

Homo technologicus and the Recovery of a Universal Ethic: Maximus the Confessor and Romano Guardini*

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Abstract. On September 1st 2017, Pope Francis and the Ecumenical Patriarch Bartholomew issued a Joint Message for the World Day of Prayer for Creation. The gesture reveals the church's efforts "to breathe with two lungs" on the urgent matter of climate change and ecological sustainability. But, the church leaders have also insisted on a philosophical and religious reflection on technology if humanity is to take responsibility for the environment. In particular, they have sought to correct the wrong interpretation of the biblical imperative to "have dominion over" (Gen 1:26) the creatures of the Earth and to "subdue it" (Gen 1:28) that for centuries has condoned ecological abuse, in particular in the name of technological progress.

In this paper, I propose a theological reflection on *Homo technologicus* through the writings of the seventh century monk Maximus the Confessor and the twentieth century Catholic priest Romano Guardini. Maximus offers a systematic account of human *techne* as reflecting the mark of sin, while being God's gift to assist us in stewarding creation. Guardini offers a challenging argument for the moral nature of technology in our times. In an age where technology extends human power, even as it seemingly takes

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on a life of its own, Maximus' and Guardini's insights on the "technological human" offer a renewed Christian anthropology that, in the tradition of natural law reasoning, can ground a global ethic for a "sustainable and integral development." (*Joint Message*, 2017)

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If there is an urgent problem—or rather, many clusters of problems—for humanity to crack, undeniably they are about the "state of the natural world," and the manifold environmental and sustainability issues that plague our planet. However, from its vantage point of considering creation as a mission entrusted upon humanity by God, for the Christian, the accelerating ecological crisis is necessarily construed as a moral, spiritual and theological crisis as well.

Pope Francis' 2015 encyclical *Laudato Si: On care for our common home* (2015) sought precisely to address this issue. In the spirit of Pope John XXIII's *Pacem in Terris* (1963), and all documents developing the tradition of Catholic Social Teachings since, the encyclical is addressed to "every person living on this planet" (LS, 3), where he sought to situate the ecological crisis as a moral and spiritual crisis as well. Scientists, academics and even politicians (Jesuit European Social Centre 2015), who are responsible for moral action on behalf of nations and communities, lauded the encyclical, as Pope Francis elevated "integral ecology" (Ch. 4) as a call to personal and collective human responsibility.

However, the encyclical must also be read for its theology, and specifically for its "theological anthropology" that in being unpacked as a "Christian doctrine of the world and creative activity" (Bulgakov 2002, 332) also re-contextualizes the dialogue between faith and science. *Laudato Si*'s greatest contribution is to bring to the fore the question—moral, spiritual and theological—of what constitutes "integral development" in the context of an *oikos* that in recent centuries has very rapidly been reshaped by the impact of technology. Accordingly the relation between technology and the human, or the specific vocation of *Homo technologicus*, must be unpacked as well.

Furthermore, *Laudato Si* also makes it clear that Pope Francis has situated his ecological theology for a technological age—and therefore the understanding of how the healing of the “environment” and its regeneration are, properly speaking, also an *ecclesial* task of evangelization—as not solely a “Catholic” issue. Quite the contrary: in para.7 of *Laudato Si*, Francis notes: “other Churches and Christian communities—and other religions as well—have expressed deep concern and offered valuable reactions on issues which all of us find disturbing.” He adds that a “striking example” is “the beloved Ecumenical Patriarch Bartholomew, with whom we share the hope of full ecclesial communion.” Indeed, in the next two paragraphs, 8–9, Francis quotes freely from Bartholomew’s teachings, in particular about our “sins” against the natural world and the need for repentance from vices that harm the planet. He also repeats Bartholomew’s teaching that: “As Christians, we are also called ‘to accept the world as a sacrament of communion, as a way of sharing with God and our neighbours on a global scale.’”

Just as significantly, the same year after the promulgation of *Laudato Si*, Pope Francis instituted in the Catholic Church the “World Day of Prayer for the Care of Creation”, celebrated on 1 September, “as has been the custom in the Orthodox Church for some time.” (Pope Francis 2015). On September 1, 2017, Pope Francis and the Ecumenical Patriarch Bartholomew even issued a “Joint Message for the World Day of Prayer for Creation.” The gesture reveals the church’s efforts “to breathe with two lungs” on the urgent matter of climate change and ecological sustainability. In this way, the church east and west reveals her desire not only to support the work of scientists who are ceaselessly working to find technical solutions for environmental problems. Bartholomew and Francis also “draw attention to the ethical and spiritual roots of environmental problems, which require that we look for solutions not only in technology but *in a change of humanity*; otherwise we would be dealing merely with symptoms” (LS, 9).

Unsurprisingly, if humanity is to take responsibility for the environment, both Christian leaders also insist on a philosophical and religious reflection on *the meaning of technology in the context of theological anthropology*. In particular, they seek to correct the wrong interpretation of the biblical

imperative to “have dominion over” (Gen 1:26) the creatures of the Earth and to “subdue it” (Gen 1:28) that for these past centuries of industrialization has condoned ecological abuse, in particular in the name of technological “progress”, that inevitably has become a manifestation of human “prowess”. As *Gaudium et Spes* 39 notes:

Far from diminishing our concern to develop this earth, the expectancy of a new earth should spur us on, for it is here that the body of a new human family grows, foreshadowing in some way the age which is to come. That is why, although we must be careful to distinguish earthly progress clearly from the increase of the kingdom of Christ, *such progress is of vital concern to the kingdom of God*, insofar as it can contribute to the better ordering of human society (my emphasis).

It follows that if human craftsmanship and technological accomplishments not only have the potential to contribute to the human search for truth and the “better ordering of human society” in history, but also to “foreshadow” the eschatological age, then the “Christian” tradition must also reflect on *Homo technologicus*. The aim of this paper is to propose such a reflection.

First, I offer a critical reading of the brief reflections of the seventh century monk Maximus the Confessor, who offers a sophisticated theological understanding of “technology” and “desire” in light of Adam’s fall. Maximus’ systematic account of human *techne* as reflecting the mark of sin, while being God’s gift to assist us in stewarding creation, emerges from the rich theological anthropology of the Orthodox tradition that distinguishes quite sharply between the prelapsarian and postlapsarian state of humanity. As such, it also gives us important hints about the demands put on the church, who is called to witness Christ’s salvific work and to manifest the effects of the pouring of the Holy Spirit who gives life anew.

Second, I will focus on the work of twentieth century Catholic priest and theologian Romano Guardini, whose reflections imbue Pope Francis’ presentation of the “dominant technocratic paradigm” in Ch. 3 of *Laudato Si*, but are also central to Francis’ programmatic Apostolic Exhortation *Evangelii Gaudium*. Writing in the aftermath of the Second World War, Guardini offers a sober and extremely challenging argument for the moral implications of

technology in our times, in particular in their unleashing of power and the human abdication of responsibility. For Guardini, this dynamic between power and responsibility is precisely where we see manifested the “sin of the world” in our times—but also where the gospel offers hope for conversion.

Thus, in conclusion, I propose that reading Maximus’ and Guardini’s insights on the “technological human”, offers a Christian anthropology relevant to the times and a fresh impetus to ground a global ethic for a “sustainable and integral development” (*Joint Message*, 2017). I propose that such a global ethic could draw parallels with the tradition of natural law reasoning, even if natural law reasoning has become increasingly difficult to communicate persuasively. Accordingly, in my concluding section, I will offer brief reflections on how “natural law” reasoning could account for *Homo technologicus* in an era of radical “emergence” spearheaded by the new extraordinary power of technology.

1. Maximus the Confessor: Adam, the Fall and *techne*

Even if today we take technology for granted, our infatuation with “technology” is relatively recent in the western intellectual tradition and, in the long history of philosophical and theological reflection, considerations of *techne* have been relatively sparse. Thus it is surprising that the monk Maximus would offer a sophisticated theo-anthropology of *techne* as early as the seventh century, even if this certainly reflected the philosophy and theology of the time.

From the Athenian philosophers to the High Middle Ages, *techne* was considered with ambivalence, in particular because of its dependence on the “baseness” of material reality. (Lollar 2013) The Christian tradition even found justification for a level of “moral” ambiguity in the Scriptures. Paradigmatic narratives like the building of the tower of Babel “to make a name for ourselves” (Gen 11: 1–9) or even the fascinating point raised by Genesis that the children of Cain, murderer of his brother, were the first city dwellers, tool makers, artisans and musicians (Gen 4:17–22), can be contrasted with how craftsmanship under the guidance of God saved Noah

and the remnants of creation from the deluge (Gen 6:9–22) and how God himself “called by name” and filled “with divine Spirit” master craftsmen to build the ark of the covenant and fashion all necessary materials for the proper worship of God (Ex 31:1–11). Ultimately, the Scriptures give us the most pivotal key to interpret the theo-anthropological status of *techne*: *techne* ordered by God’s rule saves and glorifies the world, but *techne* that is fruit of human *hubris* is disordered and leads to death. (Delicata 2015, 14)

The fourth century Cappadocians offered an initial theological exposition of this inherent ambiguity of *techne* through their interpretation of the “garments of skin” with which God clothed the first man and woman after the fall (Gen 3:21). The theology of the “garments of skin,” that serves as counterpart to the other theo-anthropological themes of the theology of Christ as Archetype of humanity and the Genesis metaphor of being created in the “image and likeness of God,” reflects on human nature, not as originally intended by the Creator, but as corrupted by sin. Most crucially, while the “garments” of *pathos* and *techne* are a mark of human nature’s mortality and corruption that blemishes creation, at the same time, they are also a sign of God’s infinite divine mercy and his desire to offer us a pedagogy for our conversion.

Maximus the Confessor (2014) develops further this theology of the “garments of skin,” in particular when it comes to reflecting on *techne* as postlapsarian anthropological reality. His commentary in *Ambiguum* 45 on Gregory the Theologian’s understanding of Adam as created *atechnos* offers a robust foundation to consider *techne* both as mark of sin and as gift for humanity, and therefore to distinguish morally between true *techne* that accomplishes beauty, and mere making that perpetuates the fall’s disorder in creation. This reflection on *techne* must also be read in conjunction with the long ecclesial monastic and natural law tradition of reflecting on *pathos*, since for Maximus it is evident that *techne* is a gift offered both in response to, and certainly in conjunction with, *pathos*.

In *Ambiguum* 45, Maximus offers three “contemplations” or interpretations of Gregory’s famous verse in the oration *On Pascha*: “He (i.e., Adam) was naked in his simplicity and in a life devoid of artifice, and without any

kind of covering or barrier. For such was fitting for the primal man.” In each contemplation, he reflects on how *techne* is a response to a specific postlapsarian reality of brokenness and need.

First contemplation

According to that great teacher, the first man lived “a life devoid of artifice,” without dissipating the natural condition of good health that had originally been imparted to his essential being, and thus he had no need for clothing; and because of his innate dispassion he was not troubled by any sense of shame, neither was he affected by cold or heat, for which man most certainly devised the habit of wearing garments and living in houses.

In the first contemplation, Maximus stresses the close relation between *techne* and *pathos*, since it is precisely because the original human possessed *apatheia*, dispassion, that he had no need for artifacts. As the original humans lived in perfect harmony with their environment, they experienced no bodily needs and desires and thus, felt no necessity to make artificial things that would mediate between the human body and a harsh environment to make it better suited to their needs and better moulded to conform to their desires. *Techne* is thus a gift that enables survival in the new creaturely reality of necessity and even makes possible human thriving as a measured, intelligent response to ordered desires. This is what the dawn of culture and civilization aims to reflect and why civilization itself is understood as a sign of the development of peoples. (Delicata 2015, 17)

Second contemplation

The second contemplation takes it a step further.

Or perhaps the teacher is delineating man’s attributes as they were then by stripping away those that are observed around him now. For now man is moved either by the irrational fantasies of passions, being deceived by his love of pleasure; or because he is engrossed in the principles of technical skills, on account of circumstances, and to meet his needs; or because he is investigating natural principles derived from the law of nature in order to acquire knowledge.

But it seems fair to say that, in the beginning, none of these motivating factors held any necessary sway over man, who was superior to them all. “For it was fitting for the primal man” to be wholly undistracted by any of the things that were beneath him, or around him, or oriented to him, but to have need of one thing alone for his perfection, namely, the unconditioned motion of the whole power of his love for what was above him, by which I mean God.

Before the fall, it was not just human bodily reality that was in perfect harmony with its environment. The human spirit was also perfectly ordered by focusing all its energy for becoming on its ultimate finality: God in Godself. It is this “unconditioned motion” of love to God that ordered human relationality in all its aspects: in the relationship between human persons and through Adam and Eve’s harmony with the rest of the divinely created environment. This harmony was so complete that man and woman not only experienced no physical needs, but also no intellectual curiosities, since Adam was endowed with the original gift of knowing reality wholly and perfectly. Thus, he was able to name all creatures (cf. Gen 2:20–22), including his own companion whom he recognized as exactly like him, “bone of my bones and flesh of my flesh” (Gen 2:23), and to “till and keep” the Garden of Eden with ease (Gen 2:15; cf. Gen 1:28–30). Responsible stewardship, rather than artisanry was the mark of the original human.

Yet, the fallen human who experiences bodily and spiritual needs, not only utilizes *techne* for their survival and to thrive in a harsh reality, but *techne* itself often becomes a response to disordered desire and can even perpetuate disordered desire through shaping our sensibilities. This is what Maximus implies when he says that the human can be driven not only by “irrational fantasies of passions,” but also be “engrossed in the principles of technical skills” or in their “investigating natural principles derived from the law of nature in order to acquire knowledge.” While the exercise of reason, in both its speculative and technical dimensions, is a gift, nonetheless it requires the ordering that comes through practical reason to be in service of the truly good, and thus to glimpse truth with authenticity and to create beauty with integrity. Indeed, as the Christian tradition illustrates, it requires even more than practical reason, since it is only through eyes opened by

the Holy Spirit, and thus through the infused theological virtues of faith, hope and love, that the human can arrive to true knowledge of reality as revelatory of the Creator and therefore, fulfill in perfect harmony their role as co-creators with God. (Delicata 2015, 17)

Third contemplation

Put *in nuce*, in a postlapsarian reality, *techne* must be ordered through a patient pedagogy to acquire virtues and to be open to receive infused virtues. On the contrary, as Maximus notes in his final contemplation,

Or perhaps he was “naked,” as the teacher says, of the multiform contemplation and knowledge of nature, and his “life was devoid of artifice,” subsisting outside the various pursuits concerning the practical life and the acquisition of virtue, since he possessed by integral habit the untainted principles of the virtues, and he was “without any kind of covering or veil” since he originally had no need to rely on ideas discursively drawn from sensible objects in order to understand divine realities, but had solely the simple putting forth of the unitary, simple, all-embracing virtue and knowledge of things after God, which needs only to actualize its own movement in order to be voluntarily manifested.

The original human had no need for a pedagogy to acquire virtues, because they were already perfectly and naturally virtuous: their will to growth to their finality in the likeness of Christ as the God-human was perfectly animated by the Spirit of God within them. Hence, the divine ordering of creation, the eternal law, including the ordering of their very nature, was perfectly self-evident to the original human, and thus their living was marked by profound harmony with all there is. (Delicata 2015, 18)

Yet, it is precisely the sin of disobedience, the mark of breakdown in the human’s ordering of his nature to its absolute finality in God, that disrupts this connaturality and introduces confusion, not only in human nature, but in the created realm as a whole. As microcosm of the created macrocosm, humanity’s distance from God is manifested in the vices of ignorance, pride and violence, that is, in “Death” as the mark of their “original sin” that

accentuates chaos in the created realm itself. As human *logos* is disordered through shifting its attention away from Logos, as the fallen Adam is now unable to rule his passions or to know reality as it is, he is also unable to steward creation to bring it to its fulfillment. Thus, Maximus illustrates perfectly how an obfuscated universal morality or “natural law” requires not only the right ordering of the passions, but also the right ordering of *techne*.

In fact, according to Maximus, postlapsarian reality is properly speaking a “technical” reality, where the human is by necessity an artificer of “extensions” for their bodily and spiritual faculties. As the human is gifted by a greater awareness of their frailty, both bodily and spiritual, so they compensate for their nakedness through making “tools” that mediate and transform their experience and knowledge of the rest of creation. Through artifacts, they seek to fulfill not only their bodily and spiritual desires, but also to accomplish their original destiny of being microcosm, and thus to bring all of creation to reflect the splendor of the nature of God.

Maximus’ three contemplations on Gregory’s *atechnos*, unpack the crucial difference between original human nature and the postlapsarian condition that corrupted our nature, while not radically depraving it. Even if the Son-made-flesh brings absolute salvation and restores creation’s potential for receiving grace, until the *eschaton*, the heavy garments of *pathos* and *techne* remain essential means for fulfilling our destiny as microcosm to return the macrocosm—all of creation—to God. If the passions are the subjective dimension of how the human seeks to survive and to thrive in their new harsh environment, their “arts” and “crafts” are the permanent, objective, mark of their efforts to cultivate the cosmos to become a resplendent mediation of God. Human artifacts constantly seek to fix what appears broken, to facilitate what seems difficult, to beautify what is perceived as ugly, to make existence on earth more favorable to life and to flourishing in authentically human relationships. (Delicata 2015, 19)

Yet this ongoing effort to create artifacts and eventually to technologize, that is, to automate processes that mediate a more “human” existence, are completely dependent on what the human perceives to be their, and creation’s, ultimate good. In their original state, human beings “had nothing

mediating God—mediation [according to Maximus] being the ultimate motion of the contemplation of nature.” (Lollar 2013) But in their postlapsarian reality, the body itself burdened by the passions is the foundational—and decisive—mediator and veil to the divine. Analogously, artifacts and technologies as extensions of the body, can both thicken the mist the separates us from God, as well as allow rare glimpses of the divine. Indeed, it is precisely this fundamental distinction—between *techne* as mediating divine reality and *techne* as obscuring further divine reality; between *techne* that facilitates ecological flourishing and *techne* that becomes “technocratic”—that needs to ground our moral reflection on human creativity and its fruits.

2. Guardini: technology, power and responsibility – salvation as humility

This principle of discernment is perhaps nowhere articulated more clearly than in the quote from German theologian Romano Guardini that Pope Francis includes in *Evangelii Gaudium* 224: “The only measure for properly evaluating an age is to ask to what extent it fosters the development and attainment of a full and authentically meaningful human existence, *in accordance with the peculiar character and the capacities of that age.*”

That “character” and those “capacities” are always morphed through the skills, tools and eventually technologies that characterize a particular culture. However, as Guardini argues persuasively in his essay “The End of the Modern World,” the cultural revolution occurring with the rise of modernity, and even more so with its dissolution in our times, is precisely that we might not be attaining “a full and authentically meaningful human existence” in accordance with the particular technological capacities of the age. In fact, as Pope Francis argues in Ch. 3 of *Laudato Si*, it is actually the opposite: that we seem to have lost control on the unfolding of the age and we are rather allowing its “peculiar character” to “dominate” us. (Ergo: the “dominant technocratic paradigm.”) Guardini traces this failure to, what Maximus describes as the succumbing of *Homo technologicus* to disordered desire: that is, where *techne* becomes not only a powerful response to

turning away from God, but also perpetuates a disordered self-referential *hubris* through shaping our sensibilities. Guardini argues how that dynamic is evident in two distinct phases: first, the rise of science and technology in the “modern world”; and then how these take on a life of their own in its aftermath—what he terms “the end of the modern world”—that was unfolding during the Second World War.

Guardini grounds the first phase in a shift in the understanding of human “work” or *techne* itself as, during the Renaissance, we discover a greater ability to accomplish things through the rise of science, and eventually technology. The downside of this achievement is that we become so competent and self-reliant, that just like the story of the Tower of Babel, the culture also experiences the “death” of God. As the human ceases to participate in God’s creative work, but becomes himself or herself “the worker” and “creator”, so the world ceases to be God’s creation and becomes a human project:

Insofar as modern man saw the world simply as “nature,” he absorbed it into himself. Insofar as he understood himself as a “personality,” he made himself the Lord of his being, and insofar as he conceived a will for “culture,” he strove to make of existence the creation of his own hands.

The fashioning of this three-sided vision harmonized with the conceptions upon which modern science was being built. From modern science, technology has grown, and technology is a concentration of processes allowing man to posit ends in conformity with his own desires. Not only did science, politics, economics, art and pedagogy sever themselves consciously from the old bonds of Faith. Of more importance they cut themselves away from an ethic which once had bound men universally. But now each cultural discipline was to grow autonomously according to laws intrinsic to its own nature. (Guardini 1998, 41–42)

The process of technologization amplifies efficiency, generates massive wealth and leads to a radical transformation of society through urbanization, new class stratifications and economic and political organization. However, there is also a deeper, and paradoxical, cost: an increased distancing between one’s “work” and one’s “creative power” and therefore between self-sacrifice and a true expression of creativity and generativity.

In the modern world, even if “work” is a necessary means to make a living for oneself and one’s family, it risks becoming, not the expression of “skills”, of true *techné* appropriated through drudgery, but drudgery that deskills. While because of increased mechanization, we might think that we can afford to lose many skills precisely because the tasks themselves can now be done better, faster and cheaper through automation, (Martinho-Truswell 2018) it is not always the case that we discover new creative pursuits through which we express with dignity our desire for communal participation through “the work of our hands.” At the same time, as increased mechanization and automation bred even more sophisticated technologies, greater unchecked power could control and manipulate resources and the natural environment on a massive scale. In particular, in these past fifty years of increased computational power and more sophisticated algorithms, the results have been an unparalleled power to reconfigure any matter, physical and biological.

This, therefore, is the second after-“modernity” phase traced by Guardini. As we become more dependent on automated processes, not only do we participate less in our creative activity, but we have less control over the power of our technologies.

Man’s relations with nature have been altered radically, have become indirect. The old immediateness has been lost, for now his relations are transmitted by mathematics or by instruments. Abstract and formalized, nature has lost all concreteness; having become inorganic and technical, it has lost the quality of a real experience.

As a result, man’s experience of his own work has changed. It too has become distant, indirect, abstract, dead. Man can no longer experience the work he does; he can only calculate its possibilities and control its effects from a distance. This condition raises grave problems. Basically man becomes himself through what he experiences. What can he be, however, if he can no longer involve himself “sensibly” in the work he does? Human responsibility means simply that man must give an account of what he does. Responsibility involves growth, growth from an immature process of executing material acts to a mature process of squaring them with ethical standards. But how can ethical standards be applied

to areas of work which have become lost in abstract formulae and distant machines? (Guardini 1998, 69–70)

This crisis of responsibility also has its dangerous flipside. We are profoundly aware—and perhaps even perturbed—by the fact that, the more powerful humanity becomes, the more helpless we feel. As technology becomes more all-encompassing, but human beings increasingly distant from the fruit of our creativity expressed in technological products, so we end up being mastered by the very ethos of the technology. Even worse, we not only lose a sense of our humanity, but our technologies risk becoming “demonic.”

The use of power is accepted simply as a natural process; its only norms are taken from alleged necessity, from either utility or security. Power is never considered in terms of the responsibility for choice which is inherent in freedom.

Of even more significance, the development of power has created the impression that power objectifies itself; that is, power cannot really be possessed or even used by man; rather, it unfolds independently from the continuous logic of scientific investigations, from technical problems, from political tensions. The conviction grows that power simply demands its own actualization. Yes, this does mean that power has become demonic. (Guardini 1998, 83)

This brings to the fore the particular aspect of theological anthropology that the current cultural moment demands that we develop: reclaiming the true meaning of human power as ordered to the stewardship of creation; and consequently, reclaiming human responsibility in the exercise of power as an exercise of our freedom ordered to our finality, who can only be God. In narrowing down today’s most fundamental issues with theological anthropology to the nexus of power, Guardini is also acknowledging that the fundamental issue is “humanizing” *Homo technologicus* who is at risk of becoming “non-human”. This is because: “Nothing corrupts purity of character and the lofty qualities of the soul more than power. To wield power that is neither determined by moral responsibility nor curbed by respect of person results in the destruction of all that is human in the wielder himself.” (Guardini 1998, xx)

Guardini defines “power” as necessitating two elements: “real energies capable of changing the reality of things, of determining their condition and

interrelations; and awareness of those energies, the will to establish specific goals and to launch and direct energies towards those goals.” Purposefully directing the goal of energies “presupposes spirit, that reality in man which renders him capable of extricating himself from the immediate context of nature in order to direct it in freedom.” (Guardini 1998, 121) However, the issue of *Homo technologicus* is precisely that: “Man today holds power over things, but we can assert confidently that he does not yet have power over his own power.” (Guardini 1998, 90)

Yet, as Guardini argues, our freedom to exercise of power reflects who we are as created *imago Dei*:

Man’s natural God-likeness consists in this capacity for power, in his ability to use it and in his resultant lordship. Herein lies the essential vocation and worth of human existence—Scripture’s answer to the question: Where does the ontological nature of power come from? Man cannot be human and, as a kind of addition to his humanity, exercise or fail to exercise power; the exercise of power is essential to his humanity. To this end the Author of his existence determined him. We do well to remind ourselves that in the citizen of today, the agent of contemporary development, there is a fateful inclination to utilize power ever more completely, both scientifically and technically, yet not to acknowledge it, preferring to hide it behind aspects of “utility,” “welfare,” “progress,” and so forth. This is one reason why man governs without developing a corresponding ethos of government. Thus power has come to be exercised in a manner that is not ethically determined; the most telling expression of this is the anonymous business corporation. (Guardini 1998,133–134)

Power becomes invisible as the human loses their moral compass oriented to ultimate finality, collapsing it instead to an “ethic of authenticity” (to quote Charles Taylor) that is simply self-referential. Thus, reclaiming power, in particular reclaiming power from forces of evil, demands a re-acknowledgement of the source of all Power and Creativity:

If human power and the lordship which stems from it are rooted in man’s likeness to God, then power is not man’s in his own right, autonomously, but only as a loan, in fief. Man is lord by the grace of God, and he must exercise his

dominion responsibly, for he is answerable for it to him who is Lord by essence. Thus sovereignty becomes obedience, service.

Service first of all, in the sense that sovereignty is to be exercised with respect for the truth of things. ... Sovereignty, then, does not mean that man imposes his will on the gifts of nature, but that his possessing, sharing, making is done in acceptance of each thing's being what it is—an acceptance symbolized in the “name” by which he tries to express its essential quality. Sovereignty is obedience and service also in that it operates as part of God's creation, where its mission is to continue what God in his absolute freedom created as nature, to develop it on the human level of finite freedom as history and culture. Man's sovereignty is not meant to establish an independent world of man, but to complete the world of God as a free, human world in accordance with God's will. (Guardini 1998, 134–135)

Guardini also stresses that on the cross, we have the ultimate revelation of what this sovereignty, and therefore power, should mean if we become in the “likeness of God: an exercise of humility:

True Christian humility is a virtue of strength, not of weakness. In the original sense of the word, it is the strong, high-minded, and bold, who dare to be humble. He who first realized the attitude of humility, making it possible for man, was God himself. The act by which this took place was the Incarnation of the Logos. ...

All creaturely humility has its origin in the act in which the Son of God became man. He accomplished it out of no personal need whatsoever, but out of pure freedom, because he, the Sovereign, willed it. The name of this “because” is Love. And it should be observed that the norm of Love is not to be found in what man has to say about it, but in what God himself says. For Love, like humility, as the New Testament points out, begins with God. (1 Jn 4:8–10) (Guardini 1998, 142–143)

Ultimately, therefore, for *Homo technologicus* to reclaim the true meaning of their power and direct it in humility to ecological flourishing, Guardini suggests three virtues that need to be cultivated:

Earnestness must will to know what is really at stake; it must brush aside empty rhetoric extolling progress or the conquest of nature; it must face heroically the duties forced upon man by his new situation.

The virtue of gravity will be spiritual, a personal courage devoid of the pathetic, a courage opposed to the looming chaos. This gravity or courage must be purer and stronger even than the courage man needs to face either atomic bombs or bacteriological warfare, because it must restrain the chaos rising out of the very works of man. Finally, it will find itself—as true courage always does—opposed by an enemy, the mass, ranged against it in public organizations clotted with catchwords.

Still, we must add a third virtue: asceticism. The modern era rebelled against asceticism with every fibre of itself because it saw in asceticism the quintessence of all from which it wished to be free. It was this shrinking horror asceticism which lulled the modern world to sleep, which sapped its strength. Man must learn again to become a true master by conquering and by humbling himself. In no other way will he achieve the lordship of his own power. Only the freedom won through self-mastery can address itself with earnestness and gravity to those decisions which will affect all reality. ...

These deep virtues could breed a spiritual art of government through which man could exercise power over power, through which he could distinguish right from wrong, and ends from means. That government would truly measure human dignity and make room even under the strain of labour and battle for man himself to live in dignity and joy. Such government would be an art, would indeed be a *power*. (Guardini 1998, 92–94, italics in original)

3. *Techne* and Natural law reflection in a Digital Age

Like Maximus, who urges the ordering of desire through cultivating virtue, Guardini suggests virtues that are necessary to reclaim the power of our technologies and order them to truly human ends. Yet, while virtue is necessary to determine how we wield power in concrete situations, norms are also necessary on a societal level that can sustain a post-“modern” world where technological prowess and experimentation have nothing to restrain them. This is particularly important as we are entering a new world of extreme automation, to the extent that every biological and intellectual capacity of the human is increasingly being offloaded to machines and technique: from birthing, to diagnosing disease, to forming public opinion, to educating.

In Catholic moral theology, that “participation” in divine ordering which we apprehend in the right exercise of reason is “natural law.” Natural law also allows us to articulate norms, at least in the most general or universal sense. But natural law is not only obsolesced under conditions of newfound power that dull our senses; it is forgotten as we distance ourselves from our power, allowing it to be directed by forces of chaos. Thus, for power to be reordered, a sense of the reasonability of *techne* and its prudential exercise must also be reclaimed.

In Maximus’ three contemplations, three nuances of *techne* emerge: as a means to fulfill all our desires; as necessary for tending the earth to its finality; and as a key mode of human reasoning in our postlapsarian—but now saved in Christ—world. It is also evident that precisely as a means to fulfill our desires and to accomplish our purpose as co-creators, *techne* is in itself desirable, in itself a good—even if, in its promise of progress, of crafting a better way of life, *techne* can seem to be an end in itself instead of a means. Hence, it is imperative that *techne* be morally evaluated and directed through right reasoning (*recta ratio*) illumined by grace.

Maximus’ three ways of understanding *techne*, sustained by the virtues of earnestness (search for truth), gravity (courage) and asceticism (self-restraint) suggested by Guardini, could be appropriated within the Thomistic framework of Christian natural law reflection, to offer a robust method for evaluating our technology morally and direct its power in a manner that is conducive to flourishing.

Maximus’ three insights could be presented thus: as the response to *pathos* and thus as oriented to fulfilling in a harsh world all human inclinations, bodily and intellectual; as the virtue of rightly ordered, and not merely efficient, human making; and lastly, as demanding a fuller conception of practical wisdom that considers the cosmological responsibility of tending creation—what Pope Francis in *Laudato Si* (216) calls “ecological conversion.”

Thus, just as in the Thomistic natural law schema, practical reason determines which actions respond rightly to human inclinations—that is temperately, courageously and justly, following the principle of the mean—and thus reason demands the inculcation of such “good” actions

over less desirable ones, so *techne* and the artifacts it produces can be judged on whether they are a reasonable response to human needs and desires and, if judged to be so, selectively chosen to propagate more “human” lifestyles and cultures. In this sense, if technological prowess externalizes and concretizes our intelligence in artifacts to quite literally “humanize” the world, prudence determines what artifacts are truly worth making and what crafts are to be reasonably pursued because they are truly reflective of human dignity. The criterion for judging the legitimacy of *techne* would thus be human nature itself as it flourishes in an environment of its own making: civilization.

This would imply that the reasonability of *techne* is not simply a matter of method and efficient causality. It must also be considered from the point-of-view of its finality, that is, through the inherent intelligibility and beauty of what it makes—ultimately the re-creation of the human and the cosmos itself. In this latter sense, *techne* is less like *episteme*, knowledge or know-how, and more like *phronesis*, practical wisdom. For just as practical reason always deals with the particular circumstance, but in view of ultimate human flourishing, so making the right individual “extensions” of the human must be understood as contributing to overall cultural and cosmic flourishing.

In this regard, the desire to create can be properly understood within a natural law framework as a crucial, properly human inclination, analogous to our intellectual inclination to seek knowledge about ultimate reality and our personalist orientation that desires relationship with the other. It would then follow, that if knowledge seeks ultimate truth and relationship delights in the goodness of the absolute other, so *techne* is the intellectual virtue that accomplishes things, not merely efficiently, but with elegance that makes more resplendent creation’s inherent beauty.

Moreover, just as in a postlapsarian world our human capabilities must be perfected through grace and the theological virtues, in the same way that our knowledge of truth must be perfected through the supernatural virtue of faith and justice through the supernatural virtue of love, so *techne* would necessitate hope that God’s world is being reborn as the New Creation. More specifically, the Holy Spirit’s gifts of knowledge, piety and fear of

the Lord, would inspire proper awareness of reality as, first and foremost, God's creation and thus, reverence for creation itself as God's work. In this sense, awe, respect and humility would transcend human technological prowess as ultimately serving, not human needs and desires, but God's very commandment to participate as co-creators in his project of rebirthing creation. The *Logos* as artificer of creation would be properly considered as the Master Craftsman, the Teacher, who honors humanity as beloved apprentice or disciple in their artisanry of the cosmos.

Lastly, in an age of powerful technology it becomes poignantly obvious that while a personal and social ethic remain necessary—albeit altered to reflect emerging understandings of personhood and relationality—they are also increasingly not sufficient. If as humanity, as one global culture, we are to order complex ecological changes effected through human (and possibly even non-human) agency and manipulation, natural law reasoning must be more profoundly cosmological. This implies, that natural law must consider as much as possible, the “total ecology” in view of its finality as New Creation, but also our human obligation to steward the flourishing of creation in all its rich, inter-dependent diversity. This ultimately is what *Laudato Si* calls for when it promotes an “ecological conversion” for an authentic integral flourishing.

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