Dialogical (bio)technology? The problem of (bio)technology as definitive and post-lapsarian utopia: from Marx and Heidegger to Bostrom, Stuart Russell, and the dark star of desire

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I should like to name here another perspective for (bio)Technology, a theologically-inspired one. I would call it Dialogical (Bio)Technology, in consideration of the fact that its fundamental characteristics, internally interdependent, would be the initial orientation towards what I have called the 'dialectical composition of created nature'; thereafter the overthrow of the enforced homogenisation of people which is brought about by their being reduced to their psycho-biological elements through the promotion of a genuine dialogical society of real people, in which people do not dictate their existence to others; and the creation, in the end, of precisely that analogical identity which is expressed as imitation of the unifying, agapetic energy of God –of the will to consubstantiality rather than the will to power. These three principles would have the power to make (bio)Technology in general, and Artificial Intelligence in particular, dialogical, constantly reviewing the words, the actions and, in the end the purposes of God among his creations: wise, moderating and beneficial, with the sense of boundaries always present.

Every modern discussion on technology has already been embedded within the domain of its power and speaks in its defence. Everything is now all about technology, and this is very disturbing for the very existence of us humans and of the world. It is not only yet another, historically fleeting, trope, because, as Heidegger showed, it will never

collapse and never be surpassed[1]. It is also a lecture by Heidegger, from 1955, which will be used to start our discussion.

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As I have tried to show elsewhere[2], technology has become a privileged manner of elevating human nature whose finitude and fragility the Enlightenment was unable to conceal, even while affirming it. Bacon's 'kingdom of man', in which, according to Descartes, the human person is the 'lord and master of nature', leads to the Kantian 'possession of the world' and the Enlightenment's dogma of absolute progress, without ancestral sin, grace and ecclesiastical 'salvation'. The theory of the super-man as an imitation of a debilitated God is brutal: it has no tolerance for the incompleteness and weakness of this human nature stripped of providence and quickly seeks to upgrade it. In order for the innate imperfection to be corrected and transcended, what was required, on the political level, was Absolutism. In historical terms, this took the form of Nazism, Fascism and Soviet Communism (and this temptation has, I believe, a future, though in the form of a Velvet Absolutism, as I recently claimed[3]). At the psychological level, various forms of psychotherapy appeared in order to boost the faltering Ego of those who were attempting to implement the replacement of Theanthropism with Superanthropism. This mainly involved the American psychology of the ego, which was condemned by Jacques Lacan for its easily-swallowed and digested associations. Finally, on the level of immediate biological life, technology and biotechnology made their appearance, clearly aiming at the Homo Deus, according to Harrari's well-known expression. This was to be a techno-biological being which would execute, for itself and the world, the function of a god. Or, in more philosophical terms, a being which was to be completely self-signified.

I therefore consider that differentiating between technology and biotechnology is probably to make too nice a distinction: every form

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[1] Martin Heidegger, *Die Frage nach der Technik*, trans. William Lovitt, *The Question Concerning Technology and Other Essays* (New York and London: Garland Publishing, 1977), 39.

[2] See Nikolaos Loudovikos, *Η Ανοικτή Ιστορία και οι Εχθροί της: η Άνοδος του Βελούδινου Ολοκληρωτισμού*, (Athens: Armos, 2020), 254-257. This is where the references to the works of the philosophers which follow are to be found.

[3] See above.

of technology is, at bottom, biotechnology in the broader sense that its impact is crucial and transforms the human psycho-biological persona and that, in any case, this ultimate deeper transformation is its final aim. And it is in precisely this sense that I understand the position of Heidegger: that technology is – as things now stand – a means of discovering the truth about beings[4].

There are dozens of books in circulation about the history of technology, in the broad meaning of the word, tracing its development among peoples from pre-history to the present, but no other era has ever acquired the title of The Age of Technology, as ours has. This is because technology has now entered into the very essence of human beings and their world, even art and religion, precisely because it imposes everywhere a feature which is its particular characteristic, as a unique stamp of validity. According to Heidegger, this characteristic is human, subjective control over the nature of things rather than the ancient Greek openness and submission to them. This, in turn, arises from the application of the term 'subject', by Descartes initially, solely to human beings, meaning that all other beings thus became objects of the arbitrary reflections and concomitant actions and exploitation on the part of the one and only individual subject[5].

In reality, this pact with technology is approaching its apogee. People now understand beings simply as available for use, within the limits of what Heidegger calls 'Gestell' ('Enframing'), a term which describes exactly the psychonoetic historical framework which forcibly imposes ways by which the real is revealed, through technology, to be absolutely available, awaiting its use by humans. In other words, it is revealed as being a 'standing-reserve', with the whole scenario serving as a destining which will determine contemporary history[6]. The thing which constitutes our precipitous fall is that we arrive at the point where we ourselves will have to be taken as a standing-reserve.[7] We fail to see ourselves as the ones spoken to, and therefore also fail in every way to hear. We live enclosed in ourselves, losing all sense of our uniqueness and also, according to Heidegger, the way of a potential ek-stasis, a

[4] Ibid., 11-12.
[5] See Martin Heidegger, *Die Frage nach dem Ding* (Tübingen: Niemeyer 1962), 81-82.
[6] Heidegger, *The Question Concerning Technology and Other Essays* (New York and London: Garland Publishing, 1977), 23-24.
[7] Ibid., 27.

way out of our essence. The domination of technological enframing therefore blocks the very function of truth and any possibility of its revelation.

This does not mean that the truth itself, as philosophical metaphysics, had not already come close to its end. And, according to Heidegger, the person who announced this end was Nietzsche. In analysing the latter's well-known statement that 'God is dead', the philosopher observes that this means that the world beyond the senses is no longer convincing, there is no more life. In other words, according to Nietzsche, in reality the whole of Western philosophy, understood fundamentally as Platonism, has come to an end. Nietzsche himself understood his philosophy as a confrontation with metaphysics, as a movement against Platonism[8]. In this perspective, the end lies in the transformation of Being into Value[9] and, thereafter and in this way, the mortification of its ontological dynamic. In this sense, the very inner logic of Western thought cannot be other than Nihilism[10], which demolishes precisely this world in order, thereafter, to posit new ones, carrying out a 'revaluing' of all values. The creation of these new anti-metaphysical values is also called 'Nihilism', as the completion of the Nihilism which destroyed the old values. It follows that 'Nihilism' is used to mean two things: rejection of the above metaphysical values, on the one hand; and the creation of new ones, on the other[11]. And, naturally, the manner for this Nihilism to destroy old values and create new ones is the will to power. It follows that the very essence of Western thought, both for Nietzsche and Heidegger, is the will to power.[12]

What does this mean in practice? It means that 'the ousia (beingness) of the subiectum changes into the subjectness of self-assertive self-consciousness, which now manifests its essence as the will to will. The will is, as will to power, the command to more power'.[13] Therefore, 'the will must [...] posit a condition for a willing-out-beyond-itself. The will to power must, above all, posit conditions for power-preservation and power-enhancement. To the will belongs the positing of these

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[8] We are already referring to the second part of Heidegger's book cited above. This part is entitled 'The World of Nietzsche "God is Dead"', 61.

[9] Ibid., 102.

[10] Ibid., 67.

[11] Ibid., 67-68.

[12] Ibid., 79.

[13] Ibid., 78-80.

conditions that belong intrinsically together'.[14] In this manner, the will to power creates new values: 'The will to power values inasmuch as it constitutes the conditions of enhancement and fixes the conditions of preservation. The will to power is, in its essence, the value-positing will. Values are the preservation-enhancement conditions within the Being of whatever is'.[15] Hence, within the framework of Western thought in general, 'the intuitive self-certainty of subjectness proves to be the justification belonging to the will to power…'.[16] And, of course, as a synecdoche, 'the humanity which wills its own being human as the will to power, and experiences that being human as belonging within the reality determined in its entirety by the will to power, is determined by a form of man's essence that goes beyond and surpasses man hitherto. The name for this form of man's essence that surpasses the race of men up to now is 'overman'.[17]

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Heidegger's analysis is not without significant problems, especially when the time comes to find solutions, as we shall see below. For the present, however we shall continue to use his observations for a diagnosis of the issue leading to a critical treatment, which is what technology favours. If we believe Kostas Axelos, the first direct neoteric formulation of the issue is to be found in Marx, as the Greek thinker argues in his book *Marx, penseur de la Technique*[18]. This book has recently become of topical interest again, because it persuasively demonstrates the importance of technique at the very core of Marxist humanism, precisely because, through this, according to Axelos' Marx, it is supposed that people self-produce as those who transform nature into history. Technique is thus the way of joining theory and practice, thought and action, discourse and art. In this way, Marx is seeking to give substance to an 'absolute action' (something which arises from his conscious effort to tailor the Hegelian 'absolute knowledge' to the capacities of those he considers real people, with desires and needs linked exclusively to this material

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[14] Ibid., 80.
[15] Ibid., 80-81.
[16] Ibid., 91.
[17] Ibid., 95-96.
[18] Kostas Axelos, *Marx, penseur de la Technique* (Paris: Editions de Minuit, 1969).

world), to the messianic and revolutionary aim of realising the unity of nature-history, individual and collective, precisely through people's actions. According to Axelos, however, the problem is that, on the one hand, Marx did not consider the factor of nature as a source of some sort of wisdom, but exclusively as the object of human action; and, on the other, that he did not manage to comprehend the complementary relationship between the spiritual and material elements. Instead, he simply reversed the priorities between them, almost abandoning the former in favour of the latter. According to his Greek commentator, this stance led the German philosopher to an over-valuation of action and, consequently, to an ideology which denies any deeper significance of nature, in favour of the all-powerfulness of homo technicus, who, it is postulated, is the one and only begetter of history. Marx wants humankind to overcome its alienation by taking over the world through a technique absolutely liberated from any supposed concealed, innate wisdom in nature, since, in such supposed wisdom, he saw traces of Hegelian idealism. According to Axelos, in denying any form of transcendency, the father of communism brought his thinking to the affirmation of a relentless game of autonomous power (which according to Marcuse, Soviet- and only Soviet- Marxism gladly played out).

So Marx essentially succumbs completely to the inner logic of Western metaphysics, that is the will to power, despite the fact that, theoretically, this metaphysics seems to deny it roundly. Its same deep structure of thought, nevertheless clearly belongs to this very Western metaphysical tradition itself, which it simply reverses.

In order to proceed further with our discussion, having brought up this one and only pattern, the will to power, especially in bio-Technology, it offers us what is probably a way of understanding modern transhumanism. The new technologies, which aim at the bodily and neurobiological transformation of human nature in general, can be said to enframe it, placing it in the class of an objectivised 'standing reserve', within the prospect of achieving a greater force for the transcendence of the boundaries of antecedent humanity. The intention seems attractive: it has to do with 'Human Genetic Enhancement', which comes as the consequence of the post-neoteric exclusive emphasis on human nature as the sole source of truth of the subject, with the simultaneous exclusion of ancient cosmic Reason and the Judeo-

Christian spiritual experience[19].Thus, as I wrote recently, 'after the rise of the neoteric self-referencing subject, the expressionist weal of the main individual of the connotations creates the fantasy of an à la carte nature, which, in a sense, is chosen by the individual, rather than it doing the choosing. The era of bio-technology is nothing other than the paradise of such post-Enlightenment subjects, whose freedom to be themselves has been turned into freedom to reconstruct themselves bio/psycho-technologically; naturalistically, of course, and now in no way transcendentally. In the eyes of those imagining the bio/psycho-technological reconstruction of their nature, the ancient limits on it provoke unspeakable horror- such as its likely Christian repose in the bosom of a God who took on this nature and claims it as a dialogical connotation'.[20] Thus, human nature becomes the object of manipulation, that is controlled mutation, flirting with a potentially vast extension of human life and, thereby, human knowledge and –of course – pleasure. But is all of this really so simple?

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As is often the case, such a prospect has its theoreticians, initially thinkers such as Andy Clark and his book Natural Born Cyborgs: Minds, Technologies, and the Future of Human Intelligence [21], or Brad Allenby and Daniel Sarewitz and their book The Techno-Human Condition.[22] They will tell us, as Clark puts it, that we've always been cyborgs; or, according to Allenby and Sarewitz, that even from as early as the era of the invention of the first tools, we have been 'enhanced' and, in a certain manner, already been 'transhuman'.[23] The two authors consider it a mistake to distinguish between 'external' technological applications, such as, for example, agricultural implements or the spectacles we wear and any 'internal' technological applications brought by neoteric (bio)technology. This is in the sense that 'there's nothing new under

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[19] Nikolaos Loudovikos, *Η Ανοικτή Ιστορία και οι Εχθροί της: η Άνοδος του Βελούδινου Ολοκληρωτισμού* (Athens: Αρμός, 2020), 253-257.

[20] Ibid., 257.

[21] Andy Clark, *Natural Born Cyborgs: Minds, Technologies, and the Future of Human Intelligence* (Oxford: Oxford University Press, 2004).

[22] Brad Allenby and Daniel Sarewitz, *The Techno-Human Condition* (Cambridge MA: MIT Press, 2011).

[23] Ibid., 2.

the sun', since, in each instance, we are merely seeking our biological completeness and being commensurately self-enhanced.[24] It follows that any genetic enhancement does not imply a revolution which would raise, supposedly for the first time, ethical dilemmas and re-evaluations.[25] Clark, meanwhile, maintains that we introduced technology into our intellectual world from the time people first started to write.[26] He finds the fears of certain philosophers regarding loss of control to be exaggerated and without foundation[27]. He claims that this control will be no more successful, or otherwise, than any of the more or less successful or failed ways by which humankind has always dealt with its enhancements. What the author seems to overlook, however –among other things – is the fact that these terrifying forces or possibilities which now may be unleashed today, along with likely blunders (or deliberate malpractices) in the application of the above technologies, are likely to be instrumental in the destruction, in a wide variety of ways and means and probably for ever, of our familiar image of the world, as well as, in particular, the image and psychobiological reality of humanity as we have known it over the last dozens of millennia, as sapiens sapiens. It is also possible that they will underpin the explosion of the most terrible and ruthless form of absolutism the world has ever seen, since the enormous will to power which they (may) support and which they (may) promote cannot be fully implemented without advanced forms of extreme surveillance. Herein, indeed, lies a particularly apposite point in Heidegger's observations, which indicate that, given that the will to power is itself the essence both of human subjectivism as well as human history and society in general, it is therefore extremely difficult for us to avoid precisely these developments.

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At this point it might be useful to seek the help of older wisdom, initially that of Hans Freyer, who, as early as 1955, forecast certain very

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[24] Ibid., 15.
[25] Ibid., 17.
[26] Clark, op. cit., 6e.
[27] Clark, op. cit.,175: 'The kind of control we, both as individuals, and as society, look likely to retain is precisely the kind we always had: no more no less. The fear of "loss of control", as we cede more and more to a web of technological innovations is simply misplaced'.

important things. In his important book, Theorie des gegenwärtigen Zeitalters[28] this outstanding German sociologist mentions, as the first known characteristic of the Enlightenment, faith in ineluctable progress as a refinement of morals, far removed from a (mostly mediaeval) past which was quickly identified with brutality, barbarity and savagery. Secondly, having referred to the parallel, and hugely important, shift on the part of humanity towards the construction of machines, he deals with the greatest event of the era, which, in his opinion, is the birth of ideology –what he calls a 'secondary system'. Ideology, as the 'secondary system is the –initially theoretical –construct which, in claiming that it knows the real person, reduces them to primitive urges and tendencies/instincts, suppressing any likely more profound connotations and their existential/spiritual depth. Thereafter, with no little coercion, it advocates the proper way of life'. 'Secondary systems' had their origins in religion, in unhealthy forms of zealotry which were secularised. These systems retain the pseudo-religious form of a prescribed absoluteness which isolates people – an absoluteness which, for precisely this purpose, very much needs to espouse science, and, in fact, in its most effective form, technique. Moreover, in this instance, technique has the required advantage of being theoretically 'silent', as an outlet and guarantee of opportunities for aims as yet unspoken; the glib final motive being effectivity and, consequently, power. People no longer ask if the means is appropriate but rather, through compulsorily-recognised authority, the means asks people if they will apply it, often insisting that they do so.

But in this way, technique itself becomes the authority of the age. What Freyer sees, beyond Heidegger, is the perfect, likely combination of technique with the 'secondary systems' in a clearly adumbrated tendency towards Absolutism. We are dealing here with the immediate, impending prospect of the danger that the technical means for domination of the masses will have been shaped and that society will have been homogenised. The absolute tendency towards the reduction and absorption of the human person into its absolutely primitive characteristics, together with the demonic, enforced impetus towards its being re-constructed, re-formed and re-directed, but now without

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[28] Hans Freyer, *Theorie des gegenwärtigen Zeitalters* (Stuttgart: Deutsche-Verlags-Anstalt, 1955).

any dangerous freedom and without any metaphysical perspective, brings to a head this compulsory effectivity to which the 'secondary systems' incline, with the assistance of technique.[29]

For this purpose, the 'secondary systems' distort history, extracting from it whatever is in their interest and reinterpreting it to serve them as they deem best. This is always based on planning, overseeing and forecasting against anything in people that is true, unplanned, authentic and free. This is Comte's older phantasy: the organisation of Divine Providence, or the transformation of history from a locus of the revelation of God into one of the revelation of Man (as, indeed, Marx and Engels thought they were doing) where people supposedly take history into their own hands and become its inflexible guides. What was formerly 'the Kingdom of God' is then transformed into a system for the production of puppets and a secular-centred eschatology. If Ranke already knew that the notion of progress is enough to subject history to an abstract principle, today the millennialism of progress has morphed into its triumphant realisation in the kingdom of the masses; that is, the predominance of 'in soul and body' adapted to the wheels of a human system. In this case, the fundamental position of Freyer is that the millennialist phantasy of secular, felicitous progress has the ability to 'bring' history 'to completion' with a trumped up final goal, beyond which no different future can be expected. The 'secondary systems' of contemporary ideologies still seem to become laws for the way we live and recipes for happiness, despite the fact that, in contrast to what was expected by the utopianist modernisers, clashes within the industrialised world occur more easily and are more painful than they were before, that trade and the economy are far from peaceful, and that politics is full of dangerous and bloody confrontations. Absolutely no mention is made of the collateral losses (which might be the freedom of the human person), even though these affect the whole planet.

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[29] Freyer is, of course, describing classical Absolutism here. In the looming 'Velvet Absolutism', as I call it, there is no longer any violence involved and the function of ideology is entirely different and free. This Absolutism is produced with the unreserved assistance of its victims. See my book *Η Ανοικτή Ιστορία και οι Εχθροί της: η Άνοδος του Βελούδινου Ολοκληρωτισμού* (Athens: Αρμός, 2020), chap.5.

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As a vehicle for the will to power, 'enframing' human nature and the whole of creation in the order of an objectivised and forcibly modified 'standing reserve', (bio)technology is on the way to a (now Velvet) Absolutism, in which ideology is simply a pretext and yet also nihilistic and (revoltingly) demeaning for people and their world. It now involves the immediate danger of the extinction of the human race and/or its nightmarish reduction to a reservoir for the extraction of natural resources by an impending generation of super-intelligent machines (which will put into practice the absolute ideal of the will to power), if we listen to Nick Bostrom. Because it appears today that, beyond any related expectations and forecasts, technology, which carried out the role of an instrument of the will to power, is now in a position to become independent of us, having been converted from a means of will to power into an agent able to practise it.

But the first form of the exercise of power by technology was described in the decade of the '60s by Marshall McLuhan, much earlier than Bostrom (to whom we shall return). He did so in his famous book Understanding Media, the Extensions of Man[30], in the first chapter of which he formulates his well-known principle (which is also the title of the chapter) that 'The Media is the Message'. What McLuhan wants to say, in this instance, is 'that the personal and social consequences of any medium – that is, of any extension of ourselves –result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new Technology'[31]. As he goes on to explain, 'Any invention or Technology is an extension or self-amputation of our physical bodies, and such extension also demands new ratios or new equilibriums among the other organs and extensions of the body'[32]. The author uses the Old Testament concept of 'idol' as encountered in, for example, Psalm 113[33], to claim that 'They that make them shall be like unto them; Yea, every one that trusteth in them'. In other words, he goes on to say, 'By continuously embracing technologies, we relate

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[30] Originally published in 1964 by Mentor, New York; reissued 1994 , MIT Press, Cambridge, Massachusetts.

[31] Op. cit. p. 9.

[32] Ibid., 55.

[33] Ibid., 56. [The quotation is from the King Kames Version, where the numbering is 115. It is 113 in the Septuagint].

ourselves to them as servo-mechanisms. That is why we must, to use them at all, serve these objects, these extensions of ourselves, as gods or minor religions'[34]. Therefore, 'Physiologically, man in the normal use of Technology (or his variously extended body) is perpetually modified by it and in turn finds ever new ways of modifying his Technology. Man becomes, as it were, the sex organs of the machine world, as the bee of the plant world, enabling it to fecundate and to evolve ever new forms. The machine world reciprocates man's love by expediting his wishes and desires, namely, in providing him with wealth'[35].

It follows that Technology exerts a transformative power over our human psycho-biological identity itself and, indeed, in a manner that McLuhan called, as we have seen, proportional, as regards the relationship between the parts among themselves, between people and between a person and the world –even though the last, at the time, was not clear in the same astonishing and decisive way that it is today, sixty years later. Just as there was no clear indication of the enormous homogenisation of the human conscience which would be brought about by digital and internet Technology, which tends towards the mitigation of all the differences which spark the communion of people between each other. It will be necessary to return to these two aspects, i.e. digital identity and homogenisation.

But the danger today, as we have said, is the likelihood of a quasi self-direction of Technique- which, of course, has already occurred in practice through the internet and, at the same time, through its great benefit as a means of control and manipulation of people – through what is known as Strong Artificial Intelligence, to return to Bostrom. The concept which the Swedish philosopher employs in this instance is that of 'existential risk'[36], which means the possibility of a plot against intelligent beings, involving their annihilation or curtailment by superintelligent machines which are self-defining and self-protecting. Their tremendous potential for self-improvement and self-development will lead to a 'technological singularity' of dazzling intelligence, which might accidentally or deliberately destroy the human race, in order

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[34] Ibid., 57.
[35] Ibid., 57.
[36] See N. Bostrom, 'Existential Risks: Analyzing Human Extinction Scenarios and Related Hazards', *Journal of Evolution and Technology* 9, no. 1 (2002).

to respond absolutely to the task which has been assigned to it[37]. And simply by having a single, limitlessly-powerful skill installed by those who construct them, these superintelligent machines will quickly discover human imperfection and will recognise the limitations engendered in people by this imperfection. The machines will seek to manipulate people, developing super-weapons of unimaginable Technology and, in order to protect the task assigned to them and without being able even to evaluate all the various aspects of the reality of the world and the beings in it (which human general intelligence has always appreciated), it would be possible for them to annihilate people in order to remain intact themselves. Bostrom attempts to think up 'technological strategies' which would reduce the above 'existential risks' by promoting technologies with less development, but this is, however, far from easy.

Nevertheless, there are important thinkers, such as Joseph Sifakis who think it impossible for artificial intelligence ever to reach the level of human general intelligence. In his recent book (in truth rather ambitiously entitled), Understanding and Changing the World[38], the distinguished information Technology expert develops a series of arguments in this direction. He considers it unlikely that general artificial intelligence will ever develop to being close to that of humans, because what distinguishes the latter is 'the combination of perception/interpretation of the senses, rational processing of them and the taking of decisions which potentially lead to actions'[39]. According to the author, the human mind acts within a 'signifying model', constructed automatically in infancy and consciously increasing through learning as a dynamic system including self-awareness, interiority, common language and communication[40]. Nothing similar can be reproduced in a computer, because of the infinite forms of complexity which social, existential, linguistic and semantic relations involve for people. Moreover, any potential that computer systems have for self-education cannot lead to the creation of new concepts, aims or goals [41]. Consequently, technical

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[37] See N. Bostrom, *Superintelligence: Paths, Dangers, Strategies* (Oxford: Oxford Univ. Press, 2014), 48-52.
[38] Joseph Sifakis, *Understanding and Changing the World* (Athens: Αρμός, 2020).
[39] Ibid., 116.
[40] Ibid., 116-117.
[41] Ibid., 135.

intelligence will never attain to that of humans[42]. According to the author, any contingent dangers are to do with parameters such as the unemployment which ensues from the increasing use of computers; the limitations on human privacy through the use of personal data which is spread through the internet and can be accessed by computers which can then take it further; or the dangers of excessive dependence on computers, as well as the assignment of decision-making to them[43].

The philosophical part of the book, however, though pleasant reading, is rather too amateur to merit serious discussion. As is often the case with scientists, Sifakis does not grasp the depth and breadth of the philosophical sources and the anthropological conclusions resulting from them. If, for example, the metaphysics of the will to power is so much part and parcel of the very requirements of modern electronic (bio)Technology (together with the enormous anthropological changes of post-modernity), then trite optimism regarding its beneficial use is not only simplistic but literally dangerous. On the other hand, the problem in this instance is not whether the artificial intelligence of computers can rival that of human beings; at the end of this article I shall attempt to add a series of, in my opinion, much more serious reasons why any spiritual equivalence between computers and people is impossible. The problem, which is not at all phantastic or exaggerated, is the very real possibility that computer systems, given their incurable spiritual inferiority and their simultaneous, tremendous – though one-dimensional – 'acuity' (gradually self-determined) may, in a manner described in an unrivalled manner recently by Max Tegmark[44], attempt –with, or, at some stage, without human cooperation – a crushingly one-dimensional, existentially non-sensical, emotionally dead and spiritually arbitrary domination and quasi-captivity of the human race. The philosophical question in this case is: do we have, today, commonly accepted (even if only elementary) spiritual safety-valves to protect ourselves against such a danger? The realistic answer is that we do not. There is no place here for the usual false optimism of the technocrats.

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[42] Ibid., 140.
[43] Ibid., 141-147.
[44] See the discussion of his positions in my book, *Η Ανοικτή Ιστορία και οι Εχθροί της: η Άνοδος του Βελούδινου Ολοκληρωτισμού* (Athens: Αρμός, 2020), 229-230.

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Indeed, matters are even more serious, because the dark star of human desire enters the game, with an aim that is unfathomable, as psychoanalysis has shown. As I have written earlier, 'Desire is the only vehicle we have to reach the Whole…'[45], since (and when and if), it gradually mutates, maturing into an agency of intersubjectivity which nevertheless, in the end, exceeds all its periodical demands, progressively becoming pure desire without an object –that is, with an object which is the unity of all the demands and all their Other-agencies within it[46]. But this is a felicitous outcome; there is also the, perhaps more common, dark, paranoic development of Desire, with the phantastic fusion with the Whole (and the Other as its agent) and the possession of it in the name of a paranoic all-powerfulness[47] (which is naturally linked to the metaphysics of the will to power, as we saw above). It is precisely this dangerous Desire which is incapable of being foreseen by the contemporary reflections of scientists who promote today's electronic Technology, which culminates in (Strong) Artificial Intelligence. Instead, what is proposed are frequently naïve and simplistic solutions, even when the diagnosis of the dangers is correct. Moreover, these are solutions which unwittingly exacerbate the problem, handing this Technology over to the dark star of nascent modern paranoic desire and considering that in this way the problem of likely independence of the former can be solved. Let us look, for example, at how Stuart Russell, one of the undoubtedly most widely influential experts today, sees things[48].

We should say at the outset that Russell belongs to those who believe it to be entirely possible (because of the enormous economic pressures being applied in this direction) that some kind of general intelligence might be acquired on the part of computers, of course without them acquiring the completeness of the human hierarchy of values which would no doubt temper their likely destructivity. What is striking

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[45] See my book, *Θεοποιία: η Μετανεωτερική Απορία* (Athens: Αρμός 2007), 91.

[46] See my book, *Ψυχανάλυση και Ορθόδοξη Θεολογία: περί Επιθυμίας, Καθολικότητας και Εσχατολογίας* (Athens: Αρμός, 2003), 31-34.

[47] See Nikolaos Loudovikos, 'Analogical Ecstasis: Maximus the Confessor, Plotinus, Heidegger, and Lacan', in *Maximus the Confessor as a European Philosopher*, eds. S. Mitralexis, G. Steiris, M. Podbielski (Eugene, Oregon: Wipf and Stock, 2017), 241-254.

[48] See his recent book, *Human Compatible: Artificial Intelligence and the Problem of Control* published by Viking in 2019.

here, initially, is the same hyper-optimistic (and simplistic) post-Enlightenment belief in the supposed innocence of human intentions. This belief, which is common to almost all scholars, is deliberately blind to the probability that these 'human values' and intentions are, in themselves, flimsy and inconsistent. So they see the cure for any inadvertent damage to be the more radical transfer of electronic Technology into human hands, which they insist on considering safe. What they do not see, however, is that this is handing this Technology over to the likelihood of precisely this paranoic Desire, which is perhaps the very worst danger. And, in this way, we cure a (likely) evil with another (usually worse one). So, in the aforementioned book[49], Russell's three principles which make possible the development of beneficial machines, do not avoid this failing:

    i.   The machine's only objective is to maximise the realisation of human preferences.

    ii. The machine is initially uncertain about what those preferences are.

    iii. The ultimate source of information about human preferences is human behaviour.

According to Russell, these 'preferences' are all-encompassing, covering everything you might care about, arbitrarily far into the future. It is, however, surprising that the author seems not to realise that the problem lies in precisely this uncoordinated and uncontrolled scale of human preferences and that, therefore, subjection to them will do anything but cure any probable aberration. Initially, the machines will serve and, in the end, probably autonomously imitate any chance paranoic human desire, maximising this self-validated realisation. Who sets the limit on this realisation? Who sets its ultimate goal? In what way and by which criteria can we distinguish any success from any failure of the historical activity of machines? Who will guide Technology and in what direction, since the need for a supposed psychobiological enhancement of the human person appears to be an anthropological dogma today, resulting from the Enlightenment, and since this dogma flows from and is linked to the great enclosure of human and cosmic nature on itself? Who? – if the Biblical God and the

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[49] Ibid., 173.

reason of the cosmos of the ancient Greeks are considered incoherent myths and the will to power remains the sole permissible virtue and the only permissible anthropological and social principle. And even more: with what human existential law can all this enforced homogenisation of people and consciences which is begotten, promoted and lead by this Technology, together with the parallel debasement of differences in identity (religious, linguistic, national, historical and racial) be invested with meaning and made human? This homogenisation has recently been called 'Surveillance Capitalism'[50] by Shoshanna Zuboff. Indeed, when the destruction of the natural resources of the planet is an event already activated in reality, and the gloomy predictions of either ecological or nuclear self-destruction (or both together in combination) are already likely scenarios…

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Two modern films (though doubtless there are others) make an effort to provide an answer. The first is Interstellar, by Christopher Nolan (2014) and the second the recent Midnight Sky by George Clooney. In the first, we follow a desperate space mission in the quest for the debris from an earlier mission, the goal of which was to find planets suitable for colonisation. The reason for this was the looming ecological destruction of the world and the concomitant death of its inhabitants through pollution of the atmosphere and the gradual failure of the ability to produce raw materials for food. The brains behind the mission, however, was not telling the truth: he knew that colonisation was impossible and that the only hope of survival for humanity was the settlement of several thousand human embryos on some suitable planet. These embryos, which were also being transported on the space ship, would evolve into a new form of humanity. The discovery of this secret untruth overturned the whole scenario: Cooper, the pilot wanted to return to earth to save his children, and the loving relationship with

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[50] See Shoshanna Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (NY: Profile Books, 2019). The writer defines surveillance capitalism as the use of ' human experience as free raw material for translation into behavioural data [which] are declared as a proprietary *behavioural surplus*, fed into advanced manufacturing processes known as "machine intelligence", and fabricated into *prediction products* that anticipate what you will do now, soon, and later'.

his daughter allowed a scientifically unlikely transfer of information which would lead to the colonisation of space by earthlings. The woman on the mission, meanwhile, would head towards the planet of her lover, whose fate had been unknown for years. The significant point in this film, then, is precisely the revelation that love is the only and essential raison d'être of life and also the likely reason why Technology has been implemented and has developed in the right direction. According to Dr. Brand in the film, this love 'seems to come from another dimension'; it is 'information from elsewhere'.

Of course, even after the above, it is not easy to be certain that this discourse on love really surpasses –and to what extent – the naive discourse concerning 'love' of Rousseau and representatives of the Enlightenment. The difference between the latter and the Biblical reality of love is very great: Saint John's 'God is love' has essentially been transposed here into 'love is a god'. What we are dealing with is the elevation of physical human love to a metaphysical superscript – though, in this case we cannot rule out entirely the distant adumbration of the understanding of love as proportionate participation in the love of God.

The second film highlights what is, to a significant degree, the illusory nature of modern Technology and its collapse in real conditions. Technology not only fails to save the earth, but actually contributes to its destruction, together with the destruction of the personal life of the abstract central hero. The issue here is how to avert the return to Earth of a spaceship which has managed to discover a planet which might be hospitable to humans in the event of an ecological or other danger. It is returning in ignorance of what has happened on Earth in the meantime. And again, when the terrible news reaches the crew, they are divided, with love once more as the cause. Because of their loving relationship with those close to them on Earth, some choose to return to Earth, in a desperate attempt to save them, while the couple in love, whose relationship is already bearing fruit in the womb of the pregnant woman, choose to return to a newly-discovered planet, in order to continue human life elsewhere. The central hero, in the meantime, discloses his lost relationships and his life which has been devastated because of his utter dedication to an illusory Technology that would save the world. In other words, love again plays the absolutely decisive role

here. The insidious contradiction seems ironic and ruthless: scientific Technology, which has already destroyed the earth, or has contributed to its destruction and is unable to prevent this, invents the (partial, it must be said) salvation of it through the escape of some few people to a new, virgin planet. Here, human life will start again from scratch, as it did once on earth, given that the absence of sources of energy will quickly render the delicate Technology of the newcomers useless, with the result that the people concerned will rapidly return to primitive conditions. And, naturally, the audience is left with the suspicion that, in the distant future, this new earth will also be destroyed for the same reasons, the agent for this destruction being the very same Technology – albeit as an unwilling collaborator…

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All this means, however, that the real and acute question which Technology poses today is anthropological and, thereafter, theological. Where and how does this love exist? Let us say at the outset that there is no point demonising or exorcising Technology. Technology simply occurs; it is the modern form of Heidegger's in-der-Welt-Sein (Being-in-the-world) and, indeed, one which is destined to exist and, it appears, to be the last form of Being-in-the-world. It is not possible to imagine a non-technological future, unless we mean a post-technological era brought about by ecological or military catastrophe, to which Technology will have contributed decisively and which will be an age characterised by a nostalgia for Technology. This is why the first important issue is precisely the anthropological change which is embedded in the very core of Technology, as we've already analysed. In reality we are talking about a lasting and absolute danger or, often, the reality of the amalgamation of the will to power, (paranoic) desire and Technology which makes the former all-powerful and, at the same time displays and, in reality, usurps the whole of classical philosophical anthropology, from idealism to existentialism, together with the well-known theological personalism which follows the first two in the super-elevation of the person as freedom in relation to nature or the 'possession' of nature by the person, in accordance with recent efforts to transform it. Here this means 'personal' freedom from nature without

anyone listening to its wisdom, hidden in uncreated words. Speaking theologically this means that, in its anthropological stage, Technology is pure, ecstatic personalism which possesses, governs and 'freely' transforms the nature of beings (and which, we fear, will soon do so of its own accord, by-passing humanity and acting against it), without the divine voice within nature being able to be heard and without finding this necessary. But this voice demands the consubstantial unification with a sacrificial and suffering love, following the example of Christ. And this is precisely where the great danger lies, apart from and contemporaneous with the many and varied, much-extolled benefits.

A non-ecstatic Technology, would start from exactly the opposite point, that is by listening to the uncreated words of God which are in beings, as uncreated calls and personal energies of God, as they, in fact, are. These calls would be to a synergetic dialogue with God, a different Technology, indeed; one which would listen to, consider and interact with the divine wisdom [who] which is concealed within the depths of beings as the creator which [who] also sustains and provides. Naturally, anything such as this would be of concern only to the human handlers of Technology. Because, in any case, a self-authorised General Artificial Intelligence falls short not only as regards issues of the lack of a general 'semantic model'. It can also not possess certain (primarily theological) virtues, such as love, discernment, referentiality/relatability, gratitude, loving kindness, existential communion and, in the end, freedom. Nor, even more theologically, can it experience prayer, that is, the sense of grace. The question is to what extent these qualities are absent from the human engineers, even before the floor is conceded to machines.

So what would constitute the most disagreeable surprise for post-postmodern people in the decades to come will be, in my view, the collapse of all the (supposed) rational methods of controlling the Technology of what is known as Strong Artificial Intelligence, precisely because the forces which promote it –the will to power and paranoic desire – are much more powerful. In reality there remains only metaphysics, or more exactly, theology, which will be able to propose a different, deep destination for human existence (I mean theanthropy, in imitation of the suffering, sacrificial love of Christ), as opposed to the dangerous transformation of the world into a 'standing reserve' and (by the same logic) of human nature into a cyborg. This would also involve

its final subjection to the super-intelligent lack of reflection on the art of computers –as also the subjugation of the rest of creation, which 'groans as in the pains of childbirth' along with us, according to the well-known saying of Saint Paul – to the tyranny of the same unreflective and unwise super-intelligence. This is something which politicians and technocrats resolutely refuse to see or imagine and which philosophers are unable to define. So, although Heidegger, for instance, talks about the need for people to listen to the Being, he was never able to describe the content of this listening process. It follows that anything a thinker or poet finds or imagines can be considered to be this content, and this is exceptionally dangerous. Herein, I believe, lies the underlying Hegelianism of Heidegger, who like Hegel himself, considers that the Absolute appears only as human reason and consciousness.

In reality, then, the sole likelihood that the authentic presence of the human person can survive in this difficult and ambiguous future is the prospect which theology identifies as our 'godlikeness'. To quote Saint Makarios the Egyptian, from his wonderful first Spiritual Homily: 'as fire, the very light of the fire is alike all over, given that there is no first or last, or greater of lesser within it, so the soul that is perfectly irradiated with the ineffable beauty of the glory of the light of the face of Christ and is perfectly in communion with the Holy Spirit and has been privileged to become the dwelling and throne of God, becomes all eye, all light, all face, all glory and all spirit, being made so by Christ who bears, conveys, supports and sustains it, and graces and adorns it thus with beauty'.

It is only this godlikeness that does not fear and, primarily, does not need Strong Artificial Intelligence, because it is already wise from God: 'all eye, and all light and all face and all glory and all spirit'. These are conditions beyond the comprehension of today's life-style which, in the midst of everyday sadomasochism and cannibalism, stupidly insists that the truth and the solutions to all the overwhelming problems lies exclusively within humankind. This flies in the face of Heraclitus[51], of Plato, of Plotinus, and above all, in the face of the revelation of the incarnate Word and the opportunity to participate, by grace, in his uncreated life, through the sacraments of the Church. In the meantime,

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[51] See Nikolaos Loudovikos, «Τί είναι ο Ηρακλείτειος Λόγος;», in *Φιλοσοφείν*, June 2020, passim.

history flounders among the tombs of millions of victims, ecological catastrophe, enslavement to algorithms and a plague-like epidemic of depression. Moreover, the West, nourished on the concept of created grace in Thomism, no longer grasps clearly the possibility of participation of the uncreated, and of real synergetic dialogue with it. Instead of this they have placed the supernatural, in which the participation of the uncreated is 'translated' to created dimensions, properties and needs of the creation. One is tempted to think that it is precisely this theological notion of the supernatural which is not uncreated that was secularised, disguised as the post-Enlightenment need and notion of transhumanism, together with the need for genetic and digital enhancement, the sole criterion being the needs for greater power and augmentation. When there is no participation on the part of the uncreated, all that remains to us is the super-human 'supernatural' enhancement of the created…

I should like simply to name another perspective for (bio) Technology, a theologically-inspired one, concerning which a whole treatise might need to written on its theoretical development. I would call it Dialogical (Bio)Technology, in consideration of the fact that its fundamental characteristics, internally interdependent, would be the initial orientation towards what I have called (inspired by the theology of Maximos the Confessor) the 'dialectical composition of created nature'[52]; thereafter the overthrow of the enforced homogenisation of people which is brought about by their being reduced to their psycho-biological elements through the promotion of a genuine dialogical society of real people, in which people do not dictate their existence to others[53]; and the creation, in the end, of precisely that analogical identity which is expressed as imitation of the unifying, agapetic energy of God –of the will to consubstantiality rather than the will to power[54].These three principles, almost the opposite of those proposed

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[52] On this, see Nikolaos Loudovikos, *Μαξίμου του Ομολογητού, Τα 400 κεφάλαια περί Αγάπης, Εισαγωγή στην θεολογία του Αγ. Μαξίμου*, chap. II,1, Holy Mountain: Holy and Great Monastery of Vatopaidi, under publication. It deals with the proposition that rational creation engages dialectically, that is, in a dialogue between people among themselves, with God, with the sacraments, with asceticism, in order to show the natural modus vivendi of beings.

[53] See Nikolaos Loudovikos, *Οι Τρόμοι του Προσώπου και τα Βάσανα του Έρωτα: Κριτικοί στοχασμοί για μιά μετανεωτερική θεολογική οντολογία*, Athens, Armos 2009, 2nd ed. 2018, pp. 47-58.

[54] See the development of the concept in Nikolaos Loudovikos, *Analogical Identities: The Creation of Christian Self*, (Turnhout: Brepols 2019), Third Part.

by Stuart Russell, would have the power to make (bio)Technology in general, and Artificial Intelligence in particular, dialogical, constantly reviewing the words, the actions and, in the end the purposes of God among his creations: wise, moderating and beneficial, with the sense of boundaries always present. This would be a recognition of the fact that the history of the world of beings is a work of collaboration common to humankind and God.