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A Contemporary View of the Planetary Oikos through the Prism of Technology and Management

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Abstract

According to Aristotle, man is by nature a physei politikon zoon – a political creature and, simultaneously, zoon logon echon and zoon oikonomikon. Our interest in this paper is zoon oikonomikon and the related concept of oikos. We argue that today, in the epoch of the Anthropocene and the modern technology managing it, Aristotle's idea of Oikos needs to be updated and transferred from the level of the local community of people to the global level of humanity living on planet Earth. We propose to apply Aristotle's thesis – technology imitates nature, technology completes what nature has started, and technology produces new ones – to the concepts of habitat, Oikos and household management. Here, technology imitates nature in completing, completing the habitat created by nature for the species Homo sapiens, and at the same time, it also produces a new habitat in virtual space. Building on the results of the analysis of the essence of technology according to Heidegger, Stiegler, Ellul and others, we introduce the concept of the Planetary Oikos situated in a hybrid space. At the end of the paper, we discuss the possible future development of the Planetary Oikos concept depending on the further development of technology, especially artificial intelligence.

Keywords: oikos, planetary oikos, habitat, household management, technology, real space, virtual space, hybrid space

Introduction

Aristotle primarily defined man as zoon logon echon, i.e. an animal standing above other herd-like animals (Aristotle

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divides animals, according to their way of life, into herd-like, solitary and both). It is a being that knows how to use reason and can learn about the world of which it is a part by listening and expressing the result of this knowledge in words (Aristotle 2019, 53-55). But Aristotle's man is also a physei politikon zoon – an animal politician, destined for a life in the community: "Whoever cannot live in community, or does not need anything for his self-sufficiency, is not part of the community, is either an animal or a god." (Aristotle 2019, 51-53) While other political animals are and cooperate only instinctively, man, from a nature independent of him, strives to achieve a specific purpose, a particular goal – the ultimate good – eudaimonia. It is a state of perfection, bliss, which a person needs for their own sake and not for something else (Aristotle 2012). However, a person's ability to achieve eudaimonia is conditioned by his opportunities to freely develop political and economic activities, as well as by his status – single or unfree and especially by his ability to use reason (logos) to distinguish good from evil and justice from injustice. Every human community is created to achieve a particular good. In the following, we will focus only on the community in economic matters – Oikos, where man manifests himself as an economic animal – zoon oikonomikon. Oikos is "a community formed in harmony with nature for everyday coexistence". In it, as in a biological community, a man and a woman need each other biologically for reproduction, and further, in a property community, (by nature free) rulers and (by nature subordinate) ruled-enslaved people to maintain economic self-sufficiency are united in it. These two communities – biological and property – form the backbone of the Oikos concept. It is then further enveloped by ties and relationships, naturally arising inside the oikos, as well as ties and relationships created outward from the Oikos (Aristotle 2019, 49).

The paper aims to show that Aristotle's concept of Oikos, which arose in a particular time, a specific space and a certain state of technology, must be managed today as a Planetary Oikos. Modern technology plays a crucial role in this transformation. We analyze its effect on the form of the concept "Oikos" mainly through the prism of Heidegger's (2004) and

Stiegler's (2016) views on the relationship between technology and nature.

Constructing the concept of the Planetary Oikos brings with it several challenges related to the definition of the Planetary Oikos as a habitat, or home, identifying the form of its users, the form of relationships and ties existing in the Planetary Oikos and determining the condition of property that should be part of the Planetary Oikos.

The paper is organized as follows: first, we discuss Aristotle's concept of Oikos and identify its essential elements, based on which, subsequently, using the analogy, we design the features of the Planetary Oikos concept. We analyze the forces leading to the emergence of the Planetary Oikos and its characteristics. Furthermore, in the context of new, technology-generated spaces and environments, we discuss the Planetary Oikos as a habitat spread out in both natural and virtual space (Chalmers 2019). Similarly, we move from the concept of home in real space to the idea of home in real-virtual space to finally arrive at the image of the Planetary Oikos as an ecological niche created using human-for-human technology in a hybrid space (de Souza e Silva 2006, 261-278; van den Akker 2018). In conclusion, based on the analysis of the current impact of technology on the evolution of the Oikos concept, we consider its possible future forms, including the form of a universal Oikos for organic and inorganic species and their hybrids.

1. Aristotle's Oikos concept

Aristotle projected his observation that man, whom he initially characterized as "zoon logon echon" – a rational creature, is by nature both a political (physei politikon zoon) and an economic (zoon oikonomikon) creature into the concepts of " Oikos " and "polis". These two concepts comprehensively frame an individual's life and his coexistence with other people in the broader context of the cosmic order "cosmos" (Aristotle 2020). In this chapter, we start from Aristotle's Politics I, especially from the first and third chapters, which are entirely devoted to managing the household (Oikos). We meet the concept of Oikos in Aristotle, Plato, Xenophon, Herodotus, the Stoics and others. They all lived in a world that existed and was

perceived as a human-accessible, philosophically graspable world.

A man carries out his activities in two types of community: in the political community, represented by the concept of polis, and in the economic community, represented by the idea of Oikos. Oikos is created to ensure economic self-sufficiency. The mission of the Oikos is to solve the problem of effectively satisfying the basic needs of an economically autonomous unit of ancient society – ensuring food, shelter, safety and privacy for the family or household. Oikos, by nature, covers three types of relationships: the biological connection and the man-woman, which pursues the goal of ensuring the reproduction of the species. The relationship between father-children guarantees the transfer of knowledge (Trubody 2013, 315-335), and the master-slave relationship (as a souled part of the property that belongs, by nature, to another and which participates in reason only by perceiving it but does not have itself). The effort for economic self-sufficiency to ensure a good life for a person must be distinguished from their attempt to accumulate wealth for the sake of wealth themself. The so-called profitable art is natural only insofar as it is limited to using fruits and animals that nature provides to man (Aristotle 2019, 59-77).

From another point of view, the Oikos concept, therefore, integrates spatial reality, social reality and social relations, household, family, kinship, property and ownership concerns, and last but not least, the mechanism of effective management of the Oikos. The practical implementation of the Oikos consisted mainly of a dwelling for a limited number of people - primarily members of close ones or even more distant families living in the same household. Furthermore, living and inanimate property created and maintained the economic self-sufficiency of the Oikos – enslaved people, animals, fields, farm buildings, tools, etc. However, Oikos also functioned as support for partner and family relationships, children's education, horizontal, vertical and intergenerational transfer of knowledge, the development of economic and political relations with its surroundings, etc. The operation of the Oikos comprehensively, i.e. on the economic and political sides,

managed the oikonomus. Individual realizations of the Oikos concept differed in details and were entities, each characterized by its spirit of place. At the same time, Oikos fulfilled the conceptual features of the home.

The concept-forming elements of the Oikos are thus: a person (man/woman, their offspring), relationships and bonds (social, property, economic, political), roles, especially the role of the oikonomus, house (in the sense of the ancient Greek oikia) – dwellings, providing for the members of the Oikos community privacy and security, property (animate/inanimate, necessary to ensure the operation of the Oikos). Aristotle's oikos is set in the natural environment of the "free expanse" of real space.

Even if Aristotle does not explicitly list the initial conditions that must be fulfilled for the concept of Oikos to become a reality, we can implicitly derive them from the texts of Politics I, Eudemus Ethics, Nicomachean Ethics and the Historia Animalium (Greek Ton peri ta zoia). In our opinion, they are:

- the existence of an environment suitable for human life, i.e. the existence of actual physical space (RFP), biosphere, nature (Vernadsky 1978, 2004),
- the ability of man (with the help of technology) to change part of the RFP (biosphere, nature) into his habitat, his ecological niche,
- the heart of man to create community, including economic community,
- a person's ability to communicate/understand each other (speech),
- division of labour and mastery of hierarchical management,
- a numerically small number of members of the Oikos,
- a small geographical area limited to the house, farms and adjacent land,
- private ownership of animate and inanimate property, vertical binding to the polis.

2. The Planetary Oikos

The philosophical need to create the concept of "the Planetary Oikos" results from changes in man's position

concerning nature and technology, changes in the effect of technology on the heart, and changes in the mutual place of the concepts of Oikos – polis concerning each other. Man and his technology have become a geological force competing with nature. The search for an answer to the question of the continued existence of the Oikos for man makes sense to search only at the planetary level.

Paraphrasing Aristotle, let's define the Planetary Oikos as "a global community formed following the nature of everyday coexistence with the planet." Although the concept of "Planetary Oikos" implicitly refers to the planet Earth and the Anthropocene, it practically refers to the philosophical idea of "world" rather than the physical concept of "planet". In Sloterdijk's words, "Earth can be understood as a habitat, an Oikos ", ... as "a stage on which the play of geo-forces unfolds" (Sloterdijk 2017, 310). The reality today appears to be the result of the play of the geological force of nature and the geological force of man. With his inappropriate behaviour and inappropriate management of the Planetary Oikos, the consequence of which will be the loss of the conditions for the existence of the biosphere, man can bring about the end of himself and the end of the Planetary Oikos (Zwier and Blok 2019, 621-646). The long-term existence of the Planetary Oikos is thus decided by the web of global economic, political, cultural and social relations operating against the background of the concept of man as a geological force. The cardinal problem of the increasingly unstable Planetary oikos is mainly the absence of its effective management (Lemmens, Blok and Zwier 2017, 114-126; Lemmens and Yuk 2017, 26-41). The salvation of Sloterdijk's "stage" thus depends on the script that one writes for the play performed on it, on the direction of the play itself, and especially on how one handles the leading role in this play (Sloterdijk 2017, 310).

As an analogy to the set of concept-forming elements of Aristotle's Oikos, let us first create a set of concept-forming elements of the Planetary Oikos. Practically, we are looking for analogies to the elements of a person, house (or dwelling), property, relationships and bonds and the role of the oikonomist. The analogy to the central element of Aristotle's

Oikos – man – is again man, but this time man as a member of humanity. Compared to the man of Aristotle's Oikos, we see a quantitative and qualitative shift – from a creature of the "zoon logon echon" type to a technologically augmented (augmented) man, from a small number of individuals selected according to a specific key (kinship relationship) to the totality of all people on planet Earth without additional selection conditions. It is a mass of people, an entity that Aristotle does not consider concerning the Oikos. Humanity as a group plays the role of members of the Planetary Oikos. Anonymous individuals are transformed into a group of people by a common need or goal: consumption. In the Planetary Oikos, two types of management arise: traditional, taken from Aristotle's Oikos, and new, resulting from the character of the Planetary Oikos as a complex, geographically spread self-organizing system covering the entire planet. For the new type of management, humanity is not a suitable choice to fill the role of oikonomist of the Planetary Oikos. Instead, the ratio of the Planetary Oikos corresponds to the oikonomus in the form of collective reason, intelligence, and wisdom. However, even though modern technology supports creating an environment where each category can be cultured, as in a petri dish, none is fully developed. The role of the planetary oikonomist thus remains, as a secondary role, on man – a herd-like creature. Regarding man's role in shaping history, Arendt believes that "... human endeavours shape history, though we cannot say that men fabricate it" (Novák 2010, 481-504). As for the relations and bonds between individuals (social, property, economic, political), in the concept of the planetary Oikos, their character changes: social links are mainly created through mediation, property relations are privatized, and economic and political ties are globalized.

The Planetary Oikos concept also differs from Aristotle's Oikos by erasing the boundaries between the Oikos and polis. There is only one Planetary Oikos on Earth, to which all the planet's population belongs. The solution to the problem of survival at the family level is thus inextricably linked to the problem of survival at the level of the homo sapiens species. Thus, the role of the Oikos is combined with the part of the

polis, at the level of which the problem of environmental preservation must be solved.

The digital information and communication branch of modern technology informs the environment in which the Planetary Oikos is situated. A new domain of virtual space is added to the field of real space. The Planetary Oikos is thus spread over both spaces. Then by analogy with the house, or the dwelling, which ensures privacy, security and conditions for a good life for the members of Aristotle's Oikos, is in real space, and a narrowly anthropic sense, the so-called cultural environment, i.e. natural environment modified by technology according to human needs. In a broader context, it is the biosphere of planet Earth as the home of living matter on planet Earth. In a virtual environment, an analogy to a house is the entire digital virtual space. The key to it is the right of access to the virtual space.

Similarly, an analogy to property (animate/inanimate, necessary to ensure the running of Aristotle's Oikos) is "property", essential to ensure the running of the Planetary Oikos. In real space, it is Earth, water, and air. The so-called planetary commons should manage this property. Commons is generally characterized by "a plurality of people (communities) sharing the same resources and managing them and their relations and (re)production processes through horizontal co-management". The concept of the municipality deviates from the Western culture of the preferred public-private dichotomy (or public-private ownership), and its implementation at the planetary level requires the creation of a planetary municipality management mechanism (Helfrich and Haas 2009). In virtual space, Earth, water, and air are replaced by "cyberspace as the space of the spirit" (Barlow 2019, 5-7).

Finally, the analogy to the ultimate goal of Aristotle's Oikos – the economic self-sufficiency of a small community of people – is the long-term sustainable development of the Planetary Oikos and the long-term survival of man on planet Earth under the conditions of Heidegger's modern technology.

Next, we will develop the concept of the Planetary Oikos in terms of its synonymous meanings habitat (as a planetary house) and home.

3. The planetary habitat

In general, the word "habitat" refers to the resources and physical and biotic factors present in a specific geographical area, which create the conditions for the survival and reproduction of a particular species. We discuss the planetary habitat in the context of the species "man" and generally in the context of all forms of "living matter".

The effect of modern technology and man concerning his planetary habitat was defined by Heidegger (2004) as Gestell. It is "that extortionate claim which concentrates one to bargain what is uncovered as usable stock/useful stock". Gestell hides in himself the danger of a calculative approach to nature when "this recovery takes place in such a way that the released energy is hidden in nature, the released energy is transformed, what is created by this transformation is accumulated, the accumulated is divided again, and the divided is transformed again." The power of modern technology it gradually begins to prevail over the power of nature: "nature, which seems to stand above and against technology, is already placed in the position of usable stock." (Heidegger 1977, 40) Especially since the beginning of the so-called great acceleration, observable since 1945, modern technology has become a geological force, confronting the process of shaping the planetary habitat of humanity, nature as a whole (Stiegler 2016; Zwier, Zwier and Blok 2017, 222-242). Society no longer knows about its habitat, and according to Heidegger, in the conditions of modern technology, it cannot approach anything other than in a calculative way. Thus, the question of how to preserve the planet Earth as a habitat for humans in the future becomes topical. We can find inspiration in Aristotle's statement, "A dinner to which many contribute is better than a dinner paid for by one purse," in other words, decisions taken together are better than decisions of only the rich, only the good, or the conclusion of one best man or tyrant. The answer to the cardinal question of humanity's survival must therefore be the result of its collective decision-making. The problem of preserving the planetary habitat cannot be solved by adopting particular local solutions at the ontic level. Humanity's assumption of responsibility for the planetary habitat at the

ontic level is insufficient from the point of view of the "call of the Anthropocene" at the ontological level for the sustainable management of the planet.

Man and technology are two interacting entities (Stiegler 1998, 137). Man influences the development of technology, which in turn affects the further development of man's possibilities and the form of the biophysical environment (habitat) in which the Planetary Oikos is situated: "Technology, and especially the way it affects the energy play of entropy and negentropy in the biosphere, frames the matrix of all ideas about the Planetary Oikos, habitat (The approximations of the ancient Greek word "Oikos" used today are household, domestic environment, habitat, house. We distinguish Oikos as a framework that ensures the development of an individual and the local human community associated with him from a habitat that provides the conditions necessary for the existence of a certain species, including the species homo sapiens.) and the laws in force there." (Stiegler 2017, 129-150)

We will present the mentioned matrix of ideas about the relationship between technology and the planetary habitat of man through Aristotle's classification of the roles of technology – "technology imitates nature, technology completes, or it completes what nature has begun, and technology produces something new that nature cannot produce" (Aristotle 2010). In the context of a planetary habitat, technology plays all three roles. Nature generally provides a habitat for all species existing on Earth. Technology imitates it and simultaneously complements, completes and expands the habitat for humans in the environment of real space and produces a new habitat for them in the environment of virtual space. The thesis "technology imitates nature" should be understood on the general level of pursuing the purpose: The rational process of producing things by technology for human purposes corresponds to the teleological process of creating something by nature for its purposes. This method of imitation does not exclude technological creativity in producing new products, procedures and goals. As Engelmeyer (1911) stated at the beginning of the last century, "Animals passively adapt to the existing natural environment.

Conversely, man adapts the natural environment to his needs with the help of technology." By imitating the procedures of nature, technology in the natural environment "expands the ecological niche for humanity" (Ellis 2015, 287-331), optimizes the planetary habitat for human needs. However, since the existence of man also depends on the presence of other living matter, the anthropocentric imitation of the processes of nature by technology must be changed to a replica that ensures the long-term existence of a universal planetary habitat for all current forms of flora and fauna. The problem of the long-term sustainability of the Planetary Oikos, not only as a habitat for humans, is, at the level of concepts, most often solved at the level of proposals for a turnaround in the way technology is used. In this context, Ellul mentions the need for a "counterbalance to technology" (Ellul 1964, 301), Lemmens and Yuk (2017, 26-41) the need to transition to "responsible and intelligent care of our Planetary Oikos". Heidegger (1977) calls for a turn in an "onto-anthropo-technological sense", Sloterdijk (2017, 329) a turn from "allotechnology to homeotechnology". Stiegler (2016, 9) emphasizes the need for a "reevaluation of values" and the need for a "neganthropic pharmacological turn" aimed at caring for the Planetary Oikos. The common denominator of these "turns" is the demand for a radical change in man's attitude towards nature - from the mood of the owner of character to the philosophy in which man will function as a guide to the planet Earth with the help of technology. However, the reality of the above turnovers is questionable. For example, Heidegger deals in detail with the possibility of realizing a turn in the onto-anthropo-technical sense in his work Being and Time and nevertheless does not come to a clear conclusion (van Mazijk 2013, 336-354; Gabriel 2014, 44-73).

Technology complements and completes nature only from the point of view of man's goals, which do not have to be and, as a rule, are not even identical to nature's natural goals. It is not about completing the "defects" of character but about switching from the direction of nature's goals to man's. Here, the only measure of the perfection of the final product is the human goals/purposes. A person perceives the natural environment created by nature as a "real environment", as a

"real space", as a "free expanse" in which he can perceive and distinguish individual objects, their shapes and/or movement. Compared to the actual space, technology has built a new digital virtual space based on information as another alternative, human habitat. In connection with the concept of "digital virtual space", the idea of "virtual" itself needs to be updated. Chalmers proposed to move from the interpretation of virtual X "as if X but not quite X, i.e. as if real, but not real in all respects (Heim 1993, 160), to interpret virtual X as a "computer-generated version of X" (Chalmers 2017). Similarly, Deleuze proposed replacing the at-first glance clear dichotomy real - virtual with the dichotomy real (real) – not real (Deleuze and Guattari 1987). And Lévy added another dichotomy: real – not-real (Lévy 1998), where the hyphen indicates that it is not a "real fact".

From the perspective of the "Planetary Oikos" concept, real and virtual space are two complementary subspaces that host the real and virtual components of the planetary habitat. Implementing the virtual component of the planetary habitat is often equated with the Internet or the web. The virtual piece of the planetary habitat objectively cannot fulfil all the functions of the habitat. Above all, it cannot satisfy a person's basic needs - to obtain energy through food intake, provide him with shelter, safety, or create conditions for his reproduction. On the other hand, this component gives a person the opportunity to implement, on a global, planetary scale, activities aimed at satisfying information needs, sharing knowledge, but also satisfying the needs of communication, creating social relations and ties, etc., at a qualitatively and quantitatively higher level than is currently the case in the natural component of the planetary habitat.

Technology can also produce new things that nature does not deliver. Objectively, because technology does not pursue the goals of nature but exclusively the ideals of man. In this way, the ability of technology to produce new ones does not contradict the initial thesis about the imitation of the nature of technology. It confirms that technology does not work like a copying machine, where the original is a creation of nature. Aristotle (2010, 13-28) himself distinguished between natural

things, those "which have a hidden principle of movement (or change) and the principle of rest", and artificial things, which have a hidden principle of "self-creation". In this sense, nature produces natural things, and technology, on the contrary, from nature's point of view, makes artificial, new things that nature cannot grow because they are not its goal.

Realspace was initially filled only with things created by nature. Virtual space is filled with new, artificial things technology makes from the beginning. The ever-increasing share of the virtual component of the planetary habitat due to the action of modern technology has eliminated "... the threshold separating here (analogue, carbon-based, offline) and there (digital, silicon-based, online)..." (Floridi 2019). The natural and virtual components of the planetary habitat are becoming more closely interwoven and intertwined, resulting in the start of the hybridization process. The actual physical space based on matter, in which Newton's laws and Euclidean geometry apply, enters the process of hybridization with the virtual space based on information, which as "the new home of the mind ... is both everywhere and nowhere, but not where bodies of flesh and bones survive ..." (Barlow 2019, 5-7). The result is a hybrid – a hybrid space.

The process of hybridization of the actual space of matter and the virtual space of information can be divided into three phases in time: in the first phase, information functions as a support/extension of the case, in the second phase, information becomes part of matter, and in the third phase, information and matter become an indivisible unity – hybrid space. Metaphorically, let's define hybrid space as the space of fluid presence in time, place, social relations, and the external environment of the Oikos. We understand the space of liquid presence as a "free (in the sense of liquid) expanse of matter and information". As a being in the space of a liquid presence, a person constantly dynamically "flows" from his natural part to the virtual element and vice versa, without realizing in which amount of the hybrid space he is currently carrying out his activities. A state arises when X % of "I" is present in real space, and at the same time, Y > (100 - X) % of "I" is present in virtual space. Thus, the characteristic of the presence in a

hybrid place, in contrast to the state of presence in a specific place in real space, is the sense of sight "being somewhere". The hybrid place is by its very nature an updated concept of McLuhan's (1991) global village – one real place is (temporarily, fluidly) connected to a theoretically arbitrary number of virtual places where everyone knows each other through chats, likes, statuses, etc. The concept of "I" is a hybrid of physical and informational (data) "I". Fluidity here manifests itself in the fact that the material "I" from the genuine part of the hybrid space spills over into the virtual part in a specific data set, like one person's digital fingerprint. Technology in the hybrid space acts as a duplicator (real space duplicates by adding virtual space, physical identity duplicates by adding virtual identity, privacy in real space is added to informational privacy in virtual space, etc.).

4. The planetary home

Let's preface this section with the quote, "Home is a hand to cry on" (McLuhan 1991). This brilliant metaphor from the pen of the Slovak poet Válek (1961, 48) draws attention to a person's need not only to be but also to have a home. The hands-on which one may cry are the hands of the planet Earth as a superorganism capable of self-regulation to a certain extent (Flegr 2005, 117-118). The concept of "house" was precisely defined by Fox with the equation house = house + factor X (Fox 2006, 590), where a house is an object used for housing and related social activities. We can only say with certainty about factor X that its absence (mathematically zero value of X) qualitatively degrades a house into a house, a dozen "places for survival". In the case of the Planetary Oikos - the home of the Homo sapiens species – the X factor is the environment, which provides conditions for humans' development and long-term survival as a species on planet Earth. It is an absolute natural environment and a new, technology-driven virtual one, or hybrid environment. New variants of the management of humanity's home are the result of modern technology, which stimulates the diffusion of humanity's home from real space to virtual space and subsequently to hybrid space.

5. Future of the Planetary Oikos

The following statements illustrate the current state of development of the relationship between man and technology:

- Salomon (1997): "Technology is ... our anthropoid/ technological lot."
- Ellul (1964, 38): "Technology has become ... in effect man's environment."
- Cera (2017, 243-281): "Technology displaces nature from the position of man's natural environment."

Today, technology modifies reality's essence by transforming it into an environment formed by various information entities, their interactions and information processes. Man ceased to be an isolated Newtonian agent and instead became a part of interconnected information organisms – he became an informant rooted in the information environment (Floridi 2019, 58-113).

Technology can, in the long term, push the original (natural) environment into the background and become the dominant habitat of the posthuman species. In this regard, Cera (2017, 243-281) introduces the so-called oikological horizon as an imaginary line separating conditions suitable for human life (conditio humana) from conditions unsuitable, where man is in the position of "conditio animal" and must adapt to the conditions of the technological habitat. Technology shifts the ecological horizon, thereby creating pressure on man to adapt to the conditions of the technological habitat. In Heidegger's age of modern technology, man is also challenged by technology in the same way as nature. It is a transition from the current species, Homo sapiens, through the transitional posthuman species, to a new species, which can be a new human, a technological subject, e.g. artificial intelligence, or in general, an entity characterized by reason and intelligence with the ability to influence its surroundings (Tegmark 2020). Or, on the contrary, a new species that is characterized by neither defence nor intelligence and uses other abilities unknown to humans to adapt to the external environment. In the long term, the model of the relationship "a species that seeks for itself a habitat – technology – the form of habitat that is available" would be transformed from its current form of "man –

technology – nature" into a new form of "technology – technology – technology" (Florida 2019). In the context of the further development of the shape of the Planetary Oikos, the theory of oikology by H.R. is also relevant. Sepp (2020) focused on determining a person's place in the overall reality (Khalid and Abaas 2021, 1-14).

Today, the dominant role of technology in shaping the shape of the planetary habitat is mainly reflected by the concept of the technosphere and the concept of the emergence of a technological singularity. The technosphere represents "a system of which humans are an essential, yet subordinate part" (Haff 2014, 126-136). In the theory of technological singularity, on the other hand, as a result of the action of the "law of acceleration of responses" (Eden and Moor 2012), shortly the growth of technology possibilities will reach the point of singularity, become uncontrollable and irreversible, which will lead to unpredictable changes in human civilization.

Conclusion

The concept of "Planetary Oikos" refers to the planet Earth, its biosphere and the geological era of the Anthropocene. The Planetary Oikos represents the house, habitat and home for all living matter, especially man and his future variants, on planet Earth. The determining force of the further development of the Planetary Oikos is modern technology and management. Concerning the planetary habitat, modern technology fulfils the role of imitator of nature, as well as the role of supplementer of nature, and finally also the role of creator of new things that nature did not create. In the part of an imitator of nature, it expands the ecological niche, the habitat for man according to his requirements. In its role as a complement, technology complements the environment of matter created by nature with a new, complementary environment of information, thus enabling the expansion of the Planetary Oikos into virtual space. Finally, technology contributes to the formation of a new type of space - hybrid space - and subsequently also to the management of a new kind of Planetary Oikos – hybrid Oikos. In the context of the " Planetary Oikos" concept, hybridization is decisive.

From the point of view of evaluating the results of the impact of technology on the current form of the Planetary Oikos, modern technology is "to a lesser extent improving, or expanding technology'. It is, above all, a transforming technology (Floridi 2019). The form of the Planetary Oikos will thus, in the long term, be mainly influenced by the state of technology. One of the possible scenarios for the development of its future form is the emergence of a Planetary Oikos in the environment of technology. This would fulfil the vision of Cera (2017, 243–281). "Technology (sets in) as the Oikos (habitat) of contemporary humanity." Thus, the brilliance and wealth of our civilization cannot hide its entry into the stage of (de)evolution, where Hamlet's "to be or not to be" concerning the Planetary Oikos ceases to be a metaphor. It is necessary to move away from the consumerist pragmatic attitude towards the Planetary Oikos towards the search for an answer to the question: "Where we come from, who we are and where we are going.", or where we would like to go.

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