially in law, medicine, philosophy and theology—as a normative anthropology and—in some of its many "islands" and "archipelagos"—as a non-religious, though revered, faith and as a secularized form of eschatology.

This interpretation is also consistent with David F. Noble's genealogy of modern technology. In *The Religion of Technology*, Noble (1999) argues that many modern technological projects are not merely secular or instrumental undertakings but often inherit religious and eschatological aspirations: the conquest of nature, the overcoming of finitude, the recovery of perfection, and even the aspiration to transcend bodily limitation. In this sense, transhumanism can be read not simply as an ideology of enhancement, but as one of the most explicit contemporary forms of what Noble described as the religious imagination embedded in Western technological ambition.

Rather than engaging directly with transhumanism and posthumanism through their many instances and manifestations, the Encyclical reflects on the many "conceptual islands" solely from the point of view of the way they do influence—as "ideological background"—"some centers of technological power" and the way these centers "occupy the collective imagination in a simplified form, especially in the media and on social networks" (MH 115). *Magnifica Humanitas* (Leo XIV 2026a) responds by focusing on truth as the common good (MH 132–138) and on an educational alliance cut to measure for our digital age (MH 139–147), before dealing with the dignity of work in the current digital transition (MH 148–169). The encyclical—and theology—cannot help but focus on the protection of human freedom against dependencies and commercialization (MH 170–181).

According to Philippe Gagnon's writing in 2012, transhumanism could imply "overcoming our garment of flesh, and … transcending [the] humanistic ideal, which keeps something Promethean and invites us to measure up with the gods". To increase the well-being of humanity, transhumanism had to reform and reformulate knowledge through the sciences: technology has inevitably become the path to follow as it takes the upper hand even on intracosmic evolution. As "technology induces in us an impression of control over the future", "the point of the cybernetic turn embedded in transhumanism, be it in perception … or in making things create themselves, … is really about creating a responsive environment: an 'enchanted' world". Little wonder that Gagnon took to task some popular scientific writers and questioned their orientation to manipulate nature and life. Already in 2012, he contemplated a turn away from autonomy to theonomy and the reclamation of eschatology. He concluded that "as *imago Dei* humanity does not need to build a world in its image, but to steer creation with a heart and mind in God's likeness" (Gagnon 2012, pp. 393–405, especially 395, 399 and 402). This theological concern is reinforced by Bardziński's analysis of transhumanism as an attempt to control and perfect evolution through scientific means, in dialogue with Darwinian, Lamarckian and neo-Darwinian understandings of biological evolution (Bardziński 2014, pp. 103–15).

This theological concern allows us to pinpoint one of the most problematic anthropological assumptions of several versions of transhumanism and of our own epoch: renewed forms of "Cartesian, and thus Aristotelian dualism, imported through Enlightenment rationalism"; it implies a dominance of human intelligence and a severance of knowledge from any ethical implication. According to Foertsch (2023, p. 82), "individuals view the dualistic ability to transcend through technology as the means to enlighten themselves". The transhumanist framework of technological transcendence often presupposes an inter-

nal/external dynamic in which the subject seeks fulfillment through a third, external entity. The latter—unlike Modernity and American transcendentalism—is no longer nature but technology. Corporeity runs the risk of appearing as a provisional, time-related vessel, a biological limit over which the individual has no control, and even—perhaps—an obstacle that must be overcome in the name of consciousness, information, rationality, or subjective agency. Only the latter can transhumanism conceive as capable of preservation, amplification, alteration, or mutation.

Juxtaposing transhumanism and Teilhard de Chardin, Tim Clancy states that, while "Teilhard envisions evolution culminating in an *Omega Point* understood as the rise of a planetary self-consciousness, what he calls the *Cosmic Christ*, transhumanism … looks to the Singularity, where the pace of technological evolution goes vertical and humanity finally sheds its biological limitations, and, in some versions, even its material limitations altogether". Clancy (2019, p. 1) without any hesitation continues: "Indeed humanity evolves beyond itself to become *posthuman*" (see also Steinhart 2008).

"The value of Teilhardian and transhumanist visions of transcendence lie[s] not in their predictive accuracy, but in how they color our attitudes towards our current human condition. Do we approach our material, embodied condition as a blessing or a curse? Ought we to devote our research dollars to the elimination of pain and the extension of the human lifespan, or to technologies that can enhance the meaning of human life, whether in sickness or in health, however short or long that any given life may prove to be? And just what kinds of intelligence ought artificial intelligence research to be focusing on? Narrow instrumental intelligence, with all the dangers it entails, or a broader, one might say, humanistic, general artificial intelligence that extends to social, moral and religious domains however difficult these may be to define, measure and operationalize?" (Clancy 2019, pp. 9–10).

Perhaps it is presumptuous to indicate in Gagnon and Clancy's positions two formulations of *Magnifica Humanitas*' main concern with transhumanism and posthumanism. Never intending to propose a theology of technology still less some magisterial statement on the hazards, perils and threats to nature and to humanity, that might occur both before and after 2045 (Kurzweil's projection (Clancy 2019, pp. 9–10; Kurzweil 2006; Goertzel 2016)), when humans will in due course merge with machines and transform into cyborgs that reach singularity. In the meantime, the distinction and the demarcation lines between man and machine are becoming progressively all the more blurred, vague, and uncertain: the future of both—man and machine—depends on the body of knowledge and its eventual way forward (Kurzweil 2000, p. 2). James Lovelock even believes that humans will become extinct and be replaced by super-intelligent AI, which, expanding beyond the solar system, will constitute the final stage of evolution (Lovelock 2019, p. 123).

In *The Technological Society* (the original French dates back to 1954), Jacques Ellul illustrated "technique" as superseding machine technology: as a collection of defined procedures, *technique* targets specific goals just as *method* replaces spontaneous and instinctual behavior (Ellul 1964). Technology implies deliberate and well-planned performances. The fascination with future, possible outcomes already determines the present and directs the way toward those same outcomes through standardized procedures and instruments. Ellul later returned to the ethical consequences of this technicist logic, arguing that the problem is not merely the use of particular machines but the formation of a society governed by technical rationality itself (Ellul 1989, 2005). In "AI & Theology", Zygoulis (2024, p. 4) sums up Ellul's basic stance on technique as follows:

> "Technique has the ability to transform goals into tools. What was formerly appreciated for its intrinsic worth is now only important if it helps achieve another goal. … Technique, on the other hand, transforms means into ends, where 'know-

> how' becomes a highly valued value; in other words, 'the doctrine is converted into a procedure'."

In a very challenging way, Zygoulis (2024, p. 4) comes to the following shocking conclusion: "The distinction between the two will eventually erode, until the human spirit and the silicon chip merge". Can this be the unnamed attitude that *Magnifica Humanitas* is trying to address, as it deals with—among others—issues of work, human dignity, privacy, morality, bias and discrimination? If the goal of transhumanism, as Zygoulis (2024, p. 8) notes, is to improve human biology and physiology (Zygoulis 2024, p. 8; Foerst 1999, p. 376; Cole-Turner 2015, p. 150), then transhumanism directly calls into question both the biblical theology of creation and the very theology of God at the basis of many a shared faith, well beyond the three monotheistic religions of the Book.

In "Artificial Intelligence and Theology: Looking for a Positive—but not Uncritical—Reception", Lluís Oviedo provides a bird's-eye view of the debate within theology concerning AI (Oviedo 2022, pp. 938–52). Together with four other articles by Lumbreras, Dorobantu, Benzmueller and Vestrucci, the authoritative periodical *Zygon* intended to offer "five steps toward a strong, deep, and interdisciplinary dialogue between the research in religion and the research in AI". (Vestrucci 2022).

In his *Sententiæ*, Appius Claudius Caecus (c. 340–273 BCE)—a Roman statesman—referred to humanity's capability to be in control of fate and destiny: *Homo faber suae quisque fortunae* ("Man is the maker/producer of his own destiny"). Claudius tried to free human existence from an omniscient, numinous fate, fortune, or destiny that held every individual in its inescapable clutches. If during the Renaissance *homo faber* stood for freedom from Christian morals and Church control, in Modernity it vouched for human autonomy, reaching its peak with Nietzsche's *Übermensch*. While in Henri Bergson's *L'Évolution créatrice* (1907) *homo faber* stood for human intelligence as opposed to animal instinct, in *Man's Place in Nature* (1928) Max Scheler invited all of humanity not to neglect the *Geist* (or spiritual potency). If the human individual was more than a handyman, in her *The Human Condition* (1958), Hannah Arendt drove the point home that the *homo faber* is a unique source of activity (labor, work and action) that enables each person to impose continuity and shared commonality on nature's sometimes fickle transience.

According to Don Ihde, humans are not just makers: they themselves are co-constituted by the technologies they create and handle. Contemporary humanity forms and brings about relational networks that can transform sensory experiences and intentionality. In today's world, tools and artifacts (especially the many available forms of artificial intelligence: bots, robots, etc.) actively shape human perception and action. In our post-phenomenological world, humanity is becoming more and more dependent on an intentionality that the *homo faber* cannot control. Someone else has already set and imposed a pattern.

Is this the completion of a full circle since Appius Claudius Caecus's days? In the words of John Paul II, reproposed by Leo XIV, can God's plan of creation be handled "in such a way that its benefits accrue solely to a select few (MH 65)? Can "control over platforms, infrastructure, data and computing power" be "concentrated in the hands of a few" (MH 95)? Is humanity moving into the throes of an AGI set once more to subjugate it to some faceless, unassailable new destiny/deity, forcing humanity, gradually and inexorably, into its unrelenting clutches?

The *imago Dei* theology provides Christianity with a powerful antidote that upholds dignity, relationality, originality and a call to co-create—with God and with humankind—a healthier and ever-improving human condition. Teilhard de Chardin's Omega Point and Dorobantu's eschatological future cannot be a pie in the sky, but a future that humanity intentionally chooses and brings about. Reacting to what Brian Patrick Green calls

"the unabashed techno-aggressivism of many strands of the current transhumanist movement", he indicates a way forward in "the only solution that will make a better future": the Catholic view "that prioritizes not the power of technology but much more so the ethical control of technology". Green adds: "With technology we are pursuing God-like powers—if we do not at the same time or faster also pursue God-like holiness, we will soon discover what happens to contingent and sinful beings in the glare of a glory of which they are unworthy" (Green 2022, pp. 143–44). Green concludes as follows:

> "Technology can be construed as humankind's quest to remove chaos from nature, to slowly roll back chance and eventually put everything under orderly control, in imitation of God's own actions. … Secular transhumanism pursues salvation without God. Transhumanism is built on a loss of perspective; it mistakes a gift from God—technology—for God itself. … As we grow in power we grow in danger to ourselves. … now we must learn to be voluntarily constrained by our good judgment, our ethics" (Green 2022, pp. 152–54).

Is it just for some literary effect that Green chooses to repropose Wendell Berry's quote: "The only thing we can do for the future is to do the right thing now?" (Green 2022, p. 154).

6. Thinking Outside the Box

Research around the various AI ventures is rapidly opening up new highways of knowledge and reflection while ushering in incalculable and, sometimes, unheard-of potentialities. It would just be enough to follow the innumerable and unprecedented paths of transhumanism (or H+, and whatever that plus sign can eventually stand for) and posthumanism (or the currently unthinkable continuation and/or substitution of the human body with intelligent 'machines' that can provide indispensable substrata for human intelligence) (Gouw et al. 2022; Goundrey-Smith 2023; Donaldson and Cole-Turner 2018; Mercer and Trothen 2015; Godde 2022). All this lies well beyond the limits of the current study.

> "Just as the creator of an artistic or literary work must consider the values it conveys, so developers are called to embed values in their projects with due seriousness: with transparency, responsibility toward affected communities and careful attention to ensuring that what is being cultivated is a genuine good" (MH 111).

The current research simply tries to limit itself to the critical interfacing of values that are born of the divine Creator's "vision of humanity", as *Gen* 1:24–25—humanity in God's image and likeness—has understood it across the centuries, and as a feasible philosophical approach or approximation to a basic perception of the "epistemic, economic and political asymmetry and … the new monopolies of AI" (MH 109). Though the world of AI has hit the general public in recent months, "communities and intermediary organizations" have been reduced for quite a number of years "to passive recipients of decisions made elsewhere". Pope Leo concludes that "ownership of data cannot be left solely in private hands" (MH 108).

It is intriguing to consider together the four times *Magnifica Humanitas* refers to Augustine (and Leo XIV situates himself decisively within that very tradition). Rather than for Augustine the Dualist (or post-Manichaean), Leo opts for Augustin the Neo-Platonist and for creation as the way to full union with God. If the first is Confessions I, 1, 1 ("You have made us for yourself, O Lord, and our heart is restless until it rests in you"), the second is De civitate Dei XIV, 28 ("Two loves have built two cities: the earthly city, the love of self even to the contempt of God; the heavenly city, the love of God even to the contempt of self"). The third, from Enarrationes in Psalmos 84, 12, deals with the role of justice that informs peace, while the fourth, from *Sermons*, 272, invites Christians to unity and solidarity as members of the one body of Christ.

Human promotion and human solidarity, carried out today in the light of the Creator's "vision of humanity", are already a number of decades late, as regards the lack of an interface between humanity as *imago Dei* and as a passive occasion for data collection, "shaped by those who control data, infrastructure and computing power" (MH 106).

6.1. Questions and Answers

According to Marius Dorobantu, the most important query from the theological point of view continues to be "human uniqueness and specialness" (Dorobantu 2022, p. 21). Positing a question in abstract terms leads to answers of that same kind: if being and living in God's image is the theological answer, then *imago Dei* could be the identifier of "human uniqueness and specialness". But, by biblical standards, if the *imago Dei* were to be some inaccessible abstraction, though in human or earthly form, that could be tantamount to forming out of the very *imago Dei* an intelligible construct or a veritable idol. Herzfeld rightly comments: "To replace relationship with God and with each other with relationship with our own artifacts is idolatry" (Herzfeld 2002, p. 313). The answer can either belong to the category of substantives or to that of adjectives/adverbs; in the latter case, it cannot stand on its own feet; as a substantive, the *imago Dei* would be a *tertium*: neither fish nor fowl, neither God nor human.

From the point of view of post-phenomenology, the above analysis led us 'beyond' the *substantive* (a quality or set of capacities in humans), the *functional* (God's given mission to humanity within creation: dominion and stewardship), and the *relational* (interactions with God and with one another), toward the *eschatological* (moving beyond past and present toward an eschatological future) (Dorobantu 2022, pp. 25–27). What led us there is the need to proceed beyond ontology and definability through human activity toward possible goals shared between strong and Generic AI and God's human creation. "In this context, a survey conducted by Müller and Bostrom among experts in artificial intelligence estimates a median 50% probability that human-level AI could emerge before 2040" (Dorobantu 2022, p. 21).

Similarly, as reported by Noreen Herzfeld, quoting Bill Joy, chief scientist at Sun Microsystems in 2002, "self-replicating robots and advances in nanotechnology could result, as soon as 2030, in a computer technology that may replace our species" (Herzfeld 2002, p. 303). Even so, we would still be dealing with a static goal, set in a near or distant future that beckons humanity and AI forward. Post-phenomenology allows for speculation on the distance still to be covered: can that speculation enlighten research about the eschatological way toward humanity's hypothetical coexistence with Generic AI?

In the meantime, the worlds of technology and employment are on tenterhooks: the creation of super-computing, driven by research initiatives and supported by high-tech data infrastructures, exacts the rebranding and rehashing of the world labor market. New labor issues are already arising from the accelerating adoption of weak AI applications and white-collar unemployment. Nations, governments, and workers' networking initiatives announce action. In "Human Dignity at an AI and Neurosciences Age", Yves Poullet vividly portrays the current challenges:

The "intelligence" of digital technology is profiling us, even predicting us, and, by the same token, manipulating us and "augmenting" us. These developments are taking place in an increasingly opaque and complex environment, all in the context of a growing informational asymmetry between those who develop them, the "information haves", and us as citizens, the "information have nots", and risk reserving the benefits of these advances for a select few, the "happy few" (Poullet 2024, p. 187).

The above considerations on the *imago Dei* theology and on an ever more complex functional AI, seen from various intellectual and prophetic standpoints, would leave unan-

swered many—workers and students—concerned with their own employability, even in the near future.

Syntax and semantics should indicate the way forward. While semantics is "the interpretation of signs in general", syntax refers to "the order and arrangement of the words or symbols forming a logical sentence; the rules operating in formal systems" (Murray et al. 1989, vol. 14, p. 939, s.v. "semantics"; vol. 17, p. 487, s.v. "syntax"). Throughout, syntax has provided access to the analysis of AI and its interaction with human subjects. It has also been accounting for Christian theology's approach to the *imago Dei*: a linear and logical development, mediated by the Church Fathers, with its primary source and inspiration in *Gen* 1. Semantics, though, should control that process throughout, as it takes into account not only the Church Fathers and Medieval Theology (especially Augustine and Aquinas), but also Contemporary Theology (from Bonhoeffer, Barth, Bultmann, Moltmann, Pannenberg to Peters and 20th century Catholic Theology). All move within the one semantic field, following the 'right rules' of interpretation of both humanity and technology.

Can Biblical theology provide a way out of the currently insuperable theological impasse: a static understanding of the *imago Dei* in contrast with just some vague 'likeness'? Should current theology read *Gen* 1 in the light of subsequent biblical interpretations? Or should the theology and the formation process of *Gen* 1 determine in which way subsequent interpretations should proceed? If *Gen* 1 addresses a dynamic and engaging relationship with God, among humans, and with the rest of creation, which way should one follow: that of human subjectivity and communion, and/or that of artificial consciousness and production?

6.2. Genesis 1 as Goal of a Faith Journey

That *Gen* 1 comes first, followed by *Gen* 2, forms an unquestionable part of Western cultural heritage, even before it becomes an object of any theological reflection. Everyone seems to take such an order for granted, and hardly anyone, but some exegete, would consider that *Gen* 1 superimposes itself and its theological vision upon *Gen* 2. It surpasses the second as it forces it into the role of a secondary text. Culturally, no one seems to consider that, in the redaction of Genesis, the theology of *Gen* 2 'lost out' to tardier semantics. Theological textbooks cannot simply continue reflecting on the two parallel accounts of creation that form the first pages of the written word of God, without reflecting on the clear, paradigmatic choice of the later text as the key to other, even older, interpretations of God's creation.

While both accounts start with God as Creator, God's role in *Gen* 2 as some HR (Human Resources office) is totally superseded in *Gen* 1 by a Creator extending God's reach in all directions: divine action reorders even 'primordial chaos'. The God of the Bible appears more in control of existence than the Egyptian Ra (limited to the Nile basin), Anu, the Father of the Sumerian gods, or the Babylonian Marduk, who extended his reach through conquests carried out by beloved devotees. In *Gen* 1, the God of Israel and of Sinai is elevated well beyond Jerusalem and its temple, and well past the Davidic dynasty, to become the unique point of reference for the whole of humanity. While the contraposition of Babel and Nehemiah's Jerusalem in *Magnifica Humanitas* [pp. 7–9, 184, 241–242] is both telling and engaging, it is a pity that the heavenly Jerusalem encounters a fleeting mention [p. 10].

A lot has been written on the liturgical character of *Gen* 1, on the recurring response "And it was good", and on an unproven liturgical use of that text. It fits, however, as far as a literary exercise ever can, the reordering of society as it celebrated itself, its order and governance at some New Year's festival. The context parallels *Akitu*, the Assyrian celebration in honor of Anu, or its Babylonian counterpart, Marduk, and his victories, along with the public proclamation of the Enuma Elish (Sommer 2000; Debourse 2022).

Forgoing any analysis of *Gen* 1, this paper limits itself to the last detail it portrays: God's rest on the seventh day. It designates finality, the completion of the Creator's work, and the oft-forgotten continuation of God's active rest well beyond the seventh day. The six-day activity carried out by the Creator in *Gen* 1 far outstrips the technical undertaking carried out by the potter-surgeon of *Gen* 2: the latter ultimately could only come 'down' for some evening walk or react decisively (*Gen* 3) to a creation left at the mercy of humanity, and in its hands. That creation comprised all other creatures, the serpent included.

The understanding of humanity in *Gen* 1:26–27 is that of a last step that leads to mystery and to God's rest/fulfillment. It comes as the penultimate step, following on the heels of the bigger part of God's creative activity. Humanity can look both ways: to the first five or so days, as much as to the seventh. To what can and does it belong? The *imago Dei* theology provides the answer, placing humanity in direct relation to the seventh day. The text also establishes—in the line of semantics—a relation of dominion that looks back on the first five or so days. While traditional Christian theology has been handling these as conceptual deductions within logical *imago Dei* reflections, the biblical text handles cosmic relations in the semantics of life and communion, meaning and direction toward the seventh day. For this, *Gen* 1 does so as it moves beyond *Gen* 2–3 and creates a new key to everything.

The substantives *Gen* 1:26 suggests—bə·ṣal·mê·nū (נוּ בְּצַלְמֵ) and kiḏ·mū·ṯê·nū (כִּדְמוּתֵנוּ)—were never intended as those two concepts classical Greek culture turned them into and as what—through the continued mediation of Christian theology—reaches out to the current debate on technology and AI, with all their innumerable repercussions on the human condition: (a) the relation of artificial intelligence with the substantive, functional, relational and eschatological "capacities that reside within humans" (Dorobantu 2022, pp. 25–27); or (b) individually held properties—part of human nature—that humans engage in or are capable of (Herzfeld 2022, p. 4).

Accordingly, 21st-century theology needs to retrace its steps back to that very transition from *Gen* 2 to *Gen* 1, to comprehend the novelty of the latter's proposal. *Gen* 2–3 portrays a God—owner of creation—who creates a workforce, humanity, whom he later honors as a *satrap*, or governor, who can name the realities that surround humanity. Would it be forcing a comparison, looking at the elite humanity capable of managing data and observing how it subjects the rest of existence—humanity included—to the computational resources created to guide, moderate, direct and decide existence (MH 172)?

On the contrary, walking the way of *Gen* 1 calls for communion, emancipation, and eschatological transformation. This cannot be carried out by neural networks that enslave creation. That is simply contrary to *Gen* 1, which itself continues to be a theological reflection that is by far posterior to the very realities it describes. What *Gen* 1 enunciates had been in action for incalculable millennia: *Gen* 1 does not play the role of some informational network, bringing into being the world it describes. The first account of creation is first and foremost a summons to the liberation and the rehabilitation of persons and whole regions, under the control of "geopolitical relevance": "otherwise, the digital age will not [only] be post-colonial, but colonial in another form" (MH 177 and 178).

In Judaeo-Christianity, communion has always been the name of the game. And *Gen* 1, with its dynamic understanding of humanity and the Creator, continues to set the stage for the Third Millennium, as it potentially moves closer to transhumanism (H+) and posthumanism. The three monotheistic Religions of the Book can never belong to an elite, savvy minority that subjugates instead of empowering and liberating.

As theology, therefore, moves away from logic, definability, and cognition, a substantive reading of *Gen* 1 opens up to semantics and the creation of meaning. Culture cannot allow itself to be entombed in a dualistic world of worse-than-Orwellian proportions by

subjecting itself to inanimate networks that gulp down and consume inordinate amounts of resources simply to be and to function. No wonder human promotion should urgently become the primary choice and unassailable principle of schools and universities, churches and meeting halls, parliaments and international organizations, just as law courts and enforcement should wage war against arch-modern forms of enslavement and subjugation. Leo XIV ably summarizes the theological implications of *imago Dei*:

> "Created for relationship, every human person is planned and willed by God to enter into communion with him, with others and with creation. Human dignity does not depend on a person's abilities, wealth or position in life, nor on the right or wrong choices made; instead, it is a gift that precedes and transcends each person, endowed by God as an expression of his unfailing love" (MH 50).

In *Gen* 1, *image* and *likeness* continue definitely to be broad/vague concepts—the second even broader than the first; they carry on looking both ways: toward the first five or so days of creation *and*/*or* the seventh day. Reflecting on the prophetic ministry of the Old Testament and considering how amazing this is, *and*/*or*—though horrible whenever it gets reduced to an *either*/*or*—underscores the prophetic dimension that continues to conceive life at the service of God and God's word. While Western culture reckons, through the mediation of Greek philosophy and classical anthropology, with that unique *and*/*or*, the biblical text a priori excludes any form of dualism: both constitutive and cosmic.

Where ancient Greek culture sought definitions and definability—putting limits to attain comprehension and understanding—*Gen* 1 prioritizes connectiveness in all directions. There is also the shift from singular to plural as regards God (*Gen* 1:26a: "Let *us* make …") and humanity (*Gen* 1:27b: "in the image of God he created *them*"). In no way does *Gen* 1:27 slow the flow of the above and/or. *Gen* 1:28–30 further constructs and articulates the shift from *Gen* 1:1–25 to *Gen* 2:1–3 through the Creator's blessing to humanity: "Be fruitful and multiply and fill the earth and subdue it and have dominion …".

While the Greek Fathers dwelt on the *substantive* reading of the *imago Dei* (*Gen* 1:26a—"Then God said, "Let us make Adam (humans) in our image, according to our likeness", the Biblical text provides a *functional* (*Gen* 1:28–30), *relational* (*Gen* 1:26–27 and 28–30) and *eschatological* key (*Gen* 2:1–3). And the whole puzzle is back to semantics!

If the current debate on technology and Artificial Intelligence refers back to the *imago Dei* theology (*Gen* 1:26) as interpreted by the Fathers, there is no way out of the fundamental dichotomy between mind and body, human intelligence and AI, human agency and the long-awaited characteristics of Artificial General Intelligence. If the current debate upholds the integral semantics of *Gen* 1:1–2:3, then research can situate itself between the two accounts of creation and, moving beyond definability and liminality, choose responsible semantics that span the 'seven days' of all that is.

Functional, *relational,* and *eschatological* interpretations cannot be a mere afterthought, stemming from some religious outlook, meaning, or spirituality. In the 20th century, the world espoused human dignity and subscribed to the Universal Declaration of Human Rights. Choosing definability and distinction at the expense of life's communion across races, ethnicities and borders, and espousing Big Data's dominance and ascendency, humanity can push the clock backwards and—to all intents and purposes—nullify human dignity.

7. Conclusions

> "Every design choice [on the part of developers] reflects a vision of humanity" (MH 111).

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Magnifica Humanitas 45 calls for "bringing to light different aspects of a single heritage: the dignity of the person, the value of work, the universal destination of goods, solidarity and subsidiarity, care for creation and the centrality of peace and fraternity". Leo XIV's call becomes possible through collaboration across the board: the legal and the juridical, the educational and the faith-based, research fields and specialties, labor and economics, geopolitics, macroeconomics, and biosystems.

As Spanish writer Javier Cercas observes, "Technology is not the problem. The problem is the use we make of technology. … we human beings designed the technology and therefore we are responsible for the good or evil that is done with it" (Cercas 2026). This interpretation, which emphasizes the fundamentally human responsibility underlying technological development, corresponds closely to Leo XIV's own perspective. As Cercas himself notes, Pope Leo understands artificial intelligence as neither a panacea nor a diabolical force, but rather as something shaped by human use and therefore accountable in all circumstances to ethical ownership and responsibility.

This insight already found its normative articulation in Leo XIV's Message for the 60th World Day of Social Communications (Leo XIV 2026b), dedicated to artificial intelligence and technology:

> "The task laid before us is not to stop digital innovation, but rather to guide it and to be aware of its ambivalent nature. It is up to each of us to raise our voice in defense of human persons, so that we can truly assimilate these tools as allies. …".

The creators and developers of all AI models, whatever their scope or entity, are thus invited to honor human dignity and the right to life while practicing transparency and social responsibility. *Magnifica Humanitas* calls them to attain such as they handle design principles and the well-balanced systems underlying their algorithms and the models they develop, and as they promote informed consent on the part of all users. The encyclical requires the same responsibility of national legislators and supranational regulators, whose task it is to ensure respect for human dignity at all costs and in all directions.

However, in order to carry out this task, reflection on a theology of technology continues to be essential. This article has shown, first, that the Christian understanding of dignity, grounded in the concept of the image of God, requires a proper interpretation capable of accounting for human uniqueness in the face of certain questions concerning the relationship between this biblical category and AI. Second, it has been argued that AI can only co-produce human intentionality; nevertheless, this is sufficient to require a rethinking of the Catholic theology of human action.

In the age of AI, "we need faces and voices to speak for people … again. We need to cherish the gift of communication as the deepest truth of humanity, to which all technological innovation should also be oriented" (Leo XIV 2026b).

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References

Primary Source

Pseudo-Sallust. Ad Caesarem Senem de Re Publica Epistula. Available online: https://penelope.uchicago.edu/Thayer/L/Roman/Texts/Sallust/pseudo/Epistula_ad_Caesarem*.html (accessed on 28 June 2026).

Secondary Sources

African Business. 2026. Africa Stakes Its Claim in Global AI Governance. Available online: https://african.business/2026/03/long-reads/africa-stakes-its-claim-in-global-ai-governance (accessed on 20 April 2026).

AI Research Group for the Centre for Digital Culture of the Dicastery for Culture and Education of the Holy See. 2024. *Encountering Artificial Intelligence: Ethical and Anthropological Investigations*. Edited by Matthew J. Gaudet, Noreen Herzfeld, Paul Scherz and Jordan J. Wales. Eugene: Pickwick Publications.

AI Research Group for the Centre for Digital Culture of the Dicastery for Culture and Education of the Holy See. 2025. *Reclaiming Human Agency in the Age of Artificial Intelligence*. Edited by Paul Scherz and Brian Patrick Green. Eugene: Pickwick Publications.

Alexander, T. Desmond, and David W. Baker, eds. 2003. *Dictionary of the Old Testament: Pentateuch*. Downers Grove: InterVarsity Press.

Amo Usanos, Rafael. 2026. Apuntes de ética de inteligencia artificial. In *Desafíos para acompañar en la era digital*. Coordinated by Luis Arrieta Olmedo and María Estévez López. Madrid: Narcea, pp. 93–141.

Amo Usanos, Rafael, and Sara Lumbreras Sancho. 2026. Fundamentos filosóficos de la IA. In *Ética de la inteligencia artificial*. Edited by Rafael Amo Usanos, Sara Lumbreras Sancho and Íñigo Navarro Mendizábal. Madrid: Dykinson, pp. 69–90.

Arroyo Martínez Fabre, Mario Salvador. 2024. *Teología de la tecnología*. Pamplona: Eunsa.

Bardziński, Filip. 2014. Transhumanism and Evolution. Considerations on Darwin, Lamarck and Transhumanism. *Ethics in Progress* 5: 103–15. [CrossRef]

Biancu, Stefano. 2025. Pour un nouvel humanisme: La spécificité humaine à l'épreuve de l'intelligence artificielle. *Revue d'Éthique et de Théologie Morale* 329: 37–50. [CrossRef]

Bonhoeffer, Dietrich. 2005. *Ethics*. Minneapolis: Fortress Press.

Bonino, José Minguez. 1975. *Room to Be People: An Interpretation of the Message of the Bible for Today's World*. Geneva: World Council of Churches.

Bory, Paolo., Simone Natale, and Christain Katzenbach. 2025. Strong and Weak AI Narratives: An Analytical Framework. *AI & Society* 40: 2107–17.

Botterweck, G. Johannes, Helmer Ringgren, and Heinz-Josef Fabry, eds. 2012. *Theological Dictionary of the Old Testament, Volume XII*. Grand Rapids, MI: Eerdmans, p. 636.

Bultmann, Rudolf. 1955. *Essays: Philosophical and Theological*. London: SCM Press.

Campbell, Heidi A., and Stephen Garner. 2016. *Networked Theology*. Grand Rapids: Baker Academic.

Campos Ríos, Maximiliano. 2025. *Artificial Intelligence and Public Policy in Latin America and the Caribbean*. Caracas: Latin American Center for Development Administration (CLAD).

Casalone, Carlo, Maurizio Chiodi, Roberto Dell'Oro, Pier Davide Guenzi, Anne-Marie Pelletier, Pierangelo Sequeri, Marie-Jo Thiel, Alain Thomasset, and Vincenzo Paglia. 2024. *La alegría de vivir*. Madrid: San Pablo.

Cercas, Javier. 2026. Leo XIV's Balanced View on Artificial Intelligence. *Vatican News*. Available online: https://www.vaticannews.va/en/church/news/2026-03/javier-cercas-leo-xiv-balanced-view-artificial-intelligence.html (accessed on 20 April 2026).

Clancy, Tim. 2019. Virtual Eschatology: Teilhard and Transhumanism. Paper presented at the Society for Philosophy and Technology Conference, Texas A&M University, College Station, TX, USA, May 20–22; Available online: https://religioustech.org/wp-content/uploads/2021/06/Teilhard-and-Transhumanism-1.pdf (accessed on 28 June 2026).

Cole-Turner, Ronald. 2015. Going beyond the Human: Christians and Other Transhumanists. *Theology and Science* 13: 150–61. [CrossRef]

Debourse, Céline. 2022. *Of Priests and Kings*. Leiden: Brill.

Dicastery for the Doctrine of the Faith, and Dicastery for Culture and Education. 2025. *Antiqua et Nova: Note on the Relationship Between Artificial Intelligence and Human Intelligence*. Vatican City: Dicastery for the Doctrine of the Faith. Vatican City: Dicastery for Culture and Education. Available online: https://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_ddf_doc_20250128_antiqua-et-nova_sp.html (accessed on 20 April 2026).

Donaldson, Steve, and Ron Cole-Turner, eds. 2018. *Christian Perspectives on Transhumanism and the Church: Chips in the Brain, Immortality, and the World of Tomorrow*. Cham: Springer.

Dorobantu, Marius. 2022. Strong Artificial Intelligence and Theological Anthropology. In *Humanism and Its Discontents*. Cham: Palgrave Macmillan, pp. 19–33.

Dudley, Renee. 2026. The Federal Government Is Rushing Toward AI. Our Reporting Offers Three Cautionary Tales. *ProPublica*, April 6. Available online: https://www.propublica.org/article/federal-government-ai-cautionary-tales (accessed on 20 April 2026).

Ellul, Jacques. 1964. *The Technological Society*. Translated by John Wilkinson. New York: Vintage Books. First Published in French as La technique ou l'enjeu du siècle.

Ellul, Jacques. 1989. The Search for Ethics in a Technicist Society. In *Ethics and Technology*. Edited by Carl Mitcham. Translated by Dominique Gillot, and Carl Mitcham. Greenwich: JAI Press, vol. 9, pp. 23–36.

Ellul, Jacques. 2005. *Jacques Ellul on Politics, Technology, and Christianity: Conversations with Patrick Troude-Chastenet*. Eugene: Wipf and Stock Publishers.

Fisher Phillips. 2025. AI Governance Is Growing in Asia-Pacific: Key Developments and Takeaways for Multinational Companies. Available online: https://www.fisherphillips.com/en/insights/insights/ai-governance-is-growing-in-asia-pacific (accessed on 20 April 2026).

Foerst, Anne. 1999. Artificial Sociability: From Embodied AI toward New Understandings of Personhood. *Technology in Society* 21: 373–86. [CrossRef]

Foertsch, Steven. 2023. Metamodernity, American Transcendentalism and Transhumanism in Japanese Anime. In *Anime, Philosophy and Religion*. Edited by Kaz Hayashi and William H. U. Anderson. Wilmington, DE: Vernon Press, pp. 73–98.

Francis. 2016. Address of His Holiness Pope Francis to the Italian Biblical Association. Clementine Hall. September 15. Available online: https://www.vatican.va/content/francesco/en/speeches/2016/september/documents/papa-francesco_20160915_associazione-biblica-italiana.html (accessed on 28 June 2026).

Francis. 2020. Address to the Participants at the General Assembly of the Pontifical Academy for Life. February 28. Available online: https://www.vatican.va/content/francesco/en/speeches/2020/february/documents/papa-francesco_20200228_accademia-perlavita.html (accessed on 20 April 2026).

Gagnon, Philippe. 2012. The Problem of Transhumanism in the Light of Philosophy and Theology. In *The Blackwell Companion to Science and Christianity*. Edited by James B. Stump and Alan G. Padgett. Malden and Oxford: Wiley-Blackwell, pp. 393–405.

García-Moncó, Iñigo. 2022. Praxis digital. *Argumentos Razón Técnica* 25: 256–67.

Godde, Sandra J. 2022. *Reaching for Immortality: Can Science Cheat Death? A Christian Response to Transhumanism*. Foreword by Graham Joseph Hill. Eugene: Wipf and Stock.

Goertzel, Ben. 2016. *The AGI Revolution: An Inside View of the Rise of Artificial General Intelligence*. Los Angeles: Humanity+ Press.

Goundrey-Smith, Stephen. 2023. *Transhumanism, Ethics and the Therapeutic Revolution: Agents of Change*. London: Routledge.

Gouw, Arvin M., Brian Patrick Green, and Ted Peters, eds. 2022. *Religious Transhumanism and Its Critics*. Lanham: Lexington Books.

Green, Brian Patrick. 2022. A Roman Catholic View: Technological Progress? Yes. Transhumanism? No. In *Religious Transhumanism and Its Critics*. Edited by Arvin M. Gouw, Brian Patrick Green and Ted Peters. Lanham: Lexington Books, pp. 143–60.

Guardini, Romano. 1994. *Letters from Lake Como: Explorations in Technology and the Human Race*. Grand Rapids: Eerdmans.

Herzfeld, Noreen L. 2002. Creating in Our Own Image: Artificial Intelligence and the Image of God. *Zygon* 37: 303–13. [CrossRef]

Herzfeld, Noreen L. 2022. Theology and Technology. St Andrews Encyclopaedia of Theology. Available online: https://www.saet.ac.uk/Christianity/TheologyandTechnology (accessed on 20 April 2026).

Ihde, Don. 1990. *Technology and the Lifeworld*. Bloomington: Indiana University Press.

Ihde, Don. 2002. *Bodies in Technology*. Minneapolis: University of Minnesota Press.

Jiménez-Rodríguez, Luis O. 2019. Los aportes de la teología de la creación. *Pensamiento* 75: 394–410. [CrossRef]

Jiménez-Rodríguez, Luis O. 2026. Artificial intelligence as instrument, *imago Dei* or *figura hominis*? Engaging contemporary theology and recent technological developments. *Estudios Eclesiásticos* 101: 301–336. [CrossRef]

John Paul II. 1979. By the Communion of Persons Man Becomes the Image of God. General Audience. November 14. Available online: https://www.vatican.va/content/john-paul-ii/en/audiences/1979/documents/hf_jp-ii_aud_19791114.html (accessed on 28 June 2026).

Kurzweil, Ray. 2000. *The Age of Spiritual Machines: When Computers Exceed Human Intelligence*. New York: Penguin Books.

Kurzweil, Ray. 2006. *The Singularity Is Near: When Humans Transcend Biology*. London: Penguin.

Kuznetsov, Michael. 2026. Divine omniscience in the age of artificial intelligence: Can machines mediate access to God or supplant divine attributes? *Estudios Eclesiásticos* 101: 219–54. [CrossRef]

Lambert, Dominique. 2025. L'éthique de l'intelligence artificielle: Quelques pistes …. *Revue d'Éthique et de Théologie Morale* 329: 15–36. [CrossRef]

Le Figaro, and AFP. 2026. Sommet de l'IA: Emmanuel Macron affirme que l'Europe est un « espace sûr ». Le Figaro. Available online: https://www.lefigaro.fr/secteur/high-tech/sommet-de-l-ia-emmanuel-macron-affirme-que-l-europe-est-un-espace-sur-contrairement-a-ce-que-disent-des-amis-mal-informes-20260219 (accessed on 20 April 2026).

Leo XIV. 2026a. *Magnifica Humanitas*. Encyclical Letter. Available online: http://vatican.va/content/leo-xiv/en/encyclicals/documents/20260515-magnifica-humanitas.html (accessed on 19 June 2026).

Leo XIV. 2026b. Message for the World Day of Social Communications 2026. Available online: https://www.vatican.va/content/leo-xiv/en/messages/communications/documents/20260124-messaggio-comunicazioni-sociali.html (accessed on 20 April 2026).

Levin, Christoph. 2022. Genesis in Form and Tradition Criticism Today. In *The Cambridge Companion to Genesis*. Cambridge: Cambridge University Press, pp. 74–98.

Lovelock, James. 2019. *Novacene: The Coming Age of Hyperintelligence*. Cambridge: MIT Press.

Lumbreras, Sara. 2017. Strong Artificial Intelligence and Imago Hominis: The Risks of a Reductionist Definition of Human Nature. In *Issues in Science and Theology: Are We Special? Human Uniqueness in Science and Theology*. Cham: Springer, pp. 157–68.

Lumbreras, Sara. 2022. Lessons from the Quest for Artificial Consciousness. *Zygon* 57: 963–83. [CrossRef]

Magnin, Thierry. 2025. Le développement de l'IA est-il compatible avec l'écologie intégrale? *Revue d'Éthique et de Théologie Morale* 329: 85–97. [CrossRef]

Martinez, Rex. 2019. Artificial Intelligence: Distinguishing between Types and Definitions. *Nevada Law Journal* 19: 1027–29.

Mercer, Calvin, and Tracy J. Trothen, eds. 2015. *Religion and Transhumanism: The Unknown Future of Human Enhancement*. Santa Barbara: Praeger.

Merleau-Ponty, Maurice. 2002. *Phenomenology of Perception*. London: Routledge.

Middleton, Richard J. 1994. The Liberating Image? *Christian Scholar's Review* 24: 8–25.

Murray, James A. H., Henry Bradley, William A. Craigie, and Charles T. Onions, eds. 1989. *The Oxford English Dictionary*. Oxford: Clarendon Press.

Noble, David F. 1999. *The Religion of Theology: The Divinity of Man and the Spirit of Invention*. Pittston: Penguin Publishing Group.

Nørskov, Marco. 2015. Revisiting Ihde's Fourfold Technological Relationships. *Philosophy & Technology* 28: 189–207.

Oviedo, Lluís. 2022. AI and Theology: Looking for a Positive—But Not Uncritical—Reception. *Zygon* 57: 938–52. [CrossRef]

Palazzani, Laura. 2025. La santé à l'ère de l'IA et des neurosciences: Défis éthiques pour l'autonomie et la liberté. *Revue d'Éthique et de Théologie Morale* 329: 113–36. [CrossRef]

Permanent Mission of France to the United Nations. 2026. The European Union Works alongside the United Nations for the Primacy of Law over Force. Available online: https://onu.delegfrance.org/the-european-union-works-alongside-the-united-nations-for-the-primacy-of-law (accessed on 20 April 2026).

Peters, Ted. 2022. Homo Deus or Frankenstein's Monster? Religious Transhumanism and Its Critics. In *Religious Transhumanism and Its Critics*. Edited by Arvin M. Gouw, Brian Patrick Green and Ted Peters. Lanham: Lexington Books, pp. 3–30.

Peters, Ted. 2025. Artificial Intelligence, Transhumanism, and Frankenfear. *Agathon* 10: 28–35.

Poullet, Yves. 2024. Human Dignity at an AI Age. In *Human Freedom at the Test of AI*. Rome: Studium, pp. 187–200.

Ruiz de la Peña, Juan Luis. 1988. *Imagen de Dios*. Santander: Sal Terrae.

Schmidt, Katherine G. 2022. A Few New Things under the Sun: A Sacramental Approach to Digital Ecclesiology. In *Ecclesiology for a Digital Church*. London: SCM Press, pp. 52–65.

Schofer, Jonathan. 2006. The Image of God: A Study of an Ancient Sensibility. *Journal of Textual Reasoning* 4: 46–60.

Schreiber, Milton Aguilar. 1987. *L'uomo immagine di Dio: Principi ed elementi di sintesi teologica*. Studia Theologica 6. Roma: Teresianum, p. 274.

Scroxton, A. 2026. UK Businesses Must Face up to AI Threat, Says Government. Computer Weekly. Available online: https://www.computerweekly.com/news/366641649/UK-businesses-must-face-up-to-AI-threat-says-government (accessed on 20 April 2026).

Searle, John R. 1980. Minds, Brains, and Programs. *Behavioral and Brain Sciences* 3: 417–517. [CrossRef]

Simpson, Christopher Ben. 2023. Introduction. In *Human Flourishing in a Technological World: A Theological Perspective*. Oxford: Oxford University Press, pp. 1–16.

Sols, José. 2026. La antropología teológica cristiana ante el desafío de la inteligencia artificial. *Estudios Eclesiásticos* 101: 255–300. [CrossRef]

Sommer, Benjamin D. 2000. The Babylonian Akitu Festival. *Journal of the Ancient Near Eastern Society* 27: 81–95.

Steiner, Christian M. 2025. Gesù risorto ispira una vita più umana: Gaudium et spes e intelligenza artificiale. In *Intelligenze e artificialità. Riflessioni filosofiche e teologiche sull'intelligenza artificiale*. Firenze: Nerbini, pp. 83–95.

Steinhart, Eric. 2008. Teilhard de Chardin and Transhumanism. *Journal of Evolution and Technology* 20: 1–22.

Tanzella-Nitti, Giuseppe. 2015. La visione della cultura scientifica nel Concilio Vaticano II. *Apulia Theologica* 1: 103–18.

Trowitzsch, Michael. 2002. Technik II. In *Theologische Realenzyklopädie*. Berlin and New York: De Gruyter, vol. 33, pp. 12–15.

Tye, Michael. 2025. Qualia. Stanford Encyclopedia of Philosophy. Available online: https://plato.stanford.edu/entries/qualia/ (accessed on 20 April 2026).
Umar, Muhammad Suheyl. 2004. Image of God: A Note on the Scriptural Anthropology. *Journal of Scriptural Reason* 4: 8–20. [CrossRef]
Vestrucci, Andrea. 2022. Introduction: Five Steps toward a Religion–AI Dialogue. *Zygon* 57: 933–37. [CrossRef]
Wales, Jordan J. 2023. The Icon and the Idol. In *Human Flourishing in a Technological World: A Theological Perspective*. Oxford: Oxford University Press, pp. 94–115.
Xu, Ximain. 2025. *The Digitalised Image of God: Artificial Intelligence, Liturgy and Ethics*. New York: Routledge.
Young, Willaim. 2022. Virtual Pastor. *Theology and Science* 20: 6–22. [CrossRef]
Zygoulis, Photios Nikolaou. 2024. Artificial Intelligence and Theology? A Crucial Discourse Question. *Preprint*. [CrossRef]