## Summaries

### I. Monograph

1. **Transhumanism and the Future of Education (of Literature). ISBN: 978-619-7245-26-4. Sofia: PH Avliga, p. 140.**

**The introductory chapter** of the monograph **(*Transhumanism and the Obsolescence of School Education*)** sheds light on certain transhumanist projects which maintain that school as we know it must disappear; must be radically transformed so that it could prepare the children for the inequitable competition with the intelligent automata they are to face in the future. In order to meet the challenges of the future, school will have to marshal the full resources of nano-, bio-, cognitive and information technologies, where the education will begin before birth, even before conception, since it will be based on an absolutely legalized eugenics which will guarantee the production of gifted children. Transmission of past cultural experience, building up knowledge, reading literary texts will all become unessential, because the neuron will be the new fuel of the future. The teacher will be transformed into a kind of neurophysiologist, neuro-cultivator, neuro-engineer, neuro-hacker, which will make it possible for the medicine and education to gradually merge, because, on one hand, doping, drug-stimulated enhancement, taking nootropic medications improving cognitive functions will be completely legal and common practice, and, on the other hand, the students of the future will be provided with intracerebral implants, with a hybrid intelligence, both artificial and biological.

Although the above might seems to belong, more or less, to the domain of futurology and science fiction, the monograph does explore certain disquieting trends and transformations which have been paving the way for the development of such transhumanist projects.

Drawing on the research of Martha Nussbaum, **Chapter Two (*Literary Education under Threat - Economic Logic and Biotechnological Neuroenhancement*)** focuses on the "devastating" crisis experienced by modern education systems entailing their consistent subordination to the dominant economic logic and the resulting neglect of the arts, literature and humanities in the school curricula. According to Nussbaum, should this trend continue to prevail, very soon the education systems will be simply producing generations of efficient machines incapable of human empathy and devoid of any critical reflection.

Literary education, Nussbaum emphasizes, can not only help cultivate empathy and humane attitude towards the other, but also become one of the main factors in developing therese traits. Stimulating the active emotions and imagination of the children, literature encourages them to think about others, about strangers with whom their real life experience will not give them the opportunity to meet. Reading literature helps one to overcome the tendency to "egotism" (Todorov, Rorty), to build an inner intuition for the common human vulnerability, and thus counteracts the temptation to respond to human imperfections and weakness by pursuing total control.

However, according to the Oxford transhumanists Julian Savulescu and Ingmar Persson, neither the humanities nor literature are able to counteract effectively enough human moral and ethical weakness. What is more, they think that – since modern man is, from a moral point of view, but a human-like ape that possesses the scientific knowledge and technical power characteristic of Homo sapiens 3.0 – humanity today is as able to rid itself of all evils by means of technology and science as to destruct itself. Nonetheless, biotechnology, pharmaceutical substances and neuroregulators, in Oxford researchers' opinion, can make it possible to achieve that effective, predictable, and controlled moral improvement which human culture has failed to achieve for centuries including by means of education and reading literature.

Focusing on one of the immediate forerunners of transhumanism, namely, cybernetics, **Chapter Three (*Intolerance of the Human - from Cybernetics to Algorithmic Governmentality and Transhumanism*)**, traces the retreat from the humanistic tradition that occurred with the establishment of the cybernetic paradigm. Distrustful of encipatory projects of socio-political or cultural nature, cybernetics is committed to the realization of a new techno-scientific renaissance through information as the very antidote to degradation, destruction, and entropy. This ambitious endeavor resulted in the new way in which human beings are regarded, namely, as information-

processing entities that are originally similar to intelligent machines. Language itself turned out to be unnecessary and dangerous surplus because cyberneticists postulate that what is of essential importance is not the meaning, but the signal, the code. By eroding the boundaries between animate and inanimate, man and machine, the cybernetic paradigm conceives of man as an imperfect machine that should be improved by means of techno-sciences, thus laying the foundations of both modern algorithmic governmentality and transhumanism.

**Chapter Four (*Transhumanism as an Intellectual and Cultural Movement*)** traces the history of the transhumanist movement from its beginnings in the 1960s and 1980s to the present day. It focuses on the problem of the authorship of the neologism "transhumanism", as well as on some texts emblematic for transhumanism, including strategic documents and prospective visions. Besides the most famous transhumanist formations and thinkers, this part of the study also presents the programs of certain less popular transhumanist formations. However, despite their stated differences, they all share the common belief in the need to enhance the physical, intellectual and emotional abilities and achievements of human beings by means of convergent technologies.

**Chapter Five** is devoted to the **increasing medicalization of life** over the past decades. The growth and expansion of the professional power of medicine, the redefinition of a number of phenomena of social or other order in medical categories has led to the fact that increasingly greater parts of everyday life fall under medical power, influence and supervision. Moreover, modern medicalization is far from being limited to the colonization of the social field by medicine, and is a far more complex and heterogeneous process indicative of both an increasing pathologization of human life and of the modern biopolitical and bioeconomic mechanisms of controlling life itself.

**Chapter Six (*Biopolitics, Biopower, Bioeconomics, Biomedicalization*)** looks back at that moment in the history of Western societies – discussed by M. Foucault – when, for the first time in history, "the biological was made sense of through the political" and man ceased to be "an animal capable of political existence" in order to become "a political animal whose very life as a living being was in question". Based on the analyzes of M. Foucault, N. Rose and P. Rabinow, focus on the subsequent transformations of power over life, caused not least by the development of biotechnology. According to N. Rose, the first half of the 20th century saw an epistemological turn, where the body came to be thought of not only on anatomical, clinical, or moral levels, but

also on a molecular level. Genetics and genetic engineering gave rise to new attitudes and approaches towards the weaknesses of the living matter, according to which the latter must be 'improved' through intervention even at the embryonic level, and the object of this type of intervention can be literally any living species on the planet. Now, in the perspective of modern bio-economics and regenerative medicine, a human body (including a child body), like any other living or non-living matter, can also be a particularly valuable resource of primary raw materials.

**Chapter Seven (*Medicalization of Education*)** outlines the tensions that have emerged in recent decades, namely, the competition between medical / neuro / cognitive interpretations of learning difficulties and sociological and pedagogical ones. Thus, in the period 1960-1980, the social sciences and the humanities focused their attention on the sociogenesis of learning difficulties and challenged the widespread views on heredity, the innateness of learning problems. They managed to impose their tenets about the socio-economic, political, and ideological causes of educational difficulties and convince the actors in the field of education that if some children lag behind or do not cope with the learning material, it is often not due to any biological or hereditary causes but to social inequalities and certain specifics of the school institution as a state ideological apparatus. After 1990, however, observable is that the educational problems of children have increasingly been treated individually, with genetic and neurocognitive interpretations of learning problems coming to the fore. The explosion of diagnosed dysfunctions, such as dyslexia, dysgraphia, dyscalculia, dyspraxia, hyperactivity with or without attention deficit, etc., is associated with the ever growing influence of neuroscientific and / or genetic regimes of truth, with respective disregard of the socio-political, economic, cultural and institutional preconditions for the development of these difficulties.

**Chapter Eight** (***Cognitively Enhanced, Behaviorally Improved - The Case of ADHD (Attention Deficit Hyperactivity Disorder*)** is dedicated to the most common, and at the same time most alarming, symptom of childhood and school medicalization, namely, attention deficit hyperactivity disorder, where medicalization teams up with medication. Over the last four decades, this has been the most rapidly spreading diagnosis in child psychiatry, and this disorder is generally treated by prescribing and administering the psychostimulant methylphenidate, best known as Ritalin. At the same time, however, attention deficit hyperactivity disorder is an emblematic example of over-diagnosis, overmedicalization, and over-medication of childhood behavioral disorders, there being no medical grounds for this diagnosis and prescription in a

significant proportion of the children diagnosed with hyperactivity. On the other hand, the school institution plays a significant role in this medicalization and medication of learning difficulties. In contrast, in this particular case the medical professionals perform not so much the role of initiators of a certain diagnostic imperialism as that of accomplices who reaffirm, formalize, and legitimize the medication initiated by the school. According to school authorities, Ritalin has exceptional pedagogical potential in terms of institutional education and training, since it both improves the learning abilities of children and allows teachers and educators to deal more easily with problem students, yet adhering to a pedagogy which relies on drug neuroenhancement and improvement, and on the erosion of the boundaries between medicine and education.

**The last part** of the study (***Consumer Automatisms, Distracting technologies and ICT in Education*****)** focuses on certain extrabiological factors that cause concentration difficulties. Formed in a high-speed environment of distracting technologies and consumer automatisms, modern children acquire specific hyper-reactivity, disinhibition and addiction to such intense stimuli. Therefore, it is hardly surprising that when they find themselves in another environment, that of school which requires them to learn how to sit for hours on end, read, write and listen carefully, they experience serious difficulties. However, the explosion of child behaviors indicative of the excessive speed of reactivity of modern children, their disinhibition, is currently interpreted exclusively in medical categories, while the fact of these predispositions and behaviors being conditioned by the systematic influence of modern marketing strategies and psycho-technologies is consistently neglected for the sake of a medical-pedagogical modeling and calibration of child behavior.

And if concerns about the toxic dimensions of the media and technology environment led to a number of educational initiatives, undertaken in the late 1980s and 1990s with a view to insisting on a revision of the purely applicationist approach to teaching ICT and focusing the efforts on the formation of a truly enlightened, critical attitude towards the new media, in recent years these emancipatory visions have been increasingly forced to give way under the pressure of economic interests and the associated logic of adaptability. It turns out that, under the pretext of rapid accumulation of information, development of new technologies and changing demands of the labor market, modern students should be provided, above all, with certain measurable, computable competencies that will allow them to constantly adapt and flexibly respond to the rapidly changing demands of the environment. And school, as we know it, must give way to

something completely different, because otherwise, as predicted not only by transhumanists but also by a number of modern educational strategies, it will simply become a thing of the past.

In our opinion, however, this policy of adaptability has very serious anthropological consequences, because it is inherent in man to construct, build himself not only by adapting to his immediate environment, but also by internalizing, integrating and transforming past unexperienced cultural traces, cultural experience transmitted through language, other sign systems and certain technical means. And the stakes of man being thus cultivated are not his passive adaptation, but rather his being worked into the symbolic order, the assimilation of the cultural experience, which will make possible the appearance of singularity. The appearance thereof suggests not so much adaptability as disadaptability, i.e. incorporation, but also transformation and renewal of the inherited knowledge and experience.

## II. Articles

### 2.To Eliminate the Human – from Cybernetics to Transhumanism

https://naum.slav.uni-sofia.bg/sites/default/files/fillpdf/literaturata_kniga_23.pdf

In his book *The Obsolescence of Humankind (1956)*, Gunter Anders speaks of the Promethean shame of the modern man that he is not at the height of the things he invented himself. At the heart of this shame stands the humiliating feeling that unlike a machine, the human being is an accidental, incomplete result of a blind, unpredictable, incalculable and uncontrollable process of conception and birth, that unlike machines, he is born, not produced. Desiring to imitate the technical tools, the modern man sets himself ever higher goals, becoming subject to a specific engineering whose ultimate goal is to transform tne man into a machine. The article examines this process of eliminating the human from the cybernetics through the algorithmic governmentality to the biotechnical enhancement.

### 3. The Disappearing Children: Biopolitics of the Postmortal Humankind

http://piron.culturecenter-su.org/wp-content/uploads/2019/10/17-hristova-disappearing-children.pdf

In his article *What if children became a rare species*? the speaker of the French Transhumanist Association *Technoprog* Marc Roux is committed to shed some light on the dark side of the lifespan increase, namely the probability that children might become an endangered species in a mankind of adults with radically extended lives. Because transhumanism doesn't only aspire to increase the healthy lifespan of the mature part of the population, but also to decrease, to reduce, to *rarefy* the youngest part of the population – the children. According to Marc Roux the following couple of decades will be a transitional period where people will start having less and less children and afterwards children will be made only in exceptional circumstances to compensate for the sporadic cases of death due to accidents, murders or suicides.

On the other hand, the fact that the lifespan increase of adults will probably call for child production as far as their development provides rather valuable primary raw material for rejuvenation, treatment and regeneration of the mature people, is anything but comforting. On the contrary, not only are we witnessing a radical transformation of the inter-generational relationship, where the older generation will no longer transmit its past, memory and cultural experience to the next, but also a bio/thanatopolitic in which at least on a molecular level the adults will incorporate fragments, traces of the future generations, which would never happen.

**4. Neuroenhancement – the End of School Education?**

https://jesbg.files.wordpress.com/2019/12/nhristova-nknuodoc.pdf

This article examines certain transhumanist projects for the end of school education, which should give way to a biotechnological and pharmaceutical neuroenhancement that blurs the boundaries between medicine and education. Specifically, it focuses on the alarming current processes of medicalization and medicamentilization of education, on the epidemic of diagnosed dysfunctions such as attention-deficit hyperactivity disorder and the increase in prescriptions for methylphenidate-based drugs for school-aged children.

**5. Medicalising Life, Medicalising School**

https://philol-forum.uni-sofia.bg/portfolio-item/br-10/

This article problematizes the contemporary processes of medicalization and

medicamentalization of life. Specifically, it focuses on medicalization and medicamentalization of education, on the epidemic of diagnosed dysfunctions such as attention-deficit/hyperactivity disorder and the increase in prescriptions for methylphenidate-based drugs for school-aged children.

**6. Does the Future Need Us and Our Children Yet?**

http://piron.culturecenter-su.org/wp-content/uploads/2018/06/Natalia-Hristova_Does-the-Future-Need-Us.pdf

The paper examines the recent transhumanist projects about the future of education and explores some associated with its contemporary negative educational processes and tendencies. The article discusses the anthropological consequences of provided transformation of education that aims to radically reconstruct/deconstruct the school through enhancement biotechnologies.

**7. Transhumanism and the End of Education (of Literature)**

https://bglitertech.com/wp-content/uploads/2019/06/Literatura-i-technika-nauchen-sbornik.pdf

If literary education is fundamental to the maintenance and development of modern democratic societies, as it forms the so-called "democratic emotions", then in the project of transhumanists this formation is called to give way to different type, namely of biotechnological and medical emotional, moral, cognitive modeling and enhancement. The article presents certain transhumanist visions for the future of education and critically analyzes their discursive strategies. Acting on the principle of "something for everyone", they most often resort to an incoherent and ideologically contradictory eclecticism of views and proposals. Such a strategy for the transhumanist project clearly fits into what Luc Boltanski calls domination without the ideology of contemporary capitalism, which does not need consistent argumentation because it is perceived as already victorious, and which is successfully instrumentalized, turned in its favor. even the criticism leveled at him.

**8. Regulation and Adaptation: The Neoliberal Education**

http://digilib.nalis.bg/dspviewerb/srv/image_singpdff/08571f62-06cf-4cc1-8841-c7e41f02adee

This article attempts to discover the current transformations in the school education and the tendency towards marketization of the education and research. The study examines the processes of spreading of neoliberal logic in the education and some associated with it negative digital practices and transhumanist projects.

**9. On a Recuperation of Democratic Potential of Literary Writing at School**

http://www.ejournals.eu/CahiersERTA/2016/Numero-10/art/8603/

This article attempts to discover the current transformations in literary writing teaching and the tendency towards deinstitutionalization of literature in literary education. These phenomena are result from the ability of capitalism to incorporate, to recuperate and turn for its purposes the criticisms addressed to it. That is what happens precisely to the artistic criticism of May '68, which the project of literary writing at school may be associated with. The study examines the processes of spreading of neoliberal logic in the literary education and some associated with it negative digital practices of writing at school. The article insists on a pharmacological approach to ICT in education and on their really critical, 'enlightened' and therapeutic use, as the only one that could contribute to deployment of the democratic, critical and emancipatory potential of literary writing.

**10. Drones, Automats, Algorithms Or The Non-human That Therefore I Am**

http://piron.culturecenter-su.org/wp-content/uploads/2016/10/Natalia_Hristova_Dronove_algoritmi.pdf

The text discusses some of the recent transformations in the vision about the human, which come into existence as a result of the digital era and the ever-expanding ubiquitous utilization of particular digital dispositives. For instance, governing through algorythms, which has been imposed after Big Data and Data Maining analysis aims exactly at suspending definite sources of insecurities as subjectivity, singularity, and imagination for the sake of security, control, and predictability while the growth of generalizing automatization threatens to turn the working

individual into a quickly disposable labour market product. In this subordinated to the neoliberal ideology vision of humanity, the educational institution of the school co-participates actively. Under the pretence of rapid accumulation of information and the changing requirements of the labour market it turns out that young people should be provided most of all with definite measurable competences which can be assessed and which will make them capable of adaptable flexibility and repeatable self-recycling. The new murder technologies, e.g. drone attacks, whose control resembles a video game and which according to Gregoire Chamyou put an end to the traditional war by replacing it with „menhunt" are probably some of the most disturbing anthropological consequences of the digital era.

**11. Linguistic Capitalism and Regimes of Truth in the Contemporary Digital Environment In: The Philological Project - Crises and Perspectives. Sofia: Faber. ISBN:978-619-00-0463-9, p. 502-506.**

Focusing on Google's algorithms, the article also traces the transformations that the current digital environment is causing on research, ways of thinking and truth regimes today. Data mining science imposes a new ideology that tries to present data as something immanent, transparent, natural, concealing their production and construction. It claims to automatically discover an absolutely objective, inaccessible to the human mind, sterile knowledge, cleansed of any individual subjectivity, and thus tries to erase that space between words and things, which is at the same time the space of criticism, of interpretation, of discussion, of human thought.

**12. About a Negative Pharmacology of New Media in Contemporary Literary Education**
http://journal.e-center.uni-sofia.bg/site/anotacia/?d=76

This text explores certain effects of new media which are toxic to the fragile mental apparatus of the child, such as the destruction of deep attention and the formation of hyperattention. In order to fulfill its goals, the school forms a rational and ethical attention through disciplines constituted through or around writing and reading. In the current situation, however, it finds itself in an unequal competition with distracting technologies and the invisible hand of the market. That's why the paper calls for the construction of the detoxifying and therapeutic uses of ICT in the educational field.

**13. New Media and the Neoliberal Economic Order as Challenges for Contemporary Education**
https://science.slovo.uni-plovdiv.net/documents/931150/0/NT2014-B.pdf/e45ffd7e-7391-4906- 9299-5c748388cbb3

The main topic of the report are some toxically influences off fragile mental structures of the child – destruction on deep attention and embodiment of hyper-attention from new media, impose on neoliberal logic of urgency and short-term doing, immediately satisfaction to consumer's attitude. In order to achieve their goals, to capture children's attention and direct it where they want, marketing and advertising actually destroy another form of attention - the so-called deep attention, which the school traditionally forms thanks to learning to read and write. Because the school is the only place and time in which this form of attention is purposefully mastered. The attention between memory and project, between retention and investment, between retentions and protentions, is not of the order of reflexes, but is something that is formed and which in turn is formed. The formation of attention, Stigler insists, has both cognitive and ethical dimensions, because to be attentive means to be attentive, to be focused in class, for example, and to be attentive to someone or something, to care about it.

**14. Learning to Write Fairy Tales - Traditional and Digital Design**
http://www.kim-kozloduy.com/docs/ELDE_conference_2011_e-Book.pdf

This paper discusses the theoretical groundwork for the writing of fairy tales, introduced to Bulgarian schools and based on the productions of Vladimir Propp and Gianni Rodari. Presented are the structuralist revisions of the research of the Russian formalist, on which the current school practice of learning to write narrative texts is founded. The text reveals the possibility of conducting this learning activity in an digital format, and accordingly presents the software products Conte3 and Story Write 32 and their educational potential.

**15. Learning Literary Writing in a Traditional and Digital Writing Atelier**
https://journal.e-center.uni-sofia.bg/f/downloads/2010/Broi%204/Nataliya.Hristova-

Peeva_Br4.pdf

This paper discusses the history, variety and functions of writing ateliers from the viewpoint of the practical learning of literature. Presenting the traditional design of writing ateliers and the specifics of some digital versions, the article reveals the writing ateliers' potential in the process of learning literature writing.