"*Come, Let us Build ourselves a City, with a Tower that Reaches to the Heavens*" (*Gen*. 11, 4). Artificial Intelligence and the Person: Evolution or Hubris?

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Introduction

In the book of *Genesis*, we find the story of the Tower of Babel. The author preserves the following: «*καὶ εἶπαν· δεῦτε οἰκοδομήσωμεν ἑαυτοῖς πόλιν καὶ πύργον, οὗ ἡ κεφαλὴ ἔσται ἕως τοῦ οὐρανοῦ, καὶ ποιήσωμεν ἑαυτοῖς ὄνομα πρὸ τοῦ διασπαρῆναι ἐπὶ προσώπου πάσης τῆς γῆς*»[1]. According to the text, man wanted to build a tower high enough to reach the heaven. This desire, although at first seemingly normal, it eventually led to hubris. This resulted in God's intervention and the creation of nations through the separation of languages.

How really close is this allegorical story to modern technological development?

By the term "Artificial Intelligence" (henceforth AI), we define all those "smart devices" and applications that facilitate people's lives and help to keep social life in line with the advances of the Fourth Industrial Revolution. After all, technological developments do not leave the world and its activities unaffected.

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1. *Gen*. 11, 4.

1941 was the year in which man as a historical being first came into contact with an early form of machine intelligence. The first "computational intelligence" was the forerunner of the contemporary AI, and laid the foundation for science to build on this primary application for achieving the later technological developments.

At that time, scientists were asked to answer the question of whether a device could develop intelligence equivalent or superior to that of a human being. Eagerly wanting to answer this question, scientists were led to carry out a test to see if the machine was smarter than a human. The test was named after the scientist Alan Turing; through a series of questions and problems they have tried to ascertain whether it was possible to determine which answer was from a computer and which was from a human being[2].

In the first neural network created by Alan Turing, an experiment was conducted in which a human input a set of data; the AI processed them and drew conclusions. The experiment has shown that the machine was able to develop the same thinking as a human[3]. Furthermore, over the years, it has been found that machine learning has reached a point where it can collect data from the environment in which it finds itself, and, through its evolution, to constantly increasing its capabilities as a machine.

Man is even nowadays incapable of fully comprehending the mind's workings. The understanding of how cognition works is the way through which man can not only approach his self-awareness but above all to grasp his identity and define his existence in his surroundings.

Paradoxically, although man cannot fully comprehend how cognition works, AI with a series of applications has the ability not only to approach the way man thinks but, in many cases, it can surpass him and his capabilities[4].

2. Io. Vlachavas, P. Kefalas, N. Vasileiadis, F. Kokkoras, I. Sakellariou, *Τεχνητὴ Νοημοσύνη*, Gartagannis Publications, Thessaloniki 2002, pp. 2-3.
3. A. M. Turing, «Ὑπολογιστικὲς μηχανὲς καὶ νοημοσύνη», in: D. R. Hofstadter and D. C. Dennett (eds.), *Τὸ ἐγὼ τῆς νόησης. Φαντασίες καὶ στοχασμοὶ γιὰ τὸν ἑαυτὸ καὶ τὴν ψυχή*, transl. Myrto Antonopoulou, Katoptro Publications, Athens 1993, p. 45.
4. St. Russel and P. Norving, *Artificial Intelligence: A Modern Approach*, Pearson Education, Inc., Upper Saddle River, New Jersey ^{3}2010, p. 3.

This development and AI's potential is the reason why the scientific community is concerned about the consequences of the AI applications' increasing development. It should never escape to our notice that the technological development that is progressing by leaps and bounds in our time could affect the whole of human life, including fundamental human rights such as freedom. Of course, we should not overlook the fact that AI with a series of applications can provide a solution to major modern human afflictions, such as pain, disease, poverty, old age and finally death itself.

Science through new discoveries is not simply oriented to copy the rules of nature's modus operandi but tends also to produce a new reality, which will eventually replace what we have known until recently as the natural environment. This raises an immediate concern in the context of the alteration of the central core of human identity.

The immediate danger that occurs from the digital technology's abuse is that man will be altered to the point of becoming techno-nature. In the future, man may cease to exist as we know him now and become *Homo Deus*, the so-called *transhuman*.

Of course, the changes and developments that are taking place are not independent from man's volition; instead, the manipulation of technology is in his hands. Perhaps this is the reason why there is a lot of skepticism about the AI applications.

AI: A Definition

A definition of AI has proved impossible. John McCathy considered AI to be the faithful replication of human thinking through a series of activities displayed by computers. Indeed, this replication of human behavior through various computer systems, mathematical models and high-level logic rules is believed to be to the point where the computer's activity should be indistinguishable from that of a living being[5].

5. Io. Vlachavas *et al*., *Τεχνητὴ Νοημοσύνη*, *op.cit*., p. 3.

The AI's purpose is not to simply copying the way humans think. Its successful operation lies in the faithful copying of human behavior so that it is not possible to distinguish between the natural human behavior and the one exhibited by the machine. It is through this delineation of AI that it is possible to realize the potential of the machine. These perspectives are the reason why AI is considered necessary to enhance man's everyday activities.

Scientists involved in AI applications believe that the faithful replication of human cognition is an auxiliary factor for the operation and presence of AI applications in human life. Therefore, this copying is an end in itself for the development of AI. The decoding of human consciousness is necessary so that the machine can gradually become autonomous from man's presence.

The humanities and social sciences understand that human cognition is not a static process; rather, it is a set of abilities influenced by a series of external factors. Man uses his intellect to perceive the world around him and distinguish the difference between the artificial and the natural. This is the point of reference that differentiates AI from man's natural way of thinking. AI, try as it might, is not able to replicate the natural functioning of human cognition[6].

Man as a creature develops intelligence as a personal identity element that is necessary for his existence. In the opposite case, the machine can only be proven to be intelligent if it is programmed properly, i.e. if it is given the parameters and data needed to lead to specific results that will prove that it is more intelligent than the human being. Still, even then, the machine has to process the data given to it by the humans in order to finally be able to show any shred of intelligence.

In order for AI to develop a form of intelligence, it is necessary to use the principles and methods of the exact sciences; mathematics, computer science and biotechnology are helping to create all the necessary parameters for the machine to develop an intelligence comparable to that of a human being. These sciences collect data and information

6. D. Poole and A. Mackworth, *Artificial Intelligence: Foundations of Computational Agents*, Cambridge University Press, Cambridge U.K. 2010, p. 5.

from various environments, which through technical processes are used to create correlations. A classic example is biotechnology: the machine can develop neural systems with which it is possible to identically copy human cognition.

The above analysis fully justifies the development of AI in our days. Whereas AI started out as a means of solving problems, nowadays it tends to replace all human activity through the presence of specific applications. Machines are now developing meta-cognitive capabilities, to the point where the computer itself can be programmed without any human intervention.

AI: Ethical Implications and Prospects

The rapid development of AI through its applications, appart from the admiration it generates, it also causes uncertainty for all those involved in the programming of AI computer systems. Nowadays, AI has surpassed the physical limits that it is called upon to copy and is now "imposing" mechanical reality on every aspect of human life.

The aforementioned also justifies a number of ethical concerns regarding AI's use, related to whether man has the experience to use machines without violating his relationship with other people and whether the machine can ultimately overcome the limits that humans set for the machine.

The potential danger, which we believe is not immediate, is that the machine might be able to develop intelligence systems superior to those of humans, to the point of surpassing them and their capabilities. Scientists, by creating algorithms, are going to the path of creating a machine, which will be able to program itself. This autonomous programming process will be able to reach a point of complete simulation of human intelligence, aiming at its complete autonomy.

In the context of the above, a grave concern is lurking: as the machine evolves, the presence of man in space and the labor market will be minimized. Already many of the jobs traditionally done by humans have in recent years been taken over by machines, which have replaced

them. In recent years there has been talk in the public sphere about the so-called technological unemployment, which will affect the largest human resources with incalculable consequences for human life and society[7].

The widespread concern focuses on the possibility of man, instead of leading and programming the machine, to eventually becoming its slave. The scientific community wonders whether the machine has the ability to act on its own according to a moral rule or it can distinguish between what is good and what is evil. Of course, at this conjecture, any actions and deeds of the machine require the input of data from man; therefore, this necessity of programming avoids the above risk or the possibility of the machine operating independently of human will and desire. At the same time, however, there is a risk that the AI with its applications will reach the point where it can formulate a position on what is moral through a series of logical processes[8]. The discussion around this issue is that the AI should be able to construct applications on its own that may ultimately be beyond the control of humans.

This view has been expressed by Jeffrey Hinton, the father of AI. Having resigned from Google, he was anxious that AI could escape human control and eventually surpass human intelligence[9]. This anxiety indicates the possibility that AI could eventually become uncontrollable by man.

In this context, the most serious problem with AI applications is the protection of personal data. AI can generate its own algorithms – which threatens the protection of personal data and endangers the security of the individual. This is why the AI user needs to ensure the protection of his/her personal life and identity. We need to be able to control at every stage both the data collection and entry, so that we do not end up with morally questionable results.

If we look at what is happening around us, we will find that many people are deeply concerned. Ordinary citizens as well as reputable

7. J. Rifkin, *Τὸ τέλος τῆς εργασίας καὶ τὸ μέλλον της*, transl. G. Kovalenko, Nea Synora – A. A. Livanis Publications, Athens 1996, p. 57.
8. St. Russel and P. Norving, *Artificial Intelligence: A Modern Approach*, *op.cit*., p. 4.
9. Y. Wilks, *Artificial Intelligence: Modern Magic or Dangerous future?*, Icon Books, London 2019, p. 146.

scientists are expressing their serious reservations about the impact that all these changes will have on man and his environment (natural and social). These concerns range from whether modern robots with their super-intelligent brains will turn against humans to the threatening reality of a *digital dictatorship*, a program being piloted in some Chinese cities, whereby humans behave as if they were video game players, with millions of cameras watching them and a point system to reward or punish them, with corresponding rights and penalties that will follow them throughout their lives.

Collecting and entering data into the AI machines always carries the risk of transferring perceptions and stereotypes from a specific environment. The AI programmer is not always unaffected by the prevailing prejudices.

This shows how important the human factor is for the programming of AI. There is a risk that, as the AI develops its own systems, it may be able to develop its own prejudices, which the humans be unable to control[10].

Humans' presence is important, since it is they who program and are responsible for the applications of AI. Their responsibility is a very serious matter: the parameters to be introduced must be such that, at the end of the day, the machine should develop a certain degree of consciousness, emotion, and, in some cases, even intuition. Machines are programmed on the basis of the data provided by the manufacturer; therefore, it is absolutely necessary for the phases of development to be monitored, so that we are able to identify any ethical deficit that may occur and to appropriately deal with it.

All the above prove beyond any reasonable doubt the immediate need to add elements that touch on ethics and its rules, so that the AI can eventually become as autonomous as possible. Thus, the programmer must know how a machine will react to the ethical dilemmas that may arise in the future.

10. N. Bostrom and El. Yudkowsky, "The ethics of artificial intelligence", in: K. Frankish and W. M. Ramsey (eds.), *The Cambridge Handbook of Artificial Intelligence*, Cambridge University Press, Cambridge 2014, pp. 320-321.

Of course, the question that arises is whether the machine can create a consciousness on its own, linked to the process of creating moral rules. Its weakness lies also in the fact of the presence of certain emotions, which are also influenced by the input of elements that can control morality[11].

It is necessary for us to emphasize that consciousness enables man to be in constant dialogue with himself and to develop self-awareness. After all, this differentiates man from the machine, since the latter cannot reach the point of creating its own consciousness[12].

Artificial Intelligence and Orthodox Anthropology

Anthropological inquiry focuses on the various ways in which man is influenced by his environment and, in his turn, exerts his influence upon it. Orthodox anthropology understands that man as a person is primarily valued by the way God has created him. Man's creation *in the image of God* is the element that primarily constitutes his person. At the same time, Orthodox theology knows that man becomes a person only when he fulfils his eschatological perspective. Man's loving relationship as a person with the other living beings is an element that makes man a person[13]. As long as man creates relationships, he can be perceived as a true person.

According to the theology of the Orthodox Church, the Triadology, that is, the way in which the relations of the three divine persons are defined, constitutes the basis on which the existence of the human person is based. The distinction between essence and substance in the Holy Trinity is an element which confirms the uniqueness of each human person and ascribes to it the value it possesses within creation.

11. Y. Wilks, *Artificial intelligence: Modern Magic…*, *op*.cit., p. 148.
12. I. Graham, *Τεχνητὴ Νοημοσύνη*, transl. N. Dramountanis, Savalas Publishers, Athens 2004, p. 48.
13. Niki Nikolaou, *Θεολογικὴ ἀνθρωπολογία καὶ βιοηθική*, Master's thesis in the Post-graduate Program Studies in Orthodox Theology, Hellenic Open University, Patras 2013, p. 28.

Thus, man, by maintaining a functional relationship with his Creator, is constantly likening the original, which is God, and through this likeness he can reformulate the elements that define Orthodox anthropology[14].

Man as a person loves and is loved; thus, he can finally experience the value of his identity[15]. Freedom is another structural element of the human person for Orthodox anthropology. As long as man acts freely, he is gradually led towards *in the likeness* with God[16]. In fact, man's fulfillment as a person passes through the transcendence of physical limitations, by which freedom is strengthened. Man chooses responsibly to establish a relationship with God through the free-will[17].

We should not forget that free-will is the element by which man is helped to use reason, to be able to decide freely and to choose between good and evil. The above points to the presence of mind and cognition as elements of the human person[18].

Artificial Intelligence and the Human Person

The scientific community involved in the application of AI is deeply concerned with the issue of protection of –and respect for– the human person. It is understood that the human person may be threatened by the development of AI as long as the applications do not operate within a specific framework that respects human identity. This concern is the reason why it is necessary for technology and theology to work together.

14. N. Koios, *Βιοηθική. Συνοδικὰ κείμενα Ὀρθοδόξων Ἐκκλησιῶν*, Centre for Biomedical Ethics and Deontology, Athens 2007, p. 94.
15. Niki Nikolaou, *Θεολογικὴ ἀνθρωπολογία καὶ βιοηθική*, *op.cit*., p. 31.
16. Chr. Terezis, «Ἡ ὀρθοδοξία καὶ ὁ σεβασμὸς τῆς ἀνθρώπινης προσωπικότητας», in: Chr. Terezis *et al*., *Ἡ Ὀρθοδοξία ὡς πολιτισμικὸ ἐπίτευγμα καὶ τὰ προβλήματα τοῦ σύγχρονου ἀνθρώπου*, v. II, Hellenic Open University Publications, Patras 2002, p. 48.
17. Chr. Yannaras, *Ἡ ἐλευθερία τοῦ ἤθους*, Ikaros Publishing, Athens 2002, p. 30; J. Zizioulas, «Ἀπὸ τὸ Προσωπεῖον εἰς τὸ Πρόσωπον. Ἡ συμβολὴ τῆς Πατερικῆς Θεολογίας εἰς τὴν ἔννοιαν τοῦ Προσώπου», in: *Χαριστήρια εἰς τιμὴν τοῦ Μητροπολίτου Γέροντος Χαλκηδόνος Μελίτωνος*, Patriarchal Foundation for Patristic Studies Publications, Thessaloniki 1977, p. 287.
18. St. Giagkazoglou, *Κοινωνία θεώσεως*, Domos Publications, Athens 2001, p. 69.

Despite running in parallel, technology and science have never managed to meet each other. Modern technical civilization's pronounced anti-theological stance has proved to be an obstacle for the development of a relationship between technology and theology. Moreover, theology has been an element of the pre-modern era, which had been totally different from ours, characterized by the machine's intrinsic presence in human life.

Everyday life is based on technology and the use of smart devices. Human life in its entirety is characterized by the presence of machines. Although this represents a technological development, at the same time it limits man to a spatiotemporal reality, which ultimately tends to be controlled by the machine. On the other hand, man's relationship with theology frees him from the bonds of his corruptible truth and leads him to the eternity for which he was made. In this way, freedom –the essential element of the person's identity–, is under threat. As soon as man becomes dependent on technology, the way is wide open for authoritarianism.

Instead of protecting man's freedom, the applications of technology threaten him, making him dependent on them; thus, they inevitably lead to abolishing his freedom. Modern man is in danger of losing his identity and of being transformed from a free person into an identityless human-machine. Therefore, it is necessary for technology not only to improve human life but also to ensure both the freedom of man and the way in which man lives.

This is where theology and technology can work together, so that one can add elements to the other. Being susceptible to the indiscriminate use of technology, man is capable of sacrificing his freedom on the altar of contact and use of the applications offered by AI. The main difference between technology and theology on the issue of freedom is that technology tries to free man by releasing him from his needs, while for theology freedom is the result of love.

The cooperation between technology and theology can help man filling his psychic gaps, created by the modern way of life. Technology intensifies the needs of the person; more often than not, this proves to be destructive. It is these contrived needs that ultimately result in man

being a prisoner of technology and sacrificing his freedom in order to achieve a good quality of life[19]. Besides, the more man limits his existence to the consumption of goods, the more this attitude offends his identity by confining him to a consumer practice that does not help him at all in his contact and communion with other persons.

Conclusion

AI is linked to the rapid development of applications that help the everyday life of all members of the society. The use of technology has brought about major changes in the way people live, to the point that in many cases the reality in which they live is not physical but artificial.

As the use of AI increases, so do concerns about its use and respect for the human person. In any case, the proper functioning of the technology requires direct control by humans. After all, nothing is good and nothing is bad in itself. The human factor is important for the maintenance of AI in a framework that ultimately respects man and does not threaten his existence. This makes it imperative to control AI so that the machine should never replace the human presence.

An interdisciplinary discussion is necessary in order to define from an early stage the limits of the AI applications, with the aim of protecting humans from being trapped in a utilitarian context.

Theology is called upon to formulate its position on issues that are not only technical but primarily moral. Naturally, the attitude of theology towards the development of AI must not be characterized by an extreme moralism but by a proposal that will have the human person as its ultimate goal. After all, Christian morality is always relevant and defines the limits within which man can move without trespassing them. In any case, moving out of those boundaries threatens man's core identity, and it is possible that the AI may eventually turn from a technological revolution into a threat to man and his history.

19. V. Fanaras, «Ἠθικὰ διλήμματα τῆς Τεχνητῆς Νοημοσύνης: ἠθικὸ μηχάνημα ἢ ἠθικὴ χρήση;», *Ἐκκλησιαστικὸς Κήρυκας/Ekklisiastikos Kirykas* 26 (2020), pp. 220-234, here p. 228.

For these reasons, theology and technology should work together so that they can jointly meet modern man's growing needs. Orthodox anthropology can assist AI's applications to the point where man can use technology properly for his own good and his future, always respecting personal identity. Theology can prove that the solution to the problem is not simply for science to begin to have an anthropocentric approach in the light of the foregoing considerations; as a society, we should equally be taking into account the fact that man is characterized not only by autonomy and his association with others but mainly by the freedom that characterizes him as a human being.