Suffering Technology:
Philosophical Overview and a Theological Response of *Spe Salvi* (Part 2)

Joseph Tham, L.C.

Medico, dottore di ricerca e docente di Bioetica, Ateneo Pontificio Regina Apostolorum

In part one of this article, we delineated the difficulties that we confront today with the rapid advances of technology. While technology seems to provide the answer to suffering humanity, there are also ambiguities and a suspicion that it cannot provide all the answers. The noble goal of using technology to alleviate alleviating suffering must also include the ethical dimensions that are often blurred. This article looks at some of the philosophical and theological responses to this vexing problem, especially from the perspective of the Encyclical *Spe Salvi*.

Different images of techne

In order to answer these interrogatives, we need to delve into the historic understanding of technology[1]. Plato, as we have seen in the myth of Prometheus, sees *techne* as a secret of the gods because humans, no longer bound to specific specializations found in the animal kingdom, can invent different tools to adapt to their environment. Aristotle and Aquinas see the uniqueness of human ingenuity through its employment of the hand and the mind, allowing the invention of infinite arrays of instruments for different purposes. According to Stanley Jaki, science arose in the West precisely because Christian revelation supplanted the mythical concept of time which was cyclical. He argues that linear time is the condition that allowed for projection into the future and therefore scientific inquiry[2]. Thus, technical progress helps humanity to break away from a predetermined world toward a greater freedom. At this early stage, nature is a resource which humans can explore and use to reach a specific end. During the medieval period, there was a harmonious synthesis of humanity, nature and God[3]. The image of *techne* in this period is a tool taken from nature which we can take advantage of but not totally dominate, nor does it determine or control us.

Modernity entered with heavy industrialization and the Enlightenment ideal of grounding all truths in human reason alone. Arnold Gehlen observes that humans have two deficiencies that form the basis of technology. Their lack of morphological specialization that animals enjoy makes them manufacturers of tools. They are also devoid of animal instincts, making the formation of cultural institutions necessary. These essentially human "defects" propelled them to found cultures and conquer nature with technology[4]. In this phase, humans no longer conceive nature as inert essence but as matter or energy sources which they can exploit, manipulate or transform.

At the beginning of modern age, there was a buoyant optimism that science could resolve all human sorrows. The new humanity could finally triumph over nature. Bacon's dictum, "Knowledge is power," became the banner of the insatiable scientific search for improvement. In this view, technology can only be positive, progressive and benevolent. This positivistic vision, which Descartes, Comte, Hobbes and Bacon espoused, makes the question of direction irrelevant or impossible. Later on, evolutionary theories applied this concept of malleable nature to humans themselves. Hence, the image of *techne* in

modernity is one of autonomy and progression toward an unknown end.

The next few centuries witnessed the vertiginous metamorphosis of the world. According to Romano Guardini, these technological advances allow modern men and women to program their future with technical precision in almost every aspect of their economic, political, and aesthetical lives. Even health, sickness and death become organized. The recent swine flu scare that reached worldwide alarm is an indication of this obsession. This new technological culture receives a quasi-religious significance, providing a sense of security that replaces the traditional need for a providential God. At the same time, Guardini notices an anguish of modernity, which in rejecting the symbolic support of the medieval worldview, is unable to find any firm point of reference. When modernity denies God's authority, everything including power is up for grabs. The technical culture of constant movement and renewal cannot satisfy the human spirit. Since nature has become an unknown, chaotic, and uncertain force, humans are now engaged in a game of power struggle—imposing force on culture, nature and on each other—in order to survive. Risky behaviors are a part of this gamble, since technology has made the world impersonal and cold. In this scenario, where individuals can exercise power without personal responsibilities, the tragic consequences of the Second World War ensued[5].

The atom bomb, "an invention to end all inventions," symbolically marks the end of the modern era and the beginning of postmodernity. This image of *techne* is one of great uncertainty. Technology imposes upon us as a new way of life—it is as comprehensive as any cultic experience but one of which we are barely aware. It is no longer neutral but contains and fosters a substantive value; it is no longer a means but an end in itself. As technology takes on a life of its own, it is not something that we can dominate but has the

At the beginning of modern age, there was a buoyant optimism that science could resolve all human sorrows

potential to destroy everything we hold dear. Nature or the world have lost their constant or objective values. Nietzsche prophesized this nihilistic turn of events—everyone determinates for himself what are the true values and what is reality. Baconian "knowledge is power" becomes Nietzchean "will to power" where truth is imposed on others by force or even violence. Ideological or religious fundamentalisms are expressions of the postmodern age. Technologized societies must operate according to values such as efficiency, programming and power. However, as Guardini observes, organization and planning cannot fill the place of ethics[6].

On the other hand, there is still a great deal of optimism about the potential of technology. The image of Neil Armstrong walking on the moon and his words, "One small step for man, one giant leap for mankind" are etched indelibly in the human consciousness as one of its greatest achievements. As Obama's dream to banish words like "terminal" and "incurable" from our vocabulary indicate, technological imperialism has not totally disappeared with postmodernity. This disturbing poem *Counting Sheep*, written before the successful cloning of Dolly, perfectly captures this conflicted mood of the day:

A scientist has a test tube full of sheep. He wonders if he should try to shrink a pasture for them.
They are like grains of rice.
He wonders if the sheep are aware of their tininess, if they have any sense of scale. Perhaps they just think the test tube is a glass barn…
He wonders what he should do with them; they certainly have less meat and wool than ordinary sheep. Has he reduced their commercial value?
He wonders if they could be used as a substitute for rice, a sort of wooly rice…
He wonders if he just shouldn't rub them into a red paste between his fingers.
He wonders if they are breeding, or if any of them have died.
He puts them under a microscope and falls asleep counting them…[7]

Indeed, the biotech gamble has raised the stakes since it allows us to transform human nature itself. The transhumanist proposal to seize the power and take control of our evolutionary future can leave us either with Nietzsche's *Übermensch* or the *Abolition of Man* predicted by C.S. Lewis[8]. The indiscriminant use of biotechnological powers has alarmed not only religious groups but also a number of secularists who worry about unchecked profit-driven interests, the effect of an unknown post-human future, and generational inequalities that would undermine the foundation of liberal democracies[9]. This postmodern challenge provokes two reactions, one calling for ethical responsibility as in the case of Hans Jonas, and the other the pessimistic resignation of Martin Heidegger[10]. The catastrophic events of World War II greatly influenced the German Jewish philosopher Jonas, who called for responsible ethics in this hi-tech era[11]. Traditional ethics is no longer sufficient. We need to consider the accumulative effects of human impact on the world. He proposes an "imaginative heuristic of fear" as the guiding principle which anticipates the issues in the balance and their attendant perils. This precautionary ethical approach to anticipate all possible ill-effects on future generation and humanity is urgent since the velocity of technological advances makes it difficult to exercise restraint. Against the temptation of "Promethean immodesty," like Guardini Jonas calls for a "power over power" by seeking political and structural responsibility to safeguard the future of humanity. Interestingly, Jonas believes that these policies would more likely be viable in classless Marxist regimes than "bourgeois" capitalist societies which could easily resist the establishment of an untrammeled technological utopia. In this vision, Marxist humanism would substitute decadent religious hopes with a secularized eschatology, and a state-controlled responsible and moderated use of technology will effect this Kingdom on earth.

Possibly, because of their different political sympathies, the other German philosopher Martin Heidegger offers a contrasting reflection. Even though his philosophy does not make an easy read, his *Question concerning Technology* provides a thought provoking analysis to this postmodern dilemma[12]. *Techne* in its original etymological sense is related to *poiesis* because they are both productive. The latter arises from awe with nature producing or bringing forth the arts and poetry. At the same time, *techne* conceals and reveals to humanity something about Being, nature and truth. However, modern technology has changed this relationship with Being. We no longer cooperate with or learn from nature but challenge, assault and exploit it for our own benefit. Nevertheless, technology still has the ability to reveal and bring forth the truths of Being and our destiny. This is more difficult since our contact with nature is no longer immediate but mediated by many unknown steps when we tap into technical powers. Thus, technology of our age is ambiguous—it could be either "supreme danger" or "saving power."

I had a glimpse of what Heidegger tries to tell us from a personal experience. Years ago, my aunt from Hong Kong came to visit us and we took her to the Niagara Falls. Her first reaction to the spectacular sight was, to my utter surprise, if the waterfall were manmade. Sky-scrappers fill the city in which she had lived most of her life and the artificial is more "natural" to her. Heidegger uses the German word *Gestell*, which literally means en-framing, to describe our present-day predicament. By this, he wishes to convey the disquieting reality that this all-encompassing framework of technology traps the postmodern society—technology is no longer a means to an end but a mode of human existence.

Thus we shall never experience our relationship to the essence of technology so long as we merely conceive and push forward the technological, put up with it, or evade it. Everywhere we remain unfree and chained to technology, whether we passionately affirm or deny it[13].

Technology has become absolute. While we may still live in the illusion that they are only instruments, we are in fact slaves. It is no longer neutral, but invades every aspect of

our globalized world. Globalization is the process by which space and time is compressed, and this is only possible thanks to modern technology[14]. In this *Gestell*, every solution we seek to resolve problems created by technology is itself technological. This serves only to reaffirm the prison we are in. For example, we develop the cure for industrial pollutions by newer techniques to purify the pollutants, we advertise the harms of TV or internet addiction through the same media, and we treat the ulcers, which are the side effects of taking anti-inflammatory medications, with more drugs.

Is there a way to escape this self-imposed incarceration? Heidegger is ambiguous about the possible saving power of technology. He suggests at the end of the essay pondering the mysteries revealed in the constellations. Unfortunately, poetry does not seem to indicate a clear way out. In the last interview on the same question before his death, the German philosopher uttered the now famous refrain, "Only a God can save us"[15]. Of course, Heidegger's god is not the God of revelation. It consists once again in "thinking, poetizing or contemplating" rather than engaging in technological pursuits. Possibly, the German existentialist is trying to remind us once more on the kinship between *techne* and *poiesis*, and the need to recuperate a sense of wonder and admiration toward nature rather than just callously exploiting it for utility.

Perhaps the difference in approach between these two contemporary authors Jonas and Heidegger is indicative of the postmodern uncertainty regarding the role of technology. Hiroshima and Auschwitz make the need for ethical responsibility ever more urgent. Jonas approached the urgency with a proposal of increased awareness and collective duty. Heidegger, however is silent on this subject, probably because he sees no solution in this *Gestell* since ethics implies the ability to free oneself of this technological prison in order to choose the right course of action from an outsider perspective. His existential and individualistic philosophy would not permit him such a project. Jonas founded his global ethics aside from any religious perspectives.

Heidegger, realizing the impossibility of such a task, hinted with a note of irony that only a god could provide us with such an external perspective. Neither of them, however, because of their modern secular bias, was willing to serious commit themselves to theological ethics. However, it is precisely the place we will visit in order to resolve the enigma of suffering technology.

Only a God can save us

Philosophy cannot exhaust all there is to know on these troubling matters. In fact, suffering, death and the quest for immortality are preeminently religious questions. It seems foolhardy to ignore what theologians and their time-honored traditions have to say on these issues. As I have said elsewhere, it is necessary for theology to reengage secular ethics on these subjects[16]. Besides, a characteristic of postmodernism is its distrust with the overt rationalism of modernity, and it is therefore less antagonistic toward religion. With a decline in public confidence in scientific cure-all and political salvation, sociologists have witnessed a resurgence of interest in the religious offering[17].

The theological discipline of eschatology is obscure to the modern mind but can reveal some important ideas on the relationship between suffering and technology[18]. As we have seen earlier, modern science rose in the West by means of replacing the mythical concept of cyclical time with that of a linear one. The Judeo-Christian vision of creation, where God entered history and interacted with humanity, was a major factor in this development. The linearity of unlimited scientific progress, however, is a product of the Enlightenment. Christian time, although linear, is not infinite but with a definite end in sight, the *eschaton*. The former is chronological, etymologically derived from the mythological titan *Kronos* who devours his children, symbolizing the tragic irreversibility of time succession. In contrast, the Christian time is *kairos*, the just moment or God's timing[19].

In Beckett's play *Waiting for Godot*, the two protagonists wait for the coming of Godot,

i.e. God, who never shows up. This is the existential anguish of modernity, it is without hope of a secure future. Eschatology looks at what happens after death—heaven, hell, judgment and the Last Day. According to Christian revelation, this ultimate reality interprets and judges all human history. In spite of the modern prejudice against Godot who never came, the Christian message is ultimately one of hope and eternal destiny.

Pope Benedict XVI masterfully captures the interplay between hopes and fears, suffering and immortality, salvation and technology in the encyclical *Spe Salvi*. He observes that people today are not interested in eternal life but only the present one. They have put their trust in technological and scientific progress, in the construction of "the kingdom of man" (n. 17). Reason and freedom are the foundation of this faith in progress, and the French Revolution and the Marxist proletariat revolution are some of its historical manifestations. Both systems sought a utopia in politics rather than science, but paradoxically brought about violent negations of human rights and freedom.

The last century saw the ambiguities of technological power. Technical progress needs to be accompanied by ethical progress, guided not only by reason but also by faith, for otherwise, "a 'Kingdom of God' accomplished without God—a kingdom therefore of man alone—inevitably ends up as the 'perverse end' of all things" (n. 23). Here, the German pope makes a most profound observation. Ethical progress is essentially different from material progress. Ethics must include human freedom, and because of this can never reach a static state of perfection here on earth. "The moral treasury of humanity is not readily at hand like tools that we use; it is present as an appeal to freedom and a possibility for it" (n. 24). Freedom requires every generation to decide for itself the acceptance of good and rejection of evil. This means that all human structures are transitory—they can-

The last century saw the ambiguities of technological power. Technical progress needs to be accompanied by ethical progress

not reach a final stage of perfection—because any attainment of such a stage would imply a negation of freedom.

Precisely, in GATTACA or the *Brave New World*, where society has supposedly reached *perfection*, they achieved this at the expense of freedom. In order to avoid this Faustian temptation in our real world, the words of Pope Benedict ring true:

If there were structures which could irrevocably guarantee a determined—good—state of the world, man's freedom would be denied, and hence they would not be good structures at all… Man can never be redeemed simply from outside. Francis Bacon and those who followed in the intellectual current of modernity that he inspired were wrong to believe that man would be redeemed through science. Such an expectation asks too much of science; this kind of hope is deceptive. Science can contribute greatly to making the world and mankind more human. Yet it can also destroy mankind and the world unless it is steered by forces that lie outside it.[20]

Echoing the skepticism of Heidegger, with which the professor-pope is certainly familiar, the Pontiff acknowledges the insufficiency of technology to redeem humankind and the need of external forces. Heidegger was unable to resolve the dilemma—only a God can save us! Indeed, the pope rejoins, "It is not science that redeems man: man is redeemed by love." Hence, Christianity offers a response which existentialist philosophy could not. Salvation comes from God, the unconditional love of God who has come from beyond in the person of Jesus Christ. Only love can instill hope in spite of disappointments, in spite of suffering and death. *Spe Salvi* continues, "If this absolute love exists, with its absolute certainty, then—only then—is man *redeemed*" (n. 26).

Here, Guardini's theological analysis of power is instructive.[21] The *Book of Genesis* speaks of powers given to humanity over the

rest of creation, to guard and care for it as stewards. Responsibility must accompany this power, which implies service when properly understood. However, as Lord Acton used to say, "Power tends to corrupts, and absolute power corrupts absolutely." Thus, falling into the temptation of hubris, the sin of humanity consisted in the attempt to usurp a greater power and become like gods. As a corrective response, Christ entered the world not with power but with humility. "Who, being in the form of God did not count equality with God something to be grasped." (*Phil.* 2:6) "Jealously guarded" is a better translation for this last word.[22] Oddly enough, giving up his power and becoming a slave showed God's greatness and reversed humanity's arrogance and tendency of domination.

Spe Salvi teaches another theological lesson about suffering by offering hope. Suffering is part of our human existence because of our finitude and because of the real presence of evil and sin. Hope is not fulfillment precisely because evil and sin continue to exist as long as human history continues. Rather, hope gives us the courage to be on the side of good even in seemingly hopeless situations. We are impotent before suffering and death, in spite of an apparent hubris to banish them with technical advances. It is not within our power to banish suffering from the world:
We can try to limit suffering, to fight against it, but we cannot eliminate it. It is when we attempt to avoid suffering by withdrawing from anything that might involve hurt, when we try to spare ourselves the effort and pain of pursuing truth, love, and goodness, that we drift into a life of emptiness, in which there may be almost no pain, but the dark sensation of meaninglessness and abandonment is all the greater. It is not by sidestepping or fleeing from suffering that we are healed, but rather by our capacity for accepting it, maturing through it and finding meaning through union with Christ, who suffered with infinite love (n. 37).

Indeed, only a God can save us, "only a God who personally enters history by making himself man and suffering within history" (n. 36). Suffering teaches us to be compassionate because we no longer suffer alone. The presence of God's compassionate love becomes our hope. It helps us to console others who suffer, both as individuals and as a society. The encyclical continues, "The true measure of humanity is essentially determined in relationship to suffering and to the sufferer" (n. 38). Compassion can also be a source of *good* suffering, because we are then propelled to leave our egoistic self in order to care for others in need. In this way, service replaces power and hubris.

These theological insights on hope, eschatology and suffering are more relevant today than ever. There is no way to stop human innovations and technological progress. Humans have sought to defeat suffering with technology, but it turns out to be a double-edged sword. Two contrasting images of the last century remain in our minds—the mushroom cloud over Japan and the first image of the planet earth captured by the astronauts from space. As we contemplate the great mysteries and challenges of suffering technology, our attitude can only be that of humble acknowledgment of our insignificance, patient hope, and why not, a silent prayer of solidarity.

NOTE

[1] Some ideas of this section come from the 2006 Bioethics Summer Course at Regina Apostolorum University, the conferences are published in J. THAM and M. LOSITO (ed.), *Bioetica al Futuro: Tecnolocizzare l'uomo o Umanizzare la tecnica,* Libreria Editrice Vaticana, Vatican 2009.
[2] See S. JAKI, *Science and Creation*, Scottish Academic Press, Edinburgh 1974.
[3] See R. GUARDINI, *The End of the Modern World*, Sheed & Ward, London 1957.
[4] See L. PRIETO, "Antropologia e tecnologia: natura umana e cultura," in *Bioetica al Futuro*, 81-99.
[5] See R. GUARDINI, *The End of the Modern World*, cit.
[6] See ID., *Power and Responsibility: A Course of Action for the New Age*, Henry Regnery Co., Chicago 1961.
[7] R. EDSON, *The intuitive journey and other works*, Harper and Row, New York 1976.
[8] See C. S. LEWIS, *The Abolition of Man*, 6th ed., HarperCollins, Glasgow 1986; F. W. NIETZSCHE, *Thus Spake Zarathustra: A Book For All And None*, 1891.
[9] See J. RIFKIN, *The Biotech Century,* Penguin, London 1998; F. FUKUYAMA, *Our Posthuman future: Consequences*

of the Biotechnology Revolution, Picador, New York 2002; J. Habermas, *The Future of Human Nature*, Polity, Cambridge 2003.

[10] See M. Ryan, "Tecnologia a servizio dell'uomo: riflessioni filosofiche ed etiche," in *Bioetica al Futuro*, 65-76.

[11] See H. Jonas, *The Imperative of Responsibility. In Search of Ethics for the Technological Age*, Chicago University Press, Chicago / London 1984.

[12] M. Heidegger, "The Question Concerning Technology," in *Basic Writings*, ed. D. Krell, HarperCollins, New York 1993.

[13] *Ibid*, 287.

[14] See Z. Bauman, *Globalization: The Human Consequences*, Polity, Cambridge 1998.

[15] M. Heidegger, "Only a God Can Save Us," in *The Heidegger Controversy*, ed. R. Wolin, MIT Press, Cambridge 1992, 91-116.

[16] See S. J. Tham, "The Secularization of Bioethics," *National Catholic Bioethics Quarterly,* 8/3 (2008), 443-454.

[17] See L. Voye, "Secularization in a Context of Advanced Modernity", *Sociology of Religion,* 60/3 (1999), 275-288.

[18] See A. Nitrola, *Pensare l'attualità. Etica come ricera della casa comune*, PUG, Roma 2005.

[19] See H. Ur von Balthasar, *The Glory of the Lord: a Theological Aesthetics, Vol. I: Seeing the form,* Ignatius Press, San Francisco 1989, 618-683.

[20] Benedict XVI, Encyclical *Spe Salvi*, November 30, 2007, n. 24-25.

[21] See R. Guardini, *Power and Responsibility,* cit.

[22] See M. Gagliardi, *La Cristologia Adamitica*, PUG, Rome 2002, 177-179.