

Digital Revolution : The Death of Agency and Freedom in a Post-Human Future?¹

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From a Christian perspective, the starting point for any reflection on what it means to be human is the Creation story. Man is made in the image and likeness of God. What does it mean to be made in the image of God? What does it mean to be made in the likeness of God? The characteristics we humans display, which differentiate us from all other living creatures, find their source in the *imago Dei*, namely:

- The capacity to love, and to love unconditionally, in its purest form, as a reflection of Trinitarian love
- The capacity to give, freely, without expecting anything in return, in the same way that the Father gave life, along with the abundance of Creation to accompany it; the Son gave up His own life, as a sacrificial holocaust for our redemption; and the Spirit gave us His gifts as the Paraclete
- The capacity to forgive, to show mercy, in the image of the loving and forgiving Father, whom St Paul urged us to call upon as 'Abba! Father!' (Rm 8:15)
- The capacity to participate in the generative process of creation, not least through the creation of new life via conjugal union, emanating from the commandment 'go forth and multiply and fill the earth' (Gn 1:28)
- The capacity to form bonds of communion, in a reflective image of the Trinitarian life, through our ability to speak, listen, share, support and empathise
- The capacity to potentially partake in eternal life, through the infusion in our mortal bodies of an immortal soul, combined with the prospect of bodily resurrection
- The capacity to participate in the life of the Trinity, through the transformative co-optation as adoptive sons and daughters of God, allowing us to 'see God', to see the 'face of the Father'
- The capacity to experience cognition, to process and acquire knowledge, including self-knowledge, and self-awareness

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- The capacity to exercise free will and free choice, with the aid of an informed conscience

These elements form the very essence of our common humanity. Together, they are what give us an *anima*, the sentient spirit distinct from the soul, but whose existence would be impossible or make no sense in the absence of a supernatural soul. They define personhood.

The capacity to exercise free will is no doubt the most important of these characteristics, because all the others flow from it. Without free will, the capacity to love, forgive, form bonds of communion, choose between right and wrong, are moot. Human agency lies at the heart of the moral life, governing the ways in which we interact with God and with each other. It also lies at the heart of civilisation. Individual and collective choices, when aggregated, amount to civilisational choices.

It is with these characteristics of humanness in mind that we ought to consider whether digital technologies, be they apps, algorithms, mobile devices, virtual reality goggles, or microchips and sensors, contribute to the common good, to the betterment of the human condition, to the fulfilment of man's vocation and purpose, or whether they pose a kind of existential threat to human nature itself by perverting it, controlling it, manipulating it, and irredeemably altering it, to the point of potentially destroying it.

When it comes to the digital phenomenon and to artificial intelligence, from a Christian ethics point of view, there are no questions more important than these: is the digital phenomenon a humanising or a dehumanising force? Does it facilitate human agency or restrict it? Does it *enable* or *enslave*?

These questions must be posed with force and urgency, as technological developments in information technology, biotechnology, neurotechnology, robotics and artificial intelligence are evolving so rapidly that the very essence of our humanity is at stake.

Digital technology undermining human agency

Bots, algorithms and artificial intelligence

The very term AI - *artificial* intelligence - suggests that it is not natural. It is a form of information technology, derived from man's natural intelligence, but whose processing powers vastly exceed those of man's intelligence. It operates almost akin to a sentient being, with the ability to adaptively respond to different inputs, signals, environments, states of nature, conditions, and events. But unlike man's intelligence, it has no 'moral override' or capacity for empathy or discernment. It is incapable of autonomously making moral choices and can be seen as an amoral operator, albeit one with vast powers.

And yet, the algorithms which drive certain AI processes, for example, on social media platforms or internet search engines, are often based upon established patterns of human behaviours, meaning that they can reinforce tendencies towards vice : lust and violence in particular are powerful emotions, which are positively reinforced by algorithms in feedback loops that are designed to prey upon human weaknesses in a way that is camouflaged as user preferences. In this way, algorithms can be ascribed moral value, even though they be inanimate proxies for the human intellect. And in this particular example, such algorithms could be said to be *immoral*, not just amoral. With positive reinforcement, and 'nudging' – the ability for algorithms to influence human choice through the way in which information is displayed – human agency is curtailed by bots and algorithms that guide a user's experience on the

internet and digital platforms. Pop-ups, personalised ads, the order in which search results are displayed, as well as auto-complete functions are designed with built-in confirmation bias, recency bias, and reinforcement bias, all of which can weaken the will. Indeed, in some cases the algorithms are specifically designed to weaken the will, so as to engineer a particular outcome, or to elicit a specific behavioural response from users.

Digital gadgets also serve to undermine the human will – and therefore curtail human agency – by presenting an unending and hypnotic cocktail of distractions, ranging from huge libraries of streaming movies on platforms like Netflix to online gaming to Virtual Reality and 4D sensory experiences, to clickbait, to narcissistic posts on social media in a bid to collect ‘likes’. Humans are now passively *responding* to sensory impulses targeting them, rather than *creating* necessary and beautiful things, or being agents contributing to the common good. Pathological narcissism appears to have reached epidemic proportions globally. Through clever marketing traps, digital gadgets, and the advent of virtual reality, or the ‘metaverse’, where we live vicariously through digital replicas of ourselves as avatars in a parallel digital universe, we are led to believe that we are active participants, and therefore agents, in a new digital reality, when in fact our human agency has been all but usurped. Hence the oft-used expression in Silicon Valley ‘when the product is free, *you* are the product,’ as the user terms of most social media platforms attest – all messages posted, all emoticons activated, the entire digital footprint of an individual is proprietary to the platform operator, not to the individual user who generates the data. In other words, the human subject becomes the object. Everything that we do, choose, look at – our entire lives, our relationships, bodies and even our very existences, are data points to be harvested and analysed to uncover predictive patterns of behaviour, with a view to monetise, influence and control the entire chain of human experiences, and even the human person itself.

We, created in the image and likeness of God, have become a *product* – the product of the Fourth Industrial Revolution, the Digital Revolution. Indeed, carried to its extreme in the transhumanist movement, human *beings*, not just the human body, but the human *being*, with all that makes us human over and above our biological reality, that is, our *anima*, our cognitive function, our emotions, our relationships, our nervous systems, our thoughts, feelings, aspirations, hopes, fears, and ultimately, faculty to discern between right and wrong, are targeted as the last frontier of technology – a commodity to be exploited or a free spirit to be controlled. Pope Paul VI warned of the ability of the objects we create to enslave us, when they are not designed with the truth about the human person in mind: “*While very large areas of the population are unable to satisfy their primary needs, superfluous needs are ingeniously created. It can thus rightly be asked if, in spite of all his conquests, man is not turning back against himself the results of his activity. Having rationally endeavored to control nature, is he not now becoming the slave of the objects which he makes?*”³

With every click of a mouse, every emoticon shared, every key tapped on a keyboard, every person we digitally connect to, every place we visit, every purchase we make, every ‘like’ or ‘dislike’ or other button we press on our screens, every internet search we conduct, we freely give up information about our preferences, lifestyles, habits, and political views to vastly powerful information aggregators. In turn, these information aggregators process this mass of information to build a digital profile on each user, with a view towards either monetising the data, for example, with targeted advertising, or for the purposes of exercising total control and dominion over those individuals through historically unprecedented personal

³ *Octogesima Adveniens*, 9

data harvesting. Linking this internet footprint to government-operated digital profiling like digital wallets, digital IDs and digital passes, whether vaccination passports or social credit scores, allows for the comprehensive surveillance of virtually all human activity, allowing for total government control over what information people access or see, what they can buy, where they can travel, whom they may see, where they can work. In either case, we are confronted with potentially the most systematic commodification of the human person in history. Unlike previous historical cases of human commodification, such as slavery (in the sense of forced, unpaid labour), this nearly universal yet more subtle, nefarious, and often hidden commodification targets the *anima*, by penetrating the inner core of a person, going so far as to interpret even our thoughts. It is a very real form of slavery enabled by poor use of emerging technologies, which can be designed to suffocate human agency and to enslave the masses.

With the Internet of Things, this trend will only intensify very considerably. Data is growing – and therefore being harvested – at exponential rates. 90% of all data available in the world was created over the past two years, and every day we produce 2.5 quintillion bytes of data,⁴ numbers that are unfathomable. This means that digital profiles of ourselves, whose existence we often completely ignore, are being compiled with ever-greater precision. This precision includes predictive analytics, to such an extent that experiments demonstrate the ability of neural networks or machine-learning algorithms to predict the behaviours of human subjects better than those subjects can predict their own behaviours.

According to Yuval Harari, the contemporary Israeli philosopher and transhumanist provocateur, the likely outcome of these trends is that *“governments and corporations will soon know you better than you know yourself. Belief in the idea of ‘free will’ has become dangerous.”*⁵ Not only is such a vision alarming and dystopian, but it is a true perversion of the Biblical understanding that there is only One who knows us better than we know ourselves: our Creator, whom St Augustine describes as *“interior intimo meo et superior summo meo”* (*“higher than my highest and more inward than my innermost self”*).⁶ Psalm 139 is explicit about just how well God knows us: *“You have searched me, Lord, and you know me. You know when I sit and when I rise; you perceive my thoughts from afar. You discern my going out and my lying down; you are familiar with all my ways. Before a word is on my tongue you, Lord, know it completely.”* An omniscient God’s intimate knowledge of the persons He created, even unto the very number of hairs on their heads (Lk 12:7) is rooted in love, at least according to the Judeo-Christian tradition: *“Before I formed you in the womb I knew you, and before you were born I set you apart”* (Jeremiah 1:5). In contrast, an omniscient central planner’s intimate knowledge of citizens through mass surveillance and biometric data harvesting is rooted in fear, disdain, and a desire for total control.

What good can possibly come out of these new digital tendencies, whose purpose is very evidently to control the masses? Vaccine passports, social credit scores, facial recognition, ‘smart’ cities, implanted biometric sensors, ‘smart homes’, the Internet of Things, digital currencies and ‘programmable money’ all point to the death of privacy. They smack of a dystopian future, already upon us. The experience of the Canadian truckers, who were shut off from payments and banking services, purely for political reasons,

⁴ <https://www.forbes.com/sites/bernardmarr/2018/05/21/how-much-data-do-we-create-every-day-the-mind-blowing-stats-everyone-should-read/?sh=4245e95f60ba>

⁵ <https://www.theguardian.com/books/2018/sep/14/yuval-noah-harari-the-new-threat-to-liberal-democracy>

⁶ St Augustine, *Confessions* III, 6, 11, as cited by Pope Benedict XVI in the Angelus message of 11 December 2011. https://www.vatican.va/content/benedict-xvi/en/angelus/2011/documents/hf_ben-xvi_ang_20111211.html

shows the authoritarian path Western democracies are blindly walking into, aping the Chinese Communist Party. The trend is global : Nigeria recently shut off the ability of 73 million citizens to make outbound mobile phone calls, because one third of its population did not register for a centralised national digital identity database, presumably rolled out to ‘protect’ citizens.⁷ Everyone is familiar with the way digital vaccination passports allowed for discrimination between two groups of citizens, based upon their medical or ethical choices. These examples point to the serious risks to human freedom which the politicisation and weaponisation of the financial system and other critical network infrastructures, including transport and mobile telephony present – through the coercive power of regulation to force private corporations to act as extended arms of a politicised police force. Digitised currencies and digital infrastructures will only exacerbate these trends, whereby individuals or groups of individuals can be shut off from essential services at the flip of a switch, in violation of their human rights.

Does the death of privacy herald the end of free will? Algorithms and machines not only influence our decision-making, they can even make decisions on our behalf, or be programmed to grant or remove our access to various services, sometimes without our even being aware, based on previous patterns of consumption, internet search, conversations on digital platforms, people we are associated with, places we visit, political views we express and religious creeds we profess. In the digital age, not one aspect of our lives is not, already, under constant watch by a never-resting surveillance apparatus. The death of privacy augurs ill for the ability of humankind to think freely and act freely. God remains hidden for a reason: though omniscient, He remains invisible, because His visible presence, constantly looking at us, watching over us, visibly, would reduce us to puppets, who act out of fear, not out of love. Unlike the ‘big brother’ of all-encompassing, all-encroaching digital sensors, cameras and tokens, the hidden God is a loving God, who facilitates human agency and allows us to freely choose good or evil, because allowing someone to operate freely is the opposite of control. And the opposite of control is love.

This is where the notion of agency, in the Christian sense of free will, is challenged by the transhumanists, who believe every human action to be either a motor neuron response, i.e. a purely mechanical response to a neurological impulse, linked to biology, rather than to an abstract, immaterial – but real – entity such as the will or the soul, or to be the result of human conditioning, such as the environments we grow up in or the ideas to which we were exposed in school. In a way, the soul, or the will, is their enemy, because it presents a fundamental challenge to the agenda to enslave man, which they view as a biological organism to be controlled, paradoxically by ‘augmenting’ his physical capabilities and cognitive function through bioengineering, the fusion of biology and computer processing power. The technologists and radical capitalists, who instrumentalise the human person in a bid to maximise the immense profits that can be made from predicting human behavioural patterns, are equally as guilty of perverting human nature. They reduce the human person to a vector of data points – a consumer to be targeted.

The economic dimension

It could be argued that the digitalisation of commerce dehumanises commerce. This is not just a spatial phenomenon, in the sense that the ‘Amazonification’ of the economy is hollowing out the high street, with bricks and mortar retail becoming an artifact of past habits. It is also a *human* phenomenon, because the economy is comprised of human actors, who go about ‘subduing the earth’ (Gn 1:28) by ‘multiplying

⁷ <https://news.trust.org/item/20220420123542-btwyo/>

their talents' (Mt 25: 14-30) and eating bread 'by the sweat of their brow' (Gn 3:19). Not only is the economy *comprised* of human actors, it is human actors which give work – the 'raw material' that is labour input – any kind of ontological meaning. There is a human element to commerce, as an activity that is impossible without human producers and human consumers. By removing them altogether, or downgrading the primacy of human actors, the automation of production and of distribution via digital platforms has the ability to dehumanise the workforce. The fact that nearly all the Silicon Valley 'gig-economy' giants like ride-hailing firms Uber and Lyft treat their workers as 'contractors' rather than employees, is telling. As contractors, workers are not entitled to essential legal protections like a minimum wage, employer pensions contributions, safeguards in terms of working conditions and reasonable working hours. In *Rerum Novarum*, Pope Leo XIII is unflinching on the exploitation of workers: "*To defraud any one of wages that are his due is a great crime which cries to the avenging anger of Heaven.*"⁸ Digital giants like Amazon have prevented their workers from unionising for well over a quarter of a century, whereas Catholic Social Teaching explicitly recognises the rights of workers to form unions. Through the exploitation of labour, and by pitting man against machine, the Digital Revolution has facilitated the dehumanisation of the workforce in a way not seen since the Industrial Revolution in developed countries.

By disintermediating the human face of commerce, by eliminating the 'storefront' or the 'marketplace' where goods are bought and sold, the digital economy dehumanises the human exchanges, which take place between producer and the consumer. Digital networks also have the potential to dehumanise the entire supply chain by removing entirely, or rationalising, the human element in distribution. It has the capacity to remove any semblance of human satisfaction and pride, which the artisan producer might have in selling the product he made – in other words, it impoverishes society by catastrophically diminishing those intangibles, which make commerce human.

Through the 'winner-take-all' dynamics of any technological revolution, the Digital Revolution has also removed agency from the consumer. The hollowing out of the economy by digital behemoths like Amazon often leave the consumer with no choice but to engage with digital distribution platforms, because of the economic network effects that scale generates in logistics.

The digitalisation, and by extension, the virtualisation of the economy, of communication, of relationships, deconstructs all these essential human activities in a reductionist manner. By disintermediating human interventions, and commodifying the human person, they are literally dehumanising.

Bioengineering, transhumanism and the merging of man and machine

Next generation biometrics won't just remain on the surface, like facial recognition, eye-scanning, digital fingerprinting, and wearable technology, such as the iWatch, which can also monitor our vital signs. Rather, they will lurk *under* the surface of our skin. Indeed, digital wallets are already being rolled out, in the form of microchips implanted in the hand,⁹ which allow for the connection of the human body, via the simple waive of a hand, to digital appliances like electronic car locking mechanisms, digital bank accounts, and hospital monitors. All in the name of convenience, expedience, and comfort. And through the Trojan Horse of convenience and expedience comes the most radical programme of data collection in human

⁸ *Rerum Novarum*, 20

⁹ <https://www-bbc-co-uk.cdn.ampproject.org/c/s/www.bbc.co.uk/news/business-61008730.amp>

history. Trading fundamental freedoms for convenience and expedience – the lessons of the Israelites lamenting the ‘comforts’ of their life of captivity in Egypt spring to mind: *“Meanwhile, the rabble among them had a strong craving for other food, and again the Israelites wept and said, “Who will feed us meat? We remember the fish we ate freely in Egypt, along with the cucumbers, melons, leeks, onions, and garlic. But now our appetite is gone; there is nothing to see but this manna!”* (Numbers 11:4-5).

Not just external manifestations of our behaviour will be tracked, such as internet searches, purchases, social media connections, and real-time locations, but our very thoughts and emotions will be monitored. Indeed, some schools are already rolling out AI-based facial recognition capabilities to ‘read’ the emotions of pupils as they engage with learning content, presumably under the pretext that this will help teachers to better tailor content to each pupil. Tailor? Or target, isolate and indoctrinate? The next phase, neurotechnology, well underway already, will connect digital sensors directly to our nervous system. This will allow for direct, centralised monitoring of human thoughts and emotions, and conduct biometric profiling in real-time. All of this amounts to a historically unprecedented violation of human integrity and dignity that can only have catastrophic consequences.

These trends in biotechnology will usher in the age where, as Yuval Harari predicts, *“humans [will be] hackable animals. The whole idea that humans have this soul, that they have this spirit, that they have free will, and nobody knows what’s happening inside me, so whatever I choose, whether in the election, or whether in the supermarket, this is my free will....that’s over.”*¹⁰

That inanimate objects and sensors will soon be making behavioural choices on our behalf, predicting our own future actions, thereby totally undermining the will, even to the extent of *replacing* the will, raises some fundamental questions : What will remain of human agency? Are these trends truly compatible with a Christian ethos? Are they even compatible with *humanity*?

Technological progress and erroneous anthropology

From the dawn of mankind, technological progress has always been associated with hubris. Greek mythology references the hubris of Icarus, who, thanks to Daedalus’ innovation, achieved a long-standing dream for man to fly like birds. As we know, he flew too close to the sun, ignoring Daedalus’ warnings. The wax holding together his wings melted, so he perished.

The story of the Tower of Babel is the story of a technological revolution. It is arguably the first technological revolution that is mentioned in the Bible : *‘They said to each other, “Come, let’s make bricks and bake them thoroughly.” They used brick instead of stone, and tar for mortar’* (Gn 11:3). Bricks are much cheaper to produce, lighter, smoother and more even than stone. They can also be manufactured in situ, making the construction of a large tower far more practical. Thus, it seems that the timing of the tower’s construction coincided with the adoption of bricks as a convenient building material. With these new capabilities, man’s hubris grew: *“Come, let us build ourselves a city, with a tower that reaches to the heavens, so that we may make a name for ourselves; otherwise we will be scattered over the face of the whole earth”* (Gn 11:4). ‘So that we can make a name for ourselves’: this is the motivation behind the construction. It is not surprising that God chose to punish Noah’s descendants by confounding their ability

¹⁰ Yuval Harari 60 Minutes interview, 1 November 2021 - <https://www.youtube.com/watch?v=EIVTf-C6oQo>

to communicate. In contrast to their ancestor, they had sought to build according to their own vision, according to their own specifications and plans, to fulfil their own, ungodly purpose.

The ideology of progress, including technological progress, as an end in and of itself, as an artificial proxy for the highest good, is an ideology that is rooted in a violation of the First Commandment. This is the sin of Adam. It is antithetical to the Gospel and based on the idea that man can become God, or like gods, by eating the forbidden fruit of the Tree of the Knowledge of Good and Evil. Indeed, exponents of the transhumanist movement explicitly set this out to be their goal. Yuval Harari is on record as saying: “*Now humans are developing even bigger powers than ever before. We are really acquiring divine powers of creation and destruction. **We are really upgrading humans into gods.** We are acquiring the power to re-engineer life*” (emphasis added).¹¹

Humanae Vitae, prophetic in more ways than one, warned of the temptations to play god, arising from ‘*man's stupendous progress in the domination and rational organisation of the forces of nature to the point that he is endeavoring to extend this control over every aspect of his own life—over his body, over his mind and emotions, over his social life, and even over the laws that regulate the transmission of life.*’¹² and of the risks that technological advances posed to human nature itself: *Humanae Vitae* implicitly asks an important rhetorical question – whether man can and should control every aspect of humanity – or is it, paradoxically, that by man trying to control his humanity that he paradoxically dehumanises himself, through acts and decisions that are the consequence of original sin and self-appropriated messianic mission, albeit a misguided one. Pope St. John Paul II echoed this warning a generation later in *Fides et Ratio*: “*some of these, sensing the opportunities of technological progress, seem to succumb not only to a market-based logic, but also to the **temptation of a quasi-divine power over nature and even over the human being***” (emphasis added).¹³

When Christ reminded the elders that God had told their forebearers ‘you are gods’ (Jn 10:34), quoting Psalm 82, Harari’s notion of ‘upgrading humans into gods’ is not what he meant, as Pope St. John Paul II makes clear in one of his Wednesday audiences.¹⁴ As the Pope explains, what is meant by the quote is that man’s nature, with its *anima*, with its soul, is closer to God’s nature than to the rest of the created order. Man isn’t a biological entity to be ‘hacked’ or ‘upgraded’ or yet a being destined to chart a monotonic quest of progress towards a kind of technocratic nirvana, the noosphere. Man is so much more than a mere biological reality, his vocation so much more than rudderless ‘progress.’

The transhumanist vision of progress is not rooted in a Christian anthropology, which puts man at the centre as subject. The ‘upgrading of humans into gods’ is not based on a notion of incorporation, whereby God invites man to participate in divine life, through filial adoption, as heirs; rather, it is a notion of displacement, arising from human hubris. *Cogito ergo sum*. Sum. Am. I am. Cognition is the stem of personhood. The verb am is loaded with meaning. Christ clearly establishes a hierarchy of being, in his reprimand of the pharisees, when he says ‘before Abraham was, I am’ (Jn 8:58). A sentence, which appears to be poorly constructed grammatically due to a seeming inconsistency in the tense of these sentence fragments, hides a theological truth, namely, that God operates outside of the natural, finite temporal

¹¹ *Ibid*

¹² *Humanae Vitae* 2

¹³ *Fides et Ratio*, 46

¹⁴ General Audience, 6 December 1978 https://www.vatican.va/content/john-paul-ii/en/audiences/1978/documents/hf_jp-ii_aud_19781206.html

order beyond whose boundaries man is incapable of even conceiving another reality. This deliberately extra-temporal 'am' is to place God outside of time, transcending finite concepts like time, which necessarily has a beginning and an end, whereas God is eternal and immutable. When Moses asks God, present in the burning bush, to tell him who it is who sends him, if the Israelites were to ask, God replies 'I am that I am....I am has sent...you' (Ex 3:14).

At the heart of the matter is a subtle take on what it means for man to be 'at the centre' of creation. It pits secular humanism against Christian humanism (although the latter can also be disordered). The only conceivable reason why man is the summit of creation, and ought always to remain at the centre of the universe, is because he is created in *imago Dei*. Thus, an insatiable demand for 'progress' – however vaguely defined, and for its own sake, is a false god. It has seduced mankind since the dawn of time.

Two fundamentally competing anthropologies lie at the heart of contrasting visions for the future of mankind: *Deus ex machina* vs. '*Verbum caro factum est*'. The first seeks to make a god out of a machine, seeks to raise humans to the altars of the gods, through technological progress. It is the religion professed by messianic humanists. The second is the Christian anthropology. It begins with God 'humbling himself to share in our humanity,' to take on the 'face' of man, after giving man the 'face' of God, by initially fashioning him in His image and likeness. Man seeks to rise up beyond his station. He wants to appropriate for himself supernatural powers, in the same way that Prometheus wanted to steal the fire of the gods from Mount Olympus. God lowers himself. This is the tale of two opposing anthropologies : progress for its own sake vs *integral progress*, which is progress oriented towards a higher good – both a temporal higher good, and a spiritual higher good.

Deus ex machina threatens the very *essence* of man, violating the sanctum of his innermost being. Transhumanism, the latest derivative of this flawed anthropology, will necessarily lead to the abolition of man, the erasure of man, the destruction of man, will make of man a kind of Frankenstein, a monster – the ultimate contradiction. The messianic urge of secular humanists to allow 'science' to trump nature leads to destruction, not creation, because nature has not been subdued. It has been *subverted*. The natural order is turned on its head. Subduing nature is a divine command. Subverting nature isn't. Human progress must be anchored in the divine order in order to be authentic. We go back to the Creation story and to the picking of the forbidden fruit. In this stylised representation, Adam represents the technologists and transhumanists. Christ brings light into the world and points man to his true destiny.

For the Christian, 'progress' passes through death. Paradoxically, the sacrifice of the cross becomes the ultimate sign of victory: *"Is not genuine progress to be found in the development of moral consciousness, which will lead man to exercise a wider solidarity and to open himself freely to others and to God? For a Christian, progress necessarily comes up against the eschatological mystery of death. The death of Christ and his resurrection and the outpouring of the Spirit of the Lord help man to place his freedom, in creativity and gratitude, within the context of the truth of all progress and the only hope which does not deceive."*¹⁵

The Christian response to new technologies is therefore a carefully nuanced one. On the one hand, as an incarnate religion which finds its root in the 'Word made flesh' (Jn 1:14), Christianity hails human progress, including in the field of technology, as long as it is oriented towards the common good, and reflects the noble aspiration of humanity to 'subdue the earth' and to 'multiply talents.' On the other hand, the Church knows that the unbridled human quest for technological progress as an end in and of itself is an offence

¹⁵ *Octogesima Adveniens*, 41

against God, who is the only End for its own sake, the only One who Is, the only one whose name is: “I am” (Ex 3:14). As in the story of the tower of Babel, man’s quest to displace the Creator by placing himself on the throne of God often ends in human tragedy.

Conclusion

The Church, as an ‘expert in humanity’¹⁶, as Pope Paul VI described her, has a particular duty to ‘shout from the rooftops’ (Mt 10:27) the ever-greater dangers that disordered uses of technological breakthroughs present for the integrity of the human person, made in the image and likeness of God.

Restoring a proper understanding of human nature, in the mold of St. John Paul II’s Wednesday audience catechetical series on creation, marriage and the family in the early days of his pontificate, ought to be a truly urgent pastoral priority.

It is only this vision, rooted in an ordered anthropology, and based on the truth about the human person, which will guarantee the preservation of freedom in a digital dystopia, save man from himself – and prevent a post-human future.

¹⁶ 4 October 1965 Address by Pope Paul VI to the General Assembly of the United Nations
https://cdn.un.org/unyearbook/yun/chapter_pdf/1965YUN/1965_P1_SEC1_CH16.pdf