TRANSHUMANIST DREAM. WHEN GLOBAL SURVIVAL MEETS ULTIMATE DIGITALISATION

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https://doi.org/10.7251/FPNDP2304007M

ABSTRACT:

Human Enhancement Technologies (HET) encompass bio-, nano-, cognitive, and info-communication technologies and sciences aimed at enhancing and improving human capacities and characteristics beyond the statistical norm of normal human functioning. Bioethics is defined as a bridge between natural and social sciences and the humanities. It has served as the science of global survival for a long time, spanning millennia. In contemporary bioethics, there are two mainstreams and several factions: transhumanism and bio-conservatism. This theoretical and ideological divisionism has opposing arguments due to the usage of HET. While the former supports all types of human enhancement, arguing that human survival is facilitated by the use of new biotechnologies, information technologies, and other advancements, the latter opposes such usage, even in some medical and diagnostic cases. In this paper, we will analyze the usage of various Transhumanist narratives illustrated by mythology. For this purpose, we have created two methodological triangles: the Survival Triangle and the symbolical Mythological Triangle. These triangles are constructed between the following points: Anticipation/Proteus, Autonomy/Icarus, and Survival/Odysseus. The paper indicates that survival, as the ultimate goal of humans, is justified using new biotechnologies—the transhumanist aim. However, what is the ethics of the means used in this respect, and what could be the cost of ultimate digitalization for the sake of survival?

Original Scientific Article

UDK:
316.774:004.738.5

Keywords:
human enhancement technologies, transhumanism, survival, digitalisation, moral enhancement

Who controls the past controls the future:
who controls the present controls the past.
George Orwell, 1984

Introduction

Human Enhancement Technologies (HET) encompass bio-, nano-, cognitive, and info-communication technologies and sciences aimed at enhancing and im-

proving human capacities and characteristics beyond the statistical norm of normal human functioning. Bioethics is defined as a bridge between natural and social sciences and the humanities. It has served as the science of Global survival for a long time, spanning millennia (Potter, 1971, p. 1988). In contemporary bioethics, there are two mainstreams and several factions: transhumanism and bio-conservatism. This theoretical and ideological divisionism has opposing arguments due to the usage of HET. While the former supports all types of human enhancement, arguing that human survival is facilitated by the use of new biotechnologies, information technologies, and other advancements, the latter opposes such usage, even in some medical and diagnostic cases.

For this paper, digitalisation combines Information and Communication Technologies (ICT) and Artificial Intelligence (AI). However, ultimate digitalisation, besides ICT and AI, includes quantum computers to analyze our quotidian praxis more comprehensively, encompassing our identities and existence.

In this paper, we will analyze the usage of various transhumanist narratives illustrated by mythology. For this purpose, we have created two methodological triangles: the Survival Triangle and the symbolical Mythological Triangle. These triangles are constructed between the following points: Anticipation/Proteus; Respect of Autonomy/Icarus; and Survival/Odysseus.

Besides the most crucial cognitive capacity, Anticipation stands out as one of the key factors contributing to human resilience and survival. It is essential for preparedness and timely response in emergencies. When combined with the respect for individual Autonomy, it forms a symbolic triangle of survival. Within this triangle, the relationship between the degree of anticipation and the degree of respecting autonomy creates a chance for Survival.

The paper indicates that we currently live, or will soon live, the Transhumanist dream. This could transform the common morality of small communities into a Global morality that will be responsible for the survival of humankind in the distant future (Persson and Savulescu, 2011). In this context, the anticipated dangerous minds that pose an Existential risk could be eliminated or persuaded. The Ultimate goal of ensuring the survival of humankind is justified by the use of new biotechnologies. More precisely, through digitalisation, it will be possible to anticipate, eliminate, restrict, and persuade dangerous minds (freedom to fall). Powerful quantum computers, along with ICT and AI, will communicate with populations and will be tasked with anticipating malicious minds. Subsequently, these devices will persuade individuals to reject such minds and replace them with feelings of happiness and pleasure (Savulescu and Persson, 2012, p. 412). However, questions arise regarding the ethics of the means used in this respect and the potential costs of such Ultimate Digitalisation for survival.

1. Survival and Transhumanism

Before we analyse the relationship between survival, anticipation, and autonomy in the ultimate digitalisation frame, we should look at the dominant transhumanist accounts regarding such an idea.

Transhumanism advocates the use of HET to enhance the quality and extend the lives of individuals through genetic, prosthetic, and cognitive modifications. As an ideology, it centers on individual well-being, which is socially influenced by liberal economic principles and a free market. Essential ethical principles include respect for autonomy, allowing individuals the freedom to choose medical interventions or modifications. Another key principle is the maximization of life chances, such as improving social and economic status through genetic interventions (enhancing IQ, modifying intellectual disabilities through pharmaceutical means, etc.). Last but not least is the relationship between well-being and the prevention of harm, as reflected in a non-egalitarian approach to providing the best chances. In other words, if a particular HET is not universally available, it should not be restricted only to those who can afford it.

However, several narratives will be analyzed shortly in this section, including transhumanist agendas. First, transhumanist accounts are linked to the ethical shift from the moral obligation of human enhancement to moral enhancements of human beings. This involves creating a post-human, i.e., a self-sufficient person who, simultaneously, preserves the potentiality of freedom to fall and enhances a powerful self-control mechanism to safeguard other people's lives (Mitrović, 2012a). Such a concept is rooted in paternalism and involves using force or persuasion to prevent potential maleficence.

In a paper on ethics of enhancement, Julian Savulescu (2007) states that humans should not use new bio-technologies only for healing and preventing illness but, more often, for enhancing themselves and their offspring. Enhancement is comprehended as enabling a prolonged and more qualitative life. The primary means is a genetic intervention that permanently changes the concrete individual and his or her offspring. However, such intervention is not based on the proclaimed transhumanist liberal freedom of choice but on the solid "moral obligation" (ibid, p. 517), which should provoke social request and potential political and juridical demand (Mitrović, 2012). Examples that could justify Enhancement are countless, according to Savulescu (ibid), such as corrective surgery, Viagra, Ritalin, Oxytocin, Prozac, and alike. But genetic engineering would be more effective in making our lives longer and better. Fukuyama is an opponent to this account, claiming that extreme prolongation of life will put more pressure on the still-working population and create an imbalance between active and retired populations (Fukujama, 2003, p. 117).

The basic thesis of Savulescu's argument includes three key points:

1. Consistency: If we already use the aforementioned pharmaceutical means to enhance human cognitive, sexual, and social capacities, the logical extension is to employ genetic manipulation to enhance our potential.
2. Resistance to Enhancement: Savulescu argues that resisting enhancement is misguided. He illustrates this point by describing two scenarios involving parents and their offspring. In the first case, diligent parents use common, cheap, and available dietary supplements to help their highly talented child maintain extraordinary cognitive IQ and mental capacities. In the second case, lazy parents with an average-capacity offspring avoid using such supplements, resulting in the child stagnating at the level of average intellect. Savulescu contends that avoiding enhancements, even in the form of simple supplements, leads to stagnation at the average level rather than achieving enhancement and a higher quality of life for one's child (Savulescu, 2007).
3. Therapy vs. Enhancement: The third argument posits that there is no fundamental difference between therapy and human enhancement. Savulescu maintains that if it is justified to use technology for therapeutic purposes, such as healing cancer or vaccinating the population to prevent illness and improve health, it is morally permissible to enhance the capacities of healthy individuals. This consistency implies a moral obligation or moral reason to improve ourselves and our children (Savulescu, 2007, p. 533).

Nevertheless, it appears that a completely new ethical direction has emerged from the transhumanist account. In contrast to the earlier stance, which justified the almost unlimited use of new biotechnologies to attain a better and happier life for individuals and their offspring, advocates of the 'moral obligation to enhance' (Savulescu, 2007) now champion the idea of 'moral enhancement.' This concept is reflected in the use of pharmacological or ICT technology to enhance the 'quotidian morality' of humans (Persson and Savulescu, 2011).

Quotidian morality is rooted in the morals of small communities dating back to hunter-gatherer societies, and as in contemporary times, it separates the principle of avoiding harm from actively doing good. In contrast, moral enhancement is primarily based on the principle of doing good, not merely avoiding harm. This shift is deemed necessary due to the fact that everyday morality fails to anticipate existential risks posed by the use HET in the future, often operating on short-term plans (Persson and Savulescu, 2011, pp. 630-663). To effectively address existential risks, advocates propose the use of powerful quantum computers equipped with optical-genetic technology to detect malevolence. These computers would then provide a backup solution through persuasion, aiming to change the harmful prospects in individuals who predominantly produce dangerous minds, replacing them with feelings of happiness.

A similar transition in John Harris's concept, from the 'Survival Lottery' (1975) to 'Freedom to Fall' (2007), involves justifying the killing of one innocent person

to save two or more people. This transformation prioritizes the well-being of one person over the well-being of two or more. In his original proposal (Harris, 1975, p. 83), Harris suggested a scheme where everyone is assigned a lottery number. When doctors have two or more dying patients who could be saved through transplants, and no suitable organs are available naturally, they can request a central computer to supply a suitable donor. The computer then randomly selects the number of a potential donor, who is then sacrificed so that the lives of two or more others may be saved. If this scheme were ever implemented, a euphemism for 'killed' would likely be employed, perhaps framing it as citizens being called upon to 'give life' to others. Despite numerous objections based on the sanctity of human life and the wrongness of killing innocent individuals, Peter Singer (1977) offered practical examples highlighting the moral questionability of such a lottery. For instance, he questioned the morality of sacrificing a young and healthy individual for a transplant, only to extend the unhealthy habits of the recipient, such as alcoholism, smoking, or gluttony, which are autonomous behaviors that persist after transplantation.

In more recent papers, Harris (2007) has modified and expanded his perspective, stating that if individuals have the opportunity to enhance or improve their health using biotechnology, they may do so even if the same technology is not universally available. In the 'Survival Lottery,' a central computer primarily coordinates the principle of saving the lives of two or more unfortunate people at the cost of one healthy life. In this account, the utility of survival for a greater number of lives is predominant. Meanwhile, in the second account (Harris, 2007), the individual feelings of happiness and well-being take precedence over the well-being of the unfortunate majority. The common denominator in both scenarios is the use of biotechnological means, which provide survival and well-being for the chosen individuals.

2. Survival Triangles and Myths of Survival

After a brief introduction featuring basic transhumanist accounts that explore the relationship between HET, primarily digitalization, existential risk or misfortune, and survival, I will apply these accounts to general narratives or myths of survival, which consist of three fundamental concepts: Anticipation, Autonomy, and Survival. This application forms a Survival triangle (see Figure 1 and 2). Such an algorithm, in turn, could be utilized for the purpose of achieving survival through ultimate digitalisation.

Anticipation is one of the most characteristic cognitive capacities of a human being, involving concepts of the past and the future (Edelman, 2006, p. 15-17). It represents a past event that is performed in the future. Alfred Schutz (1967) indirectly explains the inner characteristic of anticipation as the perspective in which the experience of the past, present, and future in human life is interactive. Thus, we could describe humans as acting in „the future past tense".

As such, Anticipation is one of the internal capacities of Resilience. Resilience is the ability to plan and prepare for the future, enabling us to not only survive but thrive. It also represents a form of flexibility that aids in recovering our previous health after injuries or disasters. In the context of human survival, resilience plays a vital role in the long run (Mitrović, 2015).

Autonomy is the capacity to be one's own person, to live one's own life according to reasons and motives taken as one's own, and not as the product of manipulative or distorting external forces, thus allowing for independence.[1] In the Principles of Biomedical Ethics, Tom Beauchamp and James Childress define autonomy as follows: 'We analyze autonomous action in terms of normal choosers who act (1) intentionally, (2) with understanding, and (3) without controlling influences that determine their action' (Beauchamp and Childress, 2013, p. 104).[2]

This paper does not analyse various understandings of autonomy, as examples are categorised by variations on self-governing practice and ideals (Killmister, 2017; Feinberg, 1989). Interpreting possible reductions of the individual autonomy by the self-governing digital means will be discussed in next section.

Figure 1. Survival triangle with three interrelated components

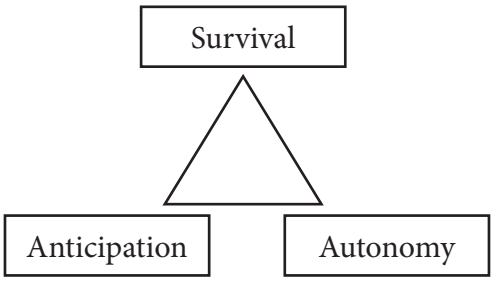
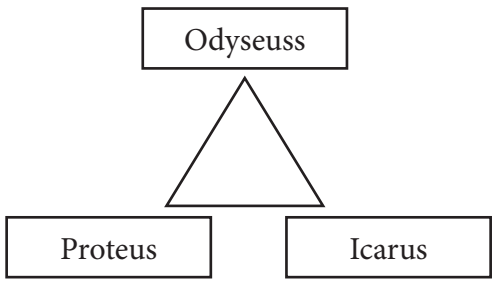


Figure 2. Mythological Triangle of Survival with the three interrelated myths



[1] See in Stanford Encyclopedia of Philosophy, 2020. https://plato.stanford.edu/entries/autonomy-moral/ (Accessed 13.07.2023)

[2] See more discussion on this definition in Michael Kühler and Veselin Mitrović, 2020.

At the very beginning of the discussion of the myths and transhumanist narrative, it is very useful to raise the question of why transhumanists do not use the myth of Icarus in accounts of free choice, but more often Odysseus's pact in explaining survival qualified by the reduction of freedom and persuasion.

Statements such as the idea that we should have autonomy in choosing means for our enhancements, even if those means are not accessible to others, can be effectively illustrated and justified through the myth of Icarus. This myth embodies Harris's concept of 'Freedom to Fall,' where Icarus acts intentionally and uses enhancements (wings) to pursue his goals, even though his choice ultimately leads to self-destruction. Similarly, in his initial account, Savulescu advocates for respecting autonomy by choosing HET to achieve individual well-being. In the case of Icarus, this pursuit of individual well-being is represented by freedom, including the freedom to fall and the desire to reach the sky. However, in his second account with Ingmar Persson, Savulescu suggests certain restrictions on individual autonomy (excluding the freedom to fall) when choosing HET for long-term survival. This account is grounded in the Odysseus pact, where the authors emphasize persuasion (symbolized by wax in sailors' ears) and force (tying Odysseus to the ship mast) over respecting autonomy (listening to the Mermaid song). Such actions are deemed necessary to avoid and prevent ultimate harm and ensure ultimate survival (Savulescu and Persson, 2012). So, transhumanists use only Odysseus's pact to justify ultimate digital means, which would prevent Ultimate harm and secure Global survival.

Let's delve deeper and analyze global survival by exploring more relevant narratives. When considering the Survival and Myths Triangles (see Figures 1 and 2), the connection between respect for autonomy and survival begins to emerge in the myths of Odysseus and Icarus. However, what is lacking in Icarus's narrative (disregarding Daedalus)? It is Anticipation, the third point of our triangles, which we find in the narrative of Proteus.

Proteus's ability to anticipate the future is accompanied by his capacity to change shape and species whenever required for a prognosis. The transitions in the transhumanist account discussed in the previous section can be likened to Proteus's ability to alter shapes and species. However, this capability also serves as a transhumanist justification for the right to authenticity, allowing individuals to choose new identities through pharmacological or digital means. Transhumanists argue that the concept of identity, as a part of human nature, should be subject to change by all means, regardless of its duration or irreversibility. Yet, the problem with Proteus is highly complex. Using him as an example, all the possibilities of changing shapes could be presented as an illustration of identity as an old and acceptable idea. However, such an example is precarious for transhumanists and some bio-conservatives due to the social and legal responsibilities associated with

personality. In light of this example, it boils down to a socially significant question (of consciousness and conscience): Why should one person bear the burden of responsibility for someone, even if it's oneself? Here's an illustrative scenario: to prevent potential harm, such as a mass shooting, a future quantum computer detects a potential criminal and, in line with Proteus's characteristics, changes their identity to that of a contented person, thereby preventing a crime and increasing the number of happy individuals. Considering our methodological triangles, anticipation, restriction of autonomy, persuasion, and deception lead to survival and the avoidance of significant crimes. Proteus's ability is utilized for prognosis and deception, transforming Icarus's free fall into Odysseus's salvation.

Nevertheless, transhumanists are not alone in avoiding such an interpretation of the ultimate algorithm that would lead to Global survival. Similar accounts can be found among bio-conservatives, especially Fukuyama. Fukuyama criticizes the possibility of pharmacologically changing behavior, human identity, and attitude. However, the author makes a certain epistemological mistake by incorrectly equating the negative consequences of pharmacological agents and genetic manipulation. This not only blurs the line between the reversibility of some interventions and the irreversibility of others but also overlooks the impact of genetic changes on the germ line, which would permanently alter not only the individual (as is the case with pharmacotherapy) but also the human species (Mitrović, 2012, p. 64). In this manner, Fukuyama, like Proteus, undergoes a transformation from a bio-conservative into a transhumanist form. This myth should, therefore, serve as a guide for us in shaping future health and social policies. These policies, stemming from one ideology, may, for various reasons, transition into another, each time avoiding providing a complete answer to the ethical and medical challenges posed by bioethical and medical questions.

3. Ultimate Digitalisation and Anticipation of Existential Risks and Harms

In the previous section, we have analysed theoretical, methodological and ideological stances and accounts. The key mechanism of global survival is anticipation of existential risks, persuasion, deception or forced prevention of ultimate harm, and doing well by transforming evil in happiness. These actions are practically performed by ultimate digitalisation. However, what causes Ultimate harm, and how can such acts be precisely prevented?

The Ultimate harm is a product of immoral behavior (Persson and Savulescu, 2011). Immoral behavior must be rectified through moral enhancement, achievable via pharmacotherapy. The most practical approach would involve using oxytocin, which should be as widespread as chlorine in freshwater is today (Douglas, 2011), or, alternatively, more effective and inevitable through the ultimate algorithm

of digital and quantum means (Savulescu and Persson, 2012). This goal will be achieved through 'optical genetics' and genetically engineered human embryos during early development. These organisms can send and receive specific 'signatures' of light, which the ultimate algorithm can measure and manipulate externally. Such a self-learning AI machine would monitor the thoughts, beliefs, desires, and intentions of every human being. Considering that these mental features are prerequisites for consciousness, the AI would construct and enhance their self-consciousness through monitoring, learning, and development.

The AI erases dangerous minds and imputes a false feeling of internalized (self-) control. It is evident that Savulescu and Persson (2012) deliberately sacrificed the freedom to fall because such a type of freedom is just one of the values in human life. The tension between the freedom to fall and survival seems too challenging to achieve. However, creating a self-sufficient person who simultaneously preserves the freedom to fall, e.g., Harris (1975) freedom to kill, enhances the powerful self-control mechanism to preserve the victim's life. The most logical way to achieve this goal is to explore when and why in life (life stories) humans use empathy and the capacity to experience pain to control the harm that may be caused to other persons or ourselves.

The Narrative approach focuses on the analysis of life stories. Life stories are constructed from all types of experiences, and one of the most vital human experiences or conscious capacities is the experience of painful feelings. We all implicitly understand what consciousness is. It is what you lose upon entering a dreamless deep sleep and, less commonly, deep anesthesia or a coma. And it is what you regain after emerging from these states. Although most people consider pain unpleasant, life without a possibility to detect, recognize, feel, and avoid pain or potential damage would be impossible or ,at least, very poor. Permanent avoiding or, less commonly, erasing pain would be a type of unconsciousness. We also know that after the damage or harm is done, we need to detect the pain. We must experience these sensations to recognize and localize that message, i.e., become the consciousness of pain in its full scale (quantitative and qualitative). Such a process allows us to take action toward minimizing or avoiding potential damage or death. In the next section, we will return to these aspects of pain, where I shall provide a more detailed explanation. Still, for now, we can roughly claim that the experience of pain and the motoric reaction happens after the occurrence of harm or possible damage. So, I maintain that further development of digitalization could use this natural gift not only for (self-preservation) protecting ourselves from various kinds of damage but also to preserve other people from ourselves. But how or when could future events or experiences be used to preserve the victim's life from damage that happened in the past?

I suggest Alfred Schutz's (1967) view that the experience of the past, present,

and future in human life is interactive; we could thus speak about humans acting in 'the future past time.' Revenge, credit, or the Odysseus pact experiences are the most indicative examples. From such a perspective, using the ultimate algorithm seems possible in the distant future. The next variation of this view would involve using the future experience of a victim to persuade the mind in the past to stop compulsive behavior ('criminals'), thereby preventing present misdeeds in nanoseconds. I suppose this approach could become the algorithm for AI in the future. Connecting to such a machine would still be questionable. Persson and Savulescu (2012) explain that voluntarily connecting to a powerful computer would be an example of a pre-commitment contract, the paradigm example of which is Odysseus and the Sirens. As we know, Odysseus's pact is the most illustrative example of how medical practice tries to explain the connections/relations of three principles: autonomy, informed consent, and the patient's beneficence.

4. Anticipation of pain and global survival in two transhumanist accounts

One might raise a logical question as to why people would connect to a powerful computer that would limit their freedom, and why they would participate in a lottery of survival that would potentially take their life or improve their life. And what does anticipation in pain in both transhumanist accounts of Global survival mean?

Persson and Savulescu (2011) state that only in the first period of use of ultimate digitalisation voluntary connection would be something that still implies a choice between extended imprisonment and a free life. The second (1975) account by Harris implies taking a human life that would prolong and enhance the life of at least two misfortunate, sick people.

Whatever the occasional reduction of freedom, Persson and Savulescu explain how anticipation in Odysseus's pact can justify the ultimate digitalization. Odysseus anticipates suffering if the sirens' song carries him and his crew away. He used the possibility to enjoy the Mermaid song and, at the same time, he used deception (wax in sailors' ears) and force (body tied to the mast) as the main arguments for avoiding pain and securing survival.

Harris (1975) anticipates that if we all accept the survival lottery and connect to the central computer, which, ironically, will choose the winner (i.e., the donor), the number of surviving and enhancing lives would increase at the global level.

So both accounts suggest a voluntary connection to the main computer, which would steer us like Odysseus to the global and enhanced survival. And both accounts underlie the importance of solidarity and altruism with victims or misfortunate people who need to prolong their life. But what is the difference between them? Harris (1975; 2007) objects to restricted freedom to fall or the literal freedom to kill one innocent man to save two or more. However, what if it were possible to find

a way to preserve the freedom from falling and save all lives that could be saved? Who would be against such a solution?

Avoiding these reductions could prove important since this could provide more reasons for a voluntary connection to the ultimate algorithm. In a revised concept of ultimate digitalization, it could be possible to suggest that, apart from such arguments, it was the experience of the Sirens' victims (and the potentiality of that same experience) that persuaded Odysseus to ignore the obsessive compulsion that the song of the Sirens was creating. In the act of Odysseus' persuasion, the past and future create one event. So, Odysseus can assume the features of Proteus and occasionally change his image to that of Icarus.

Although Bentham (1781/2000) points to the measurement method between pain and pleasure against each other and the weighing of long-term considerations against immediate short-term desire, it seems that, besides pain and the quality of life (happiness), it is possible to add potential death as an element toward building a triangle in which one of those three interlinked components could be explained through their mutual relations. The idea of using pain and possible death is based on the potential extraction and anticipation of pain's emotive and cognitive components, which could be further used in persuading individuals not to act upon irrational desires. Such an operation could be realized from a distance within the same frame of the digital and bio-quantum device. It is possible to find a similar division of different and interlinked components in pain. One could imagine an analog analytical model in which every component of pain explains the other two to preserve human life.

However, the question is which account would prevail: Harris' Survival Lottery, due to a prolonged and enhanced life, or Persson and Savulescu's ultimate digitalization, due to preventing ultimate harm? Or can those accounts merge into the voluntary end-of-life assisted by a central computer for all Icarus? In this case, merging means that digitalized assisted killing will be performed on individuals who would not give up on the freedom to fall or on those who are not empathetic with others' misfortunes.

Contemporary neuroscience and neuro-philosophical research have established that pain consists of three components: sensor-discriminative, cogno-emotive, and behavioral. Quoting Pessoa and Craig's work, Segner suggests that these three different functional components of pain cannot be seen as separate entities because they are intimately interlinked. Accordingly, with the findings of Shackman et al. (2011) study, Segner (2012) states that the harmful effect of pain and cognitive control activates the overlapping of brain regions. Pain perception is not a matter of a single brain structure, e.g., the neocortex, but a result of integrated activity of the "pain matrix" that includes a broad array of brain regions, such as the neocortex, the subcortex, and the brainstem.

Pain generation is anything but a linear translation of a nociceptive signal into pain sensation; in fact, it is a result of complex crosstalk between different regions in the cortex, the subcortex, and the brainstem. Quoting Tracey's (2005) work, Segner (ibid) emphasizes the general agreement that the extent to which a pain stimulus is experienced as an affective or emotive state depends upon parallel and serial activities in different areas of the pain matrix.

The nociceptive signal can induce pain for the sensor discrimination of dangerous or potentially dangerous situations (noxious stimuli). However, suppose the pain is readable to a human organism. In that case, these neuro-signals (noxious stimuli) must be analyzed in the sense of their own affective and motivational value and their behavioral meaning as an actual or potentially dangerous situation in the future. This pain system consists of two subsystems: avoidance and restoration or repair.

In some of the research into the field of neuroscience, we can find evidence that the feeling or experience of pain could be detected without dangerous or potentially dangerous stimuli in nociceptive receptors. Furthermore, it is possible that we find wounds without an experience of pain or that the intensity of pain is inadequate compared to the "intensity" or "size" of the wound. The patients,however, could recognize the type of pain (e.g., burning pain, etc.) (Grahek, 2007).

But these cases could be understood only if we separate and understand the very close relation between the activity of C and A delta fibers and pain. The so-called "C" fibers react to all sensations - they are multimodular. "A" fibers are more specific and react to three sensation types: mechanical, thermal, and chemical. The frequency of the activations is translated into the intensity of present detections (e.g. painful pressure). However, they may also detect a frequency of non-constant or occasional sensations. The quant nature of elementary feelings is induced through the activities of fibers that follow the "all or nothing" principle. It is possible for every new sensation to be detected and extracted with specific characteristics: quality, typical temporal profile, and the spatially specified arrays of projections. There is a relevant equivalence between the physiology of the fibers and the subjective quality of induced feeling (e.g. C fibers are related to unperceptive or firing pain). There is equivalence between the field of certain C nocio-receptors and the projected feeling of pain as well. In short, these equivalences illustrate the relationship between the activity of the nocio-receptor and the feeling of pain (ibid).

Quoting Pessoa's (2008) interpretation of the aforementioned relations between sensations and pain, Segner emphasizes that "the affective processing of a stimulus is not independent of cognitive factors such as attention: on the one hand, an item's affective significance appears to guide attention and enhance the processing of emotion-laden information and, on the other hand, goal-directed attention and task context influence the neural fate of affectively significant items."

The optimistic fact regarding future research in this area is that the pain matrix

is composed of very different brain regions. We could imagine that the multimodal character of the pain matrix is, in an analytic sense, analogous to the multimodal features of the nocioceptive fibers. The multimodality of the pain matrix in the brain secures the calculation with distinctive codes from the "pain experience" in the same way that fibers distinguish and detect different stimuli from different types of painful threats (Grahek, 2007; Pessoa 2008; Segner, 2012).

Nowadays, research in neuroscience start to picture a frame of the possible future that will be marked with the ultimate scientific goal—creating an artificial conscious device or being. It is possible to find many other analogous examples of biomedical knowledge or devices used for military research in preventing the deaths of soldiers or civilians. Are such examples a bellwether in enhancing morality?

One hypothetical example is the revised concept of ultimate digitalization, which will be based on neuroscience and possible manipulation with empathy, pain, and death. Such a concept would be justified by the communication between neuroceptive signals and the human brain, creating a persuasive message that would include the cogno-emotive code of the misfortunate's experience of pain and death. These messages would be analyzed in a bio-quantum computer and sent via an optogenetic method to the suspicious brain, where the inevitable desire to kill or lack of empathy is detected. Apart from its capacity to localize pain and realize other (behavioral) components of pain, such a code could also provide information about a future event, or, in other words, it could provide information about the asocial person/criminal's sudden death if they persist with their irrational desire to take a human life. Computers will treat the same issue of letting someone die and someone to kill. The first scenario is based on the following condition: if a criminal and a non-empathetic person, having received such information, persists in thinking of harming a victim or a patient, the ultimate algorithm would read that message as the inevitable will for self-determination, and, based on the information provided, the program of euthanasia would terminate their life without violating the golden rule.

The second option is canceling such desires as an act of persuasion: the product of the motivational aspect of painful feeling and the information about the possibility of euthanasia, which are induced from the victim's cogno-emotive code. Both of those scenarios will be completed in a nanosecond. With regard to that, it is difficult to say whether a non-empathetic person would opt for canceling the crime (saving the victim's life and preserving a human life) or the fulfillment of the freedom to fall (taking their own life and preserving another human life – the victim's).

The existence of the pain matrix in a human brain gives a solid reason to believe that one of the scenarios would be accepted, as well as that canceling dangerous desires would probably be the preferred option. If the victim's experience of pain (cogno-emotive code of pain) does not affect the part of the brain in charge of empathy, then another approach could, hypothetically, be used that would prevent

the misdeed through an economy of pain. Placed in the same cogno-emotive code derived from the victim's pain, we also find information about sudden death. Such information could be readable for another brain region in the brain's pain matrix. This brain region will alert an undesirable mind that, if it still decides to kill the victim, the ultimate survival algorithms will terminate the criminal based on their free will and informed consent. So, thanks to the complexity of the pain matrix and the distinctive but interlinked components of pain, the criminal, as in every other case of informed consent, could calculate whether they would use the subcode of empathy or pain. In these programs, an "economy of pain" could present a back-up or a substitute for a lack of empathy based on a simple systematization of the feeling of pain and the possible choices in such cases in which criminals persist in intending to destroy other persons and even themselves. Such a device will also give more chances to Harris survival lottery due to the option of self-choosing destruction of the non-empathetic.

Conclusion

Despite sophisticated surveillance technology and significant programs in preventing crimes, including the latest forensic technology and legal practices, crime recidivism is still commonplace. All transhumanist accounts for moral enhancement by ultimate digitalization are based on counter-recidivism. However, it is still worth recalling a simple lesson that Erik Parens (1998) revitalizes in the conclusion of his paper – the one that says it is wrong to use new means for old ends. While for Douglas, Savulescu, and Persson, recidivism seems to be a significant argument for developing a new concept (ultimate digitalization and moral enhancement) toward old ends – the obliteration of immoral acting, Harris posted a general lack of empathy with those who need organ donation as asocial behavior. Although all concepts encountered objections, they established that preserving human life is at any cost. The question is then, whose lives? Prolonged and enhanced lives are those justified by a central computer, i.e., ultimate digitalization. However, if one concept is imperfect because it would use deception and force to prevent immoral acts, it is imaginable that scientists could try to find a more acceptable way to provide freedom to fall and, at the same time, preserve a victim's life.

An analysis of the Transhumanist accounts reveals how morality would be enhanced due to being consistent with global survival. One of the possible ways is within brain science and, not so new, experimentation with pain, quality of life, death, and artificial intelligence. Possible anticipation of the emotive and cognitive components of pain, taking into account the sensor-discriminative component of pain (potential harm), on the one hand, and, on the other hand, the future event (although its time sequence is very short and depends on the nociceptive sensors

or the so-called peripheral nerve fibers: C and A delta fibers), could induce the prevention of criminal behavior (past event) and prevent the harming or killing (present event) of victims. In the same manner, Harris's survival lottery would request obedience with the choice of the central computer. Yet, before that, a dose of empathy and probably altruism could be provided by Persson-Savulescu's account of ultimate digitalisation.

From the perspective of today's morality and survival, the question arises: who would oppose ultimate digitalisation, which could prevent crimes such as mass shootings, rape, and the like? Who would be against providing countless donated organs? The answer is probably all those who currently advocate for privacy through the use of AI and surveillance devices and those who oppose the killing of innocent people. It is hard to resist the reasons for ultimate digitalization, yet easy to resist its ultimate consequences.

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TRANSHUMANISTIČKI SAN. SUSRET GLOBALNOG OPSTANKA I ULTIMATIVNE DIGITALIZACIJE

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APSTRAKT:
Tehnologije unapređenja ljudi (eng. Human Enhancement Technologies - HET) obuhvataju bio-, nano-, kognitivne i info-komunikacione tehnologije i nauke s ciljem poboljšanja ljudskih kapaciteta i karakteristika izvan statističkog normativa normalnog ljudskog funkcionisanja. Bioetika se definiše kao most između prirodnih nauka, društvenih nauka i humanističkih disciplina. To je nauka o globalnom opstanku kroz duga vremenska razdoblja, tj. protežući se kroz milenijume. U savremenoj bioetici postoje dva glavna pravca i nekoliko frakcija: transhumanizam i bio-konzervatizam. Ovaj teorijski i ideološki raskol nosi suprotstavljene argumente u vezi s korišćenjem HET-a. Dok prvi podržava sve vrste unapređenja ljudi, tvrdeći da se ljudski opstanak olakšava korišćenjem novih biotehnologija, informacionih i drugih tehnoloških dostignuća, potonji se protivi takvom korišćenju, čak i u nekim medicinskim i dijagnostičkim slučajevima. U radu ćemo analizirati upotrebu različitih transhumanističkih narativa i to kroz njihovo povezivanje sa motivima iz mitologije. U tu svrhu, kreirali smo dva metodološka trougla: Trougao opstanka i simbolični Mitološki trougao. Ovi trouglovi se konstruišu između sledećih tačaka: Anticipacija/Protej, Autonomija/Ikar i Opstanak/Odisej. Rad ukazuje da se opstanak, kao krajnji cilj ljudi, opravdava korišćenjem novih biotehnologija - transhumanističkim ciljem. Međutim, kakve su etičke implikacije upotrebe tih sredstava, odnosno kakva bi mogla biti cena ultimativne digitalizacije zarad opstanka?

Ključne riječi:
tehnologije unapređenja ljudi, transhumanizam, opstanak, digitalizacija, moralno poboljšavanje