The Technosphere as a New Aesthetic

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INTRODUCTION

ŽARKO PAIĆ

Günther Anders spoke about the "obsolescence of man", believing that the age of total media rule in the world has come. For this, he used two terms that had an almost ontological weight for him ─ *phantom* and *matrix.* The world cannot be longer determined by original worldliness, but by the mediation of sounds and images produced by radio and television. Therefore, for Anders, the world appears as a "phantom", and he will refer to it as an "ontological ambiguity" of completely artificial situations that act on man by the belief that the world is nothing more than an event of phantasmal experience. Anders claimed that the individual self-consciousness of a person characterized by an individual decays into "divisum", that is, what is divisible, which, as in "schizophrenia", can be broken down into even smaller parts, going in principle endlessly. This "schizophrenia" must be understood not as "a *multitude of confrontations with the world, but in the plurality of the functions of the individual."* (Anders 2002: 138) If the "phantom" denotes the cognitive structure of the "alienation" of man in the technological world of media reproduction, then the "matrix" is nothing more than an "*instrument in the form of a pseudo-microcosmic model"*, which closes the circle of living in appearance as the only real world (Anders 2002: 164). The matrix establishes a "pragmatic picture of the world" because an opinion corresponding to this and that state of affairs cannot be "illusory". It is extremely purposeful and appropriate to what lies at the root of the enchantment in general. What Anders argues might be only the beginning of a total rule of a completely different ideology. With sound and image, it reinforces its power, which has anyway become absolute. If a man cannot be longer an "individual," then it becomes self-evident that the "schizophrenia" of identity represents his new way of legitimizing in a principally programmed world, in which he exists only as a function and application in the system.

How does this media-designed "man" think and act if he should be under the authority of transforming the world into a "phantom" and "matrix" of something that necessarily produces a different thought from what we call metaphysical? Needless to say, these assumptions were developed

especially in the works of theorist Fredric Jameson in the case of an analysis of the postmodern condition of culture (Jameson 1991)and in the later work of the post-structuralist philosopher Gilles Deleuze, when he argues about the "societies of the control" and the transformation of individuals into divides, with all the consequences that result from the essence of man in general (Deleuze 1992). It seems that the term "man" in the state of his "obsolescence" is something disturbing because it shows how much this "phantom" world ruled by "matrix" is away and uncanny, though it tries to cope by becoming a media fit into the whole system of functions. Without this, not only is human life impossible in a technological environment but everything that belongs to a human, too human, as Nietzsche put it, proves to be "obsolete" concerning what should be opposed to it. We know that this will soon become a philosophical problem addressed by Jean-François Lyotard. There are already interdisciplinary scientific movements such as posthumanism and transhumanism. Lyotard briefly called it the condition of *inhuman*. (Lyotard 1992). If "man" in his obsolescence is reduced to everything that determines the way of the Being between media and thinking machines (radio, television, computers), then it should be quite certain that the thinking that makes him a participant in this enchanted world of absolute mediation cannot be otherwise determined from something that is "new" and no longer expresses the world in terms of first cause and last purpose. Anders called this thinking, which adorns the American philosophy of modernity, "pragmatic thinking." And its "essence" is that instead of metaphysics as eschatology it establishes anti-metaphysical principles of "utility" and "practicality".

Can a "man" still be existentially oriented in the coming future if he is already technically displaced to such an extent that he needs to create a substitute system of apparatus and dispositions of thought for his survival? In the 20th century, all anthropologists sought to answer this question by postulating *eccentric positionality* (Plessner 1975). Being in a position of displaced establishment as a being of lack certainly marks the first step in determining "man" from the position of his artificiality. The artificial and that what cannot be completely rooted in nature (*physis*) belongs to human "nature". It is no coincidence, therefore, that most prominent post-Hegelian thinkers like Marx and Nietzsche, those who indicate that "man" cannot exist without the specific "human nature" not assigned to him as plants and animals, and their instinctive structure to sink into the environment. Instead of such a way of dwelling, "Human" exists by producing and creating the tools by which life elevates to the act of reflexive existence, acting "in" the world as the new environment and a habitual assemblage. The only problem is that with the emergence of anthropologies in the 20th century, inflation

will have no more than that which characterized the old metaphysical systems, which was the transcendental construction of "human nature" starting from the principles and postulates of mind and reason in the speculative and empirical versions of modern metaphysics, but to inflation of all kinds of replacement "ontology" with their hybrid terminology. When one can no longer think "man" vertically from the sphere of a predetermined scheme of the metaphysical frame of thought of Being, he moves towards "horizontal" self-determination with an excess of immanence, subjectivity and what now enters the self-centred centre. This denotes the aporia of all anthropologies of modernity, which are hidden by what elevates, but also undermines the dignity of man and his position in the world at large. It is the basic notion with which Nietzsche tries to think of becoming (*Werden*) as the frame of reference for all possible approaches to "Human" in modern *life*.

In its existential "irrelevance" as *homo kybernetes*, man has become superfluous to the existence of a developed technological civilization. Because concerning the robot, cyborg and android, all "human" functions, including his thinking, which requires bodily physicality, feelings and passions, traumas and pleasure, are already encoded and transmitted into cyberspace whose keyword does not relate to rallying destruction and deconstruction (Heidegger-Derrida), but rather the establishment of binary code through the processes of *embodiment/disembodiment* and *embedment/dis-embedment*. Instead of synapses and brain cortices, it's all about chips and implants, sensors and visual dispositions. What was still invisible in the previous paradigm of "life" becomes the visualization process or the hologram technique "visible" as a symbolic trace of information and the genetic code to make an object ready for "artificial life". It does not teach man the machine to think, but the thought machine teaches man to see what happens as a digital simulation in the hyper-reality of "life." This turn, therefore, occurs in its necessity in such a way that thinking loses its telling moment of language. Despite this, it turns the image calculated projection of what happens to the object. Needless to say, the Anthropocene era was the last age that could still have a Human as its governor and apocalyptic executor of the will of metaphysics.

When the thinking machine that Heidegger spoke already in the 1930s came into being in the mid-1950s, thanks to Claude Shannon and his laboratory, computerization became a process of pragmatizing thinking beyond the distinction made between biological and technical physicality. Therefore, understanding the "world" from this new, cybernetic perspective could only be derived with the help of a mathematical theory of communication. This

simply meant that the signals were being translated into coded messages, but in a two-way channel: the sender-receiver of the message. From all, it is evident that machine thinking appears not only as an innovation of cybernetics in the pragmatic way of understanding the "world". More importantly, as the philosopher Max Bense used to say, the aesthetic processes of "world programming" are no longer derived from nature and the human mind as in the Kantian way of thought, but from the matrix of a cybernetically generated program of aestheticizing the worlds (Bense 1965). It was the beginning of the emergence of "artificial intelligence" and its intention to rule the world through language, which in the logic of new media rests on the rule of the pragmatics of knowledge before the syntax and semantics of spoken communication. When, therefore, in the "essence" of language, a turn occurs in which the usefulness of a statement precedes its meaning, we find ourselves in a completely new context of understanding the relationship between man and machine. It is no accident that thanks to this new meta-theory of governing all systems of "life", the process of pragmatizing thinking takes place in parallel with the process of networking society, culture, politics and art. Nothing else can be exempted from becoming what constitutes the "essence" of cybernetics in general, which denotes the notion of *information* (Simondon 1989/2007).

What is the relation between entropy and anthropology? First and foremost the term entropy denotes the key to understanding the rise of cybernetics as realized metaphysics. Therefore, it is the second law of thermodynamics and a concept from the late 19th century. In short, entropy exists in all systems, inanimate and living, as the energy necessary for action. As the energy required to maintain the system is lost, so does the entropy gradually increase. This notion should be undoubtedly important in understanding living systems, as it shows how crucial for the survival of a being to the development of life on Earth and denotes the relationship or measure between the minimum and maximum energy consumption. It might be not surprising that this statistical and informational measurability of the state of nature and society calculates the possibility of what philosopher Gilbert Simondon calls *metastable equilibrium.* Although the history of the term is linked to the second law of thermodynamics, it is evident during the 20th century that it has expanded to include psychiatry, sociology, urban planning, engineering, biology and economics. In contemporary anthropology, Gregory Bateson's theory thus represents an extremely interesting case of the application of cybernetics with the notion of entropy to understand the relationship between man, nature and the machine. Taking into account the "ecology of the human spirit", Bateson argues that the world of the upcoming community must be liberated from the appearance of the power

of the absolute subject as the basis of rationality and rule over the surrounding world. In this sense, his anthropology as the epistemology of the ecological "mind" rests on the assumptions of cybernetics. But with the difference that its principles and concepts realize extremely creative, and show how the relationship between nature and spirit in a man's life establishes complex a structure to a fluid whole relationship (Bateson 2010).

Self-organization, self-rule, self-management ─ these are all expressions of the autopoietic way of thinking of the modern world governed by the *technosphere*. On the initial question of how entropy and anthropology are, it becomes certain that this shows a correlation between each other. It is not entropy similar to the Aristotelian cause in the formal-material sense, but the effective-and-final (*causa efficiens* and *causa finalis*). In contemporary medicine, given the research into the origin of the emergence of a deadly disease such as leukaemia, it is already common to speak of "morphological chaos" and "efficient cause". From this, we could see how the analysis of the living systems no longer stops at the principles of causality of old metaphysics. Entropy denotes therefore not a deterministic law in the wake of postmodern *complexity theory*. Instead, it is better to say that with entropy we are entering an area where "cybernetic anthropology" views man as a being of self-organization, self-rule, and self-management within the complex matrix of social and cultural relations of coordination. And since every system is "controlling" its environment, then it might be quite obvious that no correlation can be made between opposing ideas without the "internal control" of the system. "Man" cannot operate in networked societies without interacting with what makes such societies fluid and emergent. Therefore, entropy does not signify any complete disintegration of the system but indicates the possibility of its restoration on different "foundations".

Today, in the age of hyperrealism everything becomes *immersion* - like a digital image and everything appears as a constructed and aestheticized set of events whose space encompasses a virtual network. In a network, the things cannot be topological, but only without a centre and edge. Therefore, the network facilities "beauty" is constructed like the aesthetic object, and we know that this notion of Marcel Duchamp was like the last nail in the body of metaphysics of beauty and the sublime. What emerges from *ready-mades* cannot be expressed by the symbolic power of these ancient metaphysical categories ironically, as one might think at first glance, but by the pure de-substantiation of art. All that remains of the metaphysical power of art in the technological world is, therefore, the "withered beauty" of an aesthetic object, which in our hyperreal age is continued by other means.

Nothing can ever return from the past to our "hyperreal worlds". In this sense, all these great efforts in philosophy, art, and aesthetics for the renewal or return of "beauty" are only nostalgia for a time in which the kingdom of shadows (*Schein*) or the play of the un-concealment (*aletheia*) were *pretexts* for the emergence of that idea which gives to Being the meaning in the sensory motion of the thing itself. But when the sensibility with the feelings disappeared with the emergence of the *technosphere,* what is left is only to be immersed in the network of events of aesthetic pleasure and to simulate "life" (Paić 2021). Being networked means being necessarily in a situation determined by the desire to interact with the Other, and aesthetic pleasure in doing so becomes a way of relieving Humans from the functional and pragmatic logic of mass production. In 20th-century art, there is no longer any doubt about this, the paradigmatic case of this aestheticization of "artificial life" (*A-life*) represents the supercomputer HAL 9000 in Stanley Kubrick's movie *2001: A Space Odyssey* - a perfect example of understanding the machine of thought and cinematic time in which the simulation of infinity and time travel passes through the stations of metaphysical journey. And so it's completely self-explanatory why this represents one of the most important movie ideas, not the aesthetic enchantment of the world. HAL 9000 is a machine that thinks and feels; he is a machine that displays (*mimesis*) and represents (*repraesentatio*) the idea of the human brain in an application to the inhuman. Also: what denotes inhuman as hyper-human becomes the will for power that acts self-organized, self-causative, and self-effacing. With HAL 9000, the idea of "The Post-Digital Age Odyssey" began.

Why objects so-called polymorphic information system, as Donna Haraway claims (Haraway 1991) cannot "emanate" beauty, although they are identical to the things and objects of the "yesterday's world" of the analogical principles of aesthetic enchantment? Apparition was one of the most important categories for the aesthetic understanding of the world. Hegel and Nietzsche shared almost the same view concerning things, despite different cognitive-theoretical conclusions. Without illusion, beauty cannot shine through in the works of artistic reality. The reason, of course, lies in the fact that there is always a space between the thing and the object and the perceived ability of the observer. Approaching "thing-in-itself" causes the illusion to fall apart. What makes modern technological visualization represent a distortion of reality. The transparency appears too "real". That is inappropriate for the human eye and ear. Sensitivity, in its permeation with the summarizing object of aesthetics, becomes destructed and deconstructed, making it uncanny for Humans. Why? It is no more boundaries between the spectator and the observed. Apparition signifies the

experience of that subtle, invisible-inaudible-untouchable from the borderline. With the disappearance of the metaphysical wall between idea and emergence, everything might be de-materialized and de-ontologized, and so the "illusion" can no longer create the illusion of "things-about-itself." Instead of the aesthetic, we have a digital "semblance" and instead of "things-about-itself" we enter by visualizing into the space of unravelling the core of what is no longer anything sublime but constructed from itself as information in the coded order of meaning. All information is translated (*transductio*) into an image that no longer has anything of the "beauty" or "sublimity" of past epochs of great works of art, except the finite possibilities of simulating the real.

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This edited collection dedicated to the issue of *Homo Kybernetes* is primarily an attempt to shed light on the genesis and development of opinions about the technosphere as an aesthetic problem *par excellence* from different points of view. In this sense, the selected articles reflect not only on the cybernetic way of thinking as a condition of the possibility of digital aesthetics but also on the possibilities of transition of human sensibility to a different way of bodily existence starting from transhumanism and posthuman condition.

Žarko Paić in several assumptions seeks to show how in contemporary times, a radical transformation of metaphysical categories and concepts into cybernetic circuits takes place, starting with the fact that the onto-theo-cosmo-anthropological structure of philosophy breaks down into a fourfold information-feedback-control-communication. Instead of the rule of language, we encounter the logic of the techno-genesis of "worlds" whose "essence" lies in the visualization of events. The philosophical understanding of "creativity" therefore historically and epochally occurs as a bond/relationship between poiesis and téchne until the crucial reversal when the technosphere in and of itself synthesizes what is no longer "creation" or "creativity" in theological and aesthetic meaning, but denotes techno-scientifical construction of artificial worlds. A side-by-side account of Heidegger and Simondon, Blumenberg, Günther, Deleuze and Guattari shows how, through a set of thought-as-calculation-planning-construction, and what comes from the "immanent transcendence" of life itself at the end of the mysteries of Being and the beginning of event control. In the complex transformation of knowledge production, the technoscience no longer reflects on nature and life as an external object of research. Instead, they become the creative and productive force by which it is vividly

technologized, and the technology itself is transformed into the natural-life circuit of the self-production of "artificial life" from the construction of "artificial intelligence". In all areas of life, Paić claims, there are visible traces of this fateful paradigm shift: from art to architecture, from medicine to society, culture, and even politics. Nature becomes replaced by artificial creatures, and life itself becomes a technological construction of the conditions for the possibility of the emergence of the "new" thanks to the techno-scientific way of thinking.

Dieter Mersch in his article argues that algorithmic reasoning requires formal systems, which allow for modelling mathematical calculation of those kinds of problems that are principally mathematiziable. What seems to be fairly tautological has, in turn, a critical meaning because it is often forgotten that digitalisation and computerisation are based on certain mathematical paradigms, which produce their limitations. One of these limitations, already discussed in the era of the so-called 'foundational crisis' in mathematics at the beginning of the 20th century, is the question of modelling itself which requires mathematical intuition and creativity. Alan Turing considered it not to be a machine. By today, as Mersch claims, the computerization of creativity or design practices under the pre-dominance of Artificial Intelligence Research increased however in a remarkable way and states itself to be "the new Avant-garde" (Mike Tyka). Mostly based on naïve concepts of creativity and Art there seems to be a lot of success of computer art driven by deep learning systems. However, there is not only a serious lack of automatic judgement and evaluation of what can be considered creative but also masses of poor and lousy 'artificial artworks'. The chapter not only discusses questions of algorithmization of creativity and art practises (by addressing its limitations) but also points at the way of 'artistic intelligence' in a difference from the intelligence of Art.

Adriano Fabris tries to analyse today's relationship between aesthetics and ethics. Both disciplines deal with courses of action, even if different ones, and reflect on such behaviours. Ethics has delved deep into the criteria and principles according to which we qualify our choices as "good" and, as such, we choose to adopt. Aesthetics has focussed on discussing what makes us consider a human creation as beautiful. It is precisely such centrality of human action that is questioned in today's scenario, in both disciplines. Nowadays, human action takes place in technological environments: in other words, Fabris argues that environments where human beings are not the only ones who act, with some level of independence, but where devices provided with "Artificial Intelligence" act too. Therefore, the disciplines – aesthetics and ethics – that reflect precisely on such behaviours need to be deeply

rethought and also need to change the very ways they can relate to each other.

Natasha Vita-More in her contribution argues that syncretism of science, technology, and psychodynamics form a cybernetization of human needs that further life's development. By this, nothing is unthinkable, nothing is impossible for generating homeostasis, as long as that process benefits the adaptation, adjustment, and stability of life. Cybernetics is strongly linked to systems thinking, which forms a crucial information processing technique in assessing the world around us. This chapter addresses the transhuman is not limited to an inflexible and exclusive biological embodiment and toward an extended body. This system transforms and evolves, affected by influencing factors that drive change within the overall function of its patterns and cycles. The relationship of this extended body to cybernetics suggests that the science of feedback and communications between the human and the machine form a support system that expands beyond binary borders of dependence or independence of bodily forms and the interrelation of the cognitive, multi-faceted experiences that determine personality and motivation.

Massimo de Carolis deals with the problem of why in the theoretical point of view, in the context of increased development of new technoscience, it seems more evident than ever that a metaphysical distinction such as that between "nature" and "spirit" does not help at all to carry out the epistemic task for which it was constructed: that is, to clarify *precisely* what constitutes the exceptional quality of human reason, of the construction of sense or historical experience. In practice, what is removed from nature and confined to the "spirit" simply ceases to be valid as a possible object of systematic investigation and ends up in the melting pot of so-called "insoluble mysteries". Any serious research, therefore, (whether in philosophy or the field of technoscience) must at this point endeavour to *overcome* the divide, bringing into focus – so to speak – the *nature of the spirit*. De Carolis concludes that the project for "naturalising the mind" has an illustrious precedent in *psychologism*, a theoretical approach that became dominant in the academic culture of many German universities in the early twentieth century. At that time, the social conditions that today offer reductionism such valid support were almost absent. However, the almost total eclipse of psychologism was not so much caused by these practical difficulties: rather, it was the consequence of a coherent critique – shared by thinkers who were in other respects very different, such as Husserl and Frege – directed precisely against the element of psychologism that

technoscience seem to be reviving today: the attempt to reduce the trans-individual dimension of the spirit to the interiority of individual "minds".

David Rose analyses the activity of artistic production and its relationship to property and distributed cognition that most readily reveals contradictions inherent in posthuman existence. The digitalisation of production processes and the digitisation of products exaggerate inherent contradictions of private property and either offer a possibility for free, artistic activity or will perpetuate capitalism at the cost of the human as we have come to understand it in modernity. Posthumanism is to be understood as that historical epoch when cognition is no longer centred on the human being but distributed through production and consumption systems. Decisions are distributed throughout the system and new minimal agents emerge with concomitant philosophical problems of responsibility, status and accountability. Artistic production, argues Rose, is the paradigm example of intellectual property. Furthermore, the consumption of art allows us to express our individuality, the buying of music group T-shirts, the ringtones on my mobile and the choice of car one drives all send messages, exchange symbols and prestige, that marks me out as *me*. So, the ownership of educational material, verbal works, music, art and even patents is, at base, irrational and has negative normative consequences, that is the entrenchment of resources and privilege in the hands of specific classes and the reduction of the liberty of the human.

Stefan Lorenz Sorgner shows that posthuman philosophies are a shortcut for referring to a great diversity of contemporary approaches which have in common that they move away from humanism in one way or another. All of these cultural movements unfold themselves in various aspects of the lifeworld, and they have implications for ethical, social, cultural as well as aesthetic challenges. distinguish ten different types of aesthetics, whereby he will be primarily concerned with one specific posthuman artwork which closely embodies the distinctive characteristics of the aesthetics which will get described. This does not preclude, argues Sorgner, that the possibility of artwork also being related to another type of posthuman aesthetics. However, each description will not only be concerned with central features of the specific aesthetic category, but it will also reveal traces of the respective characteristic as they manifest themselves in other aspects of the lifeworld. Hajime Sorayama's "Sexy Robot" might embody the posthuman aesthetics of smoothness, which correlates with abstract geometric forms, lines and circles, and a type of shiny brightness. Parallel characteristics are also distinctive for a specific lifestyle that goes along with the aesthetics of Apple computers, and a smooth body of fully waxed skin. Here, it already

becomes obvious that there are correlations and interrelations between aesthetic preferences and lifestyle choices.

Miško Šuvaković in his article deals with the concept of assemblage as the basis for deriving the concept of "speculative medium". Therefore, he uses the phrase "speculative medium" to signify the operative modalities of digital assemblage devices and/or media: 1)a *speculative medium* is a concrete material medium that relays entirely visible and empirically verifiable information, representations, or impacts, the mediation of which yields abstract, unempirical meanings, or, frequently, abstract effects; 2) a *speculative medium* is a digital assemblage device or network of digital devices that may programmatically mimic or functionally operate like any other biological, mechanical, or analogue communicative, productive/post-productive device or entity performing the functions of remediation, meta-media, and symbolic speculation; and 3) a *speculative medium* is a digital assemblage device or network of devices whose abstract i.e. non-referential impacts – specific programmes, applications, or performative algorithms – produce an affective effect on an individual or trans-individual social micro or macro order. Through technical manipulation, a speculative medium combines the "speculative" (as opposed to the concreteness of the singular and there-present) and the "media" (appropriated into the concreteness of the materiality of a device made for the sake of communication or exchange of information).

Tonči Valentić claims that the contemporary film industry produces more films than ever before, in the age when the domination of technoscience with a techno-scientific way of thinking replaced and thoroughly changed the classical concept of film perception, therefore films in the 21st century have become reformatted to adjust to a new "post-cinematic reality". In other words, not only social matrix of film's perception that once constituted the historical manifestation of cinema has changed, but also it started to have a huge impact on epistemological and philosophical interpretations of visual arts in general. If film previously used to structure social experience through cinema, today we are witnessing the "relocation" of films into a digital sphere where they become "extensions" of an external reality within the mass production of images. There is a long way of thought from Benjamin to Deleuze, as Valentić argues, two authors that are extensively analyzed in this article, and both of them provided original insight into the film regarding its status in the technological constellation of the world of their time. In a digital age without aura, where "film is disappearing from cinema" we do not only encounter alternative modes of perception but profoundly different notions of cinematic experience which turns to be

philosophical understanding par excellence. In that sense, having in mind all those changes that were brought up by the technosphere, we might be sometimes melancholic, but never nostalgic. Because, instead of the ruins that remain behind us, melancholy for eternity becomes a plausible play of the construction of memory and the assembly of recollection in a digital age without aura.

In the concluding chapter Žarko Paić claims that since technology transformed itself into something uncanny that determines human civilization in modern times, nature has already transformed into a pure technological creation. The time of contemporary art corresponds to everything that quantum mechanics has set up based on the new understanding of the universe. From artworks of John Cage, Samuel Beckett, and Maurice Blanchot to performative-conceptual artworks of Stelarc and Ken Rinaldo, we are permanently witnessing the inability to return to the "aesthetics of stability" of the world. The whole circuit within cybernetic self-development, self-turn around, and self-organization of technosphere is reduced to three key theoretical concepts and paradigms of contemporary research in the field of A-intelligence, A-emotion, and A-intuition. These are (1) contingency; (2) singularity; and (3) emergent chaos. Unlike technique that belongs to the mechanical perception of nature as a machine of organic world reproduction, a technology that in the modern era enters the field of the semi-automatic and automatic mode of machine operation, in the age of technosphere, we are faced with the transfer to telepresence spaces (Marvin Minsky) and tele-existence (Susumu Tachi). Information transfer and managing remote systems using code becomes the condition of the possibility of interaction in the technical world. If the question of ontology has been focused on the object and its idea of autonomy, then it is obvious that it could not be "the one" facility with which it dealt concerning the metaphysics of subjectivity from Descartes to psychoanalysis. It is an object or thing that thinks in a completely distinctive way, unlike human thought. For that reason, instead of the "embodiment", it carries out the function of "embedment".

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CHAPTER ONE

METAPHYSICS AND CYBERNETICS: ABOUT THE *TECHNOSPHERE* OR FROM THE THING OF THOUGHT TO THE THING THAT THINKS

ŽARKO PAIĆ

Introduction

Fernando Pessoa in *the Book of Disquietude* begins with an insight into a complete understanding of art, science and life. An age is coming without its own "truth", an age emptied of great utopias and even more vain dreams of a complete reversal of value. Nothing can satisfy the interest of the mind anymore without taking account of its limits. Instead of "revolutions" and "utopias", "counter-revolution" and "dystopia", what determines the future will be a matter of the creative evolution of life.

> There are periods of order full of depravity and periods of disorder in which all is lofty. Decadent eras abound in mental vitality, mighty eras in intellectual weakness. Everything mixes and crisscrosses, and there is no truth unless one is presumed (fr. 277). (Pessoa 1996: 160)

There is an urgent need for the establishment of the "new" in our time, the process of mixing and cross-referencing. What does that mean? The loss of the "purity" of a substance seems to be offset by the processes of crystallization beyond the difference in materiality (*hylé*), form (*eidós*), and the aesthetic way of existence. Moreover, it seems almost impossible to talk more about the "virgin source" of the primordial life force (*materia prima*). Nature as a machine and life as a transformation into many different forms of Being requires thinking of finding "new" conceptual tools. Let us remember that Plato considered the issue of the origin of the language as equivalent to what adorns the work of the demiurge. (Plato 2003). In the

creation of nature as Being (*ousia*) and beings (*ta pragmata*), language works like a god. The only difference is that the divine model of action cannot be just like a modern clockmaker but like an ancient artisan artist. Without appropriate language, everything that happens today in the fields of science and art remains inconvenient.

In the complex transformation of knowledge production, the technoscience no longer reflects on nature and life as an external object of research. Instead, they become the creative and productive force by which it is vividly technologized, and the technology itself is transformed into the natural-life circuit of the self-production of "artificial life" from the construction of "artificial intelligence". In all areas of life, there are visible traces of this fateful paradigm shift: from art to architecture, from medicine to society, culture, and even politics. Nature becomes replaced by artificial creatures, and life itself becomes a technological construction of the conditions for the possibility of the emergence of the "new" thanks to the techno-scientific way of thinking.

In several settings, the endeavour will be to show how the present-day takes place a radical transformation of metaphysical categories and concepts in cybernetic circuits on the fact that the onto-theo-cosmo-anthropological structure philosophy unfolds in the fourfold: *information-feedback-control-communication*. Instead of the rule of language, we encounter the logic of the techno-genesis of "worlds" whose "essence" lies in the visualization of events. The philosophical notion of "creativity" therefore *historically* and *epochally* occurs as a relationship between *poiesis* and *techné*, until the crucial turn with the *technosphere* synthesizes what is no longer "creation" in theological and aesthetic meaning, but techno-scientific construction of artificial worlds.

1. Age of creative evolution?

What are "nature" and "life" within the new techno-scientific paradigm? It seems to be something quite simple to explain and therefore extremely complex. Simplicity is reflected in the fact that the former enables the second because nature for Parmenides is the all-pervading Being in its change. To the superficial observer, it will at once seem to him that the concepts used to approximate the effect of far-reaching changes in the understanding of the origin of the Earth are highly arbitrary. A variety of contemporary theories like the theory of complexity, the emergence (*Emergenz-Theorie*), contingency, chaos, cybernetics and research of „artificial mind" (*A-Intelligence*) have made the natural and spiritual or

cultural sciences (*humanities)* almost unnecessary in the world as an expanded laboratory. After all, the very notion of technoscience and accordingly techno-art and techno-aesthetics has already been announced by media theorist Vilém Flusser. He spoke of the rule of universal technical code in history. Since this code is no longer based on language as a *logos*, but on an image as a pictogram, the consequences of this paradigm shift are the disappearance of the dialogic-discursive nature of language as such.

> Human communication, as we understand it in this book, takes place intending to forget the meaninglessness and loneliness of life that leads to death and thus make life bearable. We are trying to reach this goal of communication by creating a codified world, that is, a world made up of ordered symbols, in which the information we have come to is gathered. (…)… People share different existing information with the hope that new information will be synthesized from that exchange. It is a dialogic form of communication. To preserve information, people share existing information in the hope that such distributed information will be able to better resist the entropic effects of nature. It's a discursive form of communication. (Flusser 2007: 16)

From being amazed at the mysteriousness, the Being in its fullness and splendour of multiple life forms transforms into an event of fascination with the possibility of creating so many new worlds. And their reality is revealed from the idea of the *techno-genesis* process. With wonder, the world is poetized as a work of art; with fascination, we participate in an event of the aesthetic design of many different worlds. With this in mind, we can say that the question of a new definition of "nature" and "life" cannot be derived at all from the rise of modern physics, as well as biology. What is astonishing is none other than the enframing, which Heidegger most plastically expressed in his discussion of technology, when he denied to that thing the disclosure of the "essence" of self-presentation in the event of the technology as such. If therefore, the "essence" of technology is nothing technical, then it is self-evident that even the "essence" of nature is nothing physical, as, accordingly, the "essence" of life is nothing biological. (Heidegger 1994) However, what if the contemporary sciences that are engaged in the 'exploration' of what 'new nature' and 'new life' have emerged from a laboratory scientific experiment think beyond metaphysics as such? In other words, what if the creation of an "artificial" that could no longer be likened to an analogy with that of the primordial and initial (*arché*) does not start from any permanent "Being", and so science is no longer derived from understanding knowledge as the accumulated "progress" and "development" of information needed for discoveries?

Science denotes an inherent openness. The reason is that its inner urge should be beyond the scientific field. This might be true even when is embodied in the absolute of total knowledge of "nature" and "life." In that sense, every talk of science in itself would be always tautological. Knowledge represents a condition of the possibilities of science, and its essential task is not beyond itself in improving the world, which by its merits will become a secularized version of the perfection of God's attributes from the Thomistic scholasticism: one (*Unum*), good (*bonum*), true (*verum*), and being (*ens*) including beauty (*pulchrum*). On the contrary, the "essence" of science lies in the non-scientific realm of the non-human. It's about what belongs to the technicality of the Being. It is articulated, however, as the language of the *technosphere*. The rules of this language are almost identical to the "language of the new media". Let's see how this could be explained. Pragmatics of the meaning of knowledge as *know-how* supersede semantics and syntax. If so, it doesn't matter what something means in a particular context. The only thing that matters is whether the speech itself changes the context and whether it applies to all cases or just some. So, the usable value of language as performativity sovereignly rules over language as saying "sense." It just means that the scientific truth denotes at the same time a revelation of "nature" and "life," which is the meaning of Heidegger's view of truth as a Being in *un-concealment* (*aletheia*). (Paić 2014: 11-61) The path to the "new" is intersected by furrows and cuttings in what is no longer the ground. Even the image of metaphysics as a rooted tree, established by Heidegger, nor the image of rhizomes as undermining that same tree with its branches, such as the positive sciences given by Deleuze, do not correspond to the task of technoscience. Namely, it is losing more and more the feature of the "inventiveness" of knowledge generated in a linear sequence of epochs. That's a reason why that matter is becoming more and more the "creative" creator of hybrid worlds. In this way, new life forms *crystallize* in processes of complete indeterminacy.[1] From metaphysics

[1] The notion of "crystallization" with which we refer here to the "form of (spiritual) life" is found in the ontology of trans-individualization. One example of a crystal as a form or structure beyond the material form and its passivity may be a way to establish the stability of a condition. If the process of becoming (a Being) is always an event in the state of its possible crystallization, it might be clear that in biological and technical modes, Being is dealing with something that must be both solidified and fragile. This means that the crystal cannot be pure abstraction, nor is it the mere concretion of some state of matter. Rather, the inter-condition between the conditions of possibility and the necessity of the emergence of something as something should be discussed. Individuation for Gilbert Simondon denotes a way of transgressing the Aristotelian duality of form and matter. Therefore, the term

since Plato to Hegel, the question of the meaning of science arises from the very root and the beginning of philosophy ─ the *logos*.

If history denotes the wandering and development of the mind through the labyrinth of history, then technoscience today becomes just another form of apriorism and transcendentalism the idea of knowledge. It shows that the world "is" a meaningful horizon for the appearance of the "new" in repetition. Whoever would want to deprive the evidence of this justification could hardly get rid of the impression that metaphysics in its "essence" is impossible without the supposed duality of foundations and that which is grounded, ideas and reality, Being and beings, axioms and accidents. In all epochs of its extension, from philosophy to the fundamental and applied sciences, the question of what drives the machine of human cognitive activity is the same as the question of the beginnings and sources of thought as a "form of life." The five human senses seem to be historically related to the emergence of the spiritual life in its "development" and "progress", beginning with myth, religion, art, philosophy and science. Is not the meta-scientific form of life in the artificial mode of existence that I call the *technosphere* a step to abandon the universal sensibility of plants, animals and humans, and entry into the so-called sixth sense? It is that kind of sense which arises from the connection of the cosmic-planetary "mind" (*noosphere*) in the machine-self-organized order of transformation of the whole metaphysical assemblage of the Being-God-World-Human into the technological disposition of visualization. (Paić 2016: 121-143) The "sixth sense" goes beyond the shackles of the body with the laws of nature. Without going into the realm of esoteric speculation about light beings and the emanation of divine energy in the machine of cyber physicality, it is only to be stated that Nikola Tesla also had visions of this immediacy of the cosmic void-depth experience beyond the boundaries of the physics of the material world.

What we want to open up as a problem in this consideration should be the following. Sensitivity determines the neurophysiological network of stimuli and responses in the form of reactions to the source of events. It is already clear that sensitivity cannot be longer thought from the verticality of the relation to which the body does not belong to the same rank as spirit (*nous*) and soul (*psyché*). Instead, in the horizontal order of the categories of

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crystallization should be understood here as an attempt to overcome the ontological gap in the potentiality of matter (active *vs.* passive state). It does not determine form matter, nor is the matter in itself sufficient for life without the creative principle of trans-individualization. (Simondon, 1989/2007).

sensitivities among which the notion of perception (*perceptio*) stands out, sound, warmth and respiration become in the cybernetic model of understanding life ─ "second nature". To put it another way, life should be understood as an information code. It is formed by the structure of inheritance (genes) and language as a condition for the possibility of human cognition. Information and language are fundamental concepts of cybernetics. However, we can say in advance that without the third, their bond would be ineffective. The third is nothing but the concept of "life." When, therefore, life enters the centre of techno-scientific thinking, then it becomes obvious that information and language are no longer autonomous domains of action within the system and environment. The information denotes the "essence" of life in general. The language that emerges here through the technological disposition of communication becomes the dialogue and discourse of the complex web of the creation of the "new." Hence the emergence of biocybernetics includes bioinformatics and biosemiotics in its fields of activity.[2]

The medium that enables this step beyond the metaphysical space of memory and oblivion is nothing more than the transition of an aesthetic code of communication between the participants of dialogue and discourse into a technically constructed remark of what is no longer the unity of place and time as "here" - "now". This, with Aristotle, expresses the notion of Being as a presence. Presence connects the space and time of the "eternal present" (*nunc stans*). However, change is now crucial to thinking in general. Namely, in visualizing phenomena in the virtual space, it is transposed into the sign systems. They are used to predict the upcoming state of affairs. In this respect, the concepts of technological code and deciphering the language message are mutually intertwined. When information becomes the "essence" of life, then it is only a step to the assumption that life cannot be longer externally led or beyond the energy exchange process. Life becomes an event on a "plane of immanence" or "plane of consistency," as Deleuze and Guattari put it in their ontology of becoming. (Deleuze and Guattari

[2] „In a certain sense of interpretation, today's biology is a kind of philosophy of life. […] Life is the production, mediation and acceptance of information. […] Biology derives concepts from classical mechanics, physics and chemistry and takes over the concepts of linguistics and communication theory. Messages, information, program, instructions, codes, decryption. These are new concepts of life science. […] They focus their image on life… not on architecture and mechanics anymore. Moreover, life sciences today are oriented toward grammar, semantics and syntax theory. In order to understand life, we must first decipher these messages. "- (Canguilhem, 2000, 316-317 and 318-319).

1980/2013) As an experiment with life itself, thinking no longer precedes action: thinking, Being and acting become the same. Being and experimentally living as an artist means ecstatically creating and being created from an uncanny "power" of non-humanity. The substitution of what is happening in the environment made techno-scientific and therefore altered by understanding "nature" and "life" from the notion of the substitute as artificial can no longer be reduced to corporeality as a bare substance. After all, the origin of the term *aisthesis* remains already ambiguous. It is about the sensory as the physical and experiencing the physicality itself, then the remark of the world in the form of the vitality of life and, finally, its aesthetic configuration. (Mersch 2002: 245-298)

Three, however, are the basic concepts of cybernetic thinking of digital machines: (1) *computation*; (2) *planning* (*projection*) and (3) *construction* (*design*). It follows that the number, as an abstract expression of computation, stores the idea of infinity and singularity. What seems visible in the process is merely to bring reality to the fore based on the idea of number. Binary code denotes proof of the rule of information over all other concepts of cybernetics. The same goes for the new term image. The image cannot be longer defined by the language as *logos*, but by the number as a pictogram. (Mersch 2015: 131-186) However, this does not in any way mean that the images have become numbers. Nor is it that language has lost the power of speaking "about" the world. It might be better to say that what Friedrich Kittler calls a "calculated image" (Kittler in Burda and Maar 2005, 186-203) in the digital environment is becoming a new environment of the *posthuman condition*.

What was a feature of aesthetic thinking in the Baroque and Leibniz era ─ the perfect construction of the world in the form of a pre-established harmony governed by God as a musician and watchmaker ─ is now emerging in the form of life beyond "life" in general. "Nature" itself doubles, recombines and re-aestheticizes in the *technosphere*, becoming an artificial environment. The doubling does not mean that nature, as a source of energy and information, has disappeared before the penetration of the "artificial environment". It is no longer cause or effect. Instead, the coexistence and coordination of the primordial and the reductive should be discussed. After all, the *technosphere*, as a cybernetic model of *posthuman* living, requires precisely non-linearity and contingency in everything that happens. Recombination in this context should be determined by features of complex systems. Like the game as an experiment with pre-existing combinations to create the "new", this is about merging the "old" and the "new". For example, new digital media include the old formats within

which the "new" emerges: such as silent movies in the age of interactive synthetic film, as the event of a difference between analogue and digital cinema. After all, re-esteeming cannot be "beautifying" a new environment, as it would mean that understanding the design from the cybernetic paradigm is strange to the new society and culture. On the contrary, the design emerges in the case of re-aestheticizing as the construction of "nature" and "life" from the logic of emergence of the new (for example, web design and fashion design as the creativity of a technologically transformed body between cyborgs and androids). (Moles in Rötzer 1991: 160-170) In this regard, how can we distinguish between the classical natural sciences, among which paradigmatic ones were mathematics and physics, and modern transdisciplinary such as synthetic biology, cybernetics, robotics and nanotechnology? One of the acceptable answers to that question is offered by Andrew Pickering. He introduced a new approach to epistemology within cybernetics, which connects the notion of information and life, as follows:

> ... there is something philosophical or theoretically fruitful in cybernetics. It is a kind of seductive mystery of glory that surrounds it. And the origin of it seems to me to be that cybernetics is the establishment of the paradigm of difference from the One we all grew up from ─ that reductive, linear, Newtonian paradigm that still determines most academic works in the natural and social sciences (and engineering and humanities, too) ─ these are the 'classical sciences' as they are called by Illya Prigogine and Isabelle Stengers. (Pickering 2010, 9-10)

The difference stems from how the cognitive-theoretical results of modern technoscience are manifested in the actual reality of the *technosphere*. The concepts with which we today perceive the changing realities created by the introduction of information technologies are (1) acting; (b) performativity and (3) emergence. What does that mean? First of all, it is necessary to change the way we have considered the "essence" of scientific research so far. The inevitable concepts and methods of the experiment should be added to this yet and everything belongs to project reversal laboratory conditions in the possibility of reality as "feedback". This means that cybernetics is now not determined solely by the meta-theory of managing the system and the environment in which human and machine operators. There is an increasing role of self-organization and this case, the vagueness and openness of the system itself. Control now arises from the logic of action of what in the hybrid relation of "nature" and "life" becomes artificial life (*A-life*). Entropy systems need as much control as the exchange of information between subjects/actors allows them to shut down and fall into the abyss of nothingness. For new theoretical approaches to "nature" and "life" that rely

on the genetic code, information and meaning of life (biosemiotics), it should be quite clear how technosciences operates. They are performative and emerging in terms of their technological navigation of the "new" space-time. Whereas in the classical sciences of "artificial intelligence" cybernetics worked on systems and environments with a certain degree of "autonomy", now everything is shifting to the connection of information and control of organisms.

They are not strictly determined by features derived from environments (objectivity) or internal systems (subjectivity). For example, biological research on the relationship between the brain in living organisms and their sensitivities in all aspects of the application from feeling, and experience, to cognitive observation is oriented toward the complexity of species and genera behaviour. There is no guarantee that the "feedback" of the system and environment will be deterministically stable. It is equally uncertain how certain species will behave in changed living conditions (for example, human survival in urban slums/favelas of the world's capitals, and adaptation of wild animals to the loss of their natural habitat). In the case of new techno-art, such as *Trans-genic Art* and *Bio-Art,* the experiences of molecular biology and the "artificial life" (*A-life*) denote a manipulation of genetic code. It might be thus identified with the same way of action in the sphere of artistic creation. What, then, comes from the invention of technoscience, happens in the same way in the creativity of techno-art. (Reichle 2009) For this reason, we are confronted with concepts already derived such as action, performativity, and the emergence of the "new." But not in analogy with the actions of Plato's demiurge or the theologically conceived God who creates the world out of nothing (*creatio ex nihilo*). What is new here is that both the demiurge and God can no longer be considered as a paradigm of creation without the share of "creative design". In the process of unification of mind and creativity, brain and aesthetic configuration from the very "essence" of a techno-scientific experiment with "nature" and "life" as such, what is thought was possible even for the Greeks as an uncanny state of hybridity. But for such a thing there was no order in terms and categories that would reach "the greatest depths of impersonality" concerning myth, philosophy, science and art, to use James Joyce's phrase.

The emergence of the idea of art as the production of artificial reality in the new Era is, therefore, according to Blumenberg, conditioned by the modification not only of the notion of imitation of nature but even more by the modification of the concept of form (*eidos*). It crystallizes technology as the second nature of man. On the whole, the effort to find the appropriate

language against the backdrop of the technical world has become an obsession with the emergence of the inhuman from Leibniz. And it encompasses both artistic and scientific. It does this by unleashing the spontaneity of production that no longer imitates the "first nature" or God as a condition of possibility for creation at all. Instead, we are confronted with the idea of a dispute between construction and organism, art and nature. (Blumenberg 2015: 16) It is no coincidence, therefore, that with Ernst Jünger's tenets of "organic construction" in the 20th century, the problem of the metaphysics of nature will be eliminated as an unnecessary organ in the evolution of techno-scientific thinking. What was historically separated after the Greeks with the end of the new Era is now being re-synthesized. However, the way of this synthesis becomes essentially twofold. In the metaphysical sense, in Schelling and Hegel, the synthesis of spirit and nature encompasses the identity of the knowledge of the spirit about itself in the form of the absolute as a science, thus eliminating art at the "end of history" by becoming a spiritual need by the exterior decor of the aestheticization of the world. In this way, it is only in the 20th century that one finds what makes synthesis possible. It is no longer about language as *logos*. In its place comes event visualization. They are "artificially" produced thanks to the creative potential of a living thought machine embodied in the form of a "computer machine". The apparent contradiction of the "organ" as a function of the organism as a whole of its life activities within its environment with the "construction" belonging to the technical world of objects is only eliminated when something intangible arises that mysteriously connects them. The *technosphere* denotes nothing more than "organic" and "constructive", "inhuman" and "artificial" versus so-called a reality that still flows in natural cycles, the biorhythm of its species on Earth and beyond its reach. The absolute synthesis of the space-and-time "eternal now" (*nunc stans*), which forever destroys the notions of the ontology of nature in terms of its statics and immutability, is now happening beyond the dualisms with which our metaphysically language already counts. Its "nature" became "artificial". But only when it was possible to establish something "in-between" worlds, as the medium of all media and hence the meta-medium of technical communication. It is, of course, the Internet (that thing "between" nature and life as a signal or a transmitter of information) (Kittler 2013, 214-231). The problem is that the invention of transmitting electromagnetic waves to the startup of the computer machine denotes at the same time the limit of the world: on the one hand, analogue and on the other, digital.