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A STIEGLERIANESQUE CRITIQUE OF TRANSHUMANISMS: ON NARRATIVES AND NEGANTHROPOCENE

During the time leading up to the 2016 U.S. presidential election, one candidate, Zoltan Istvan[1], was highlighted by a series of articles published for The Verge in 2015, which have been collectively posted on a transhumanist-like subpage titled "President for life". The word-play of 'for life' should not be lost, given that it is generally understood as a motto representing political beliefs that are described in the context of abortion as either *pro-life* (which is criticized by opponents with tags like anti-choice or pro-death [of the fetus]) or *pro-choice* (also criticized by their respective opponents as anti-life and, interestingly, also pro-death [of the mother]). Curiously in the case if transhumanism, it equates life as a measurable and organized process, which can be supplemented with technological subsistence, and correspondingly treats death as a defect or disorganization of life-supporting systems. To be then pro-life is to be automatically pro-science, pro-progress, etc., which is not obvious for supporters of the Voluntary Human Extinction Movement or within the context of planned parenthood. What is perhaps commonly at stake concerns the *rights* of citizens to be *free from death*, biological *limitation*, and other existential *defects*. What being pro-life in Istvan's case implies is a necessary maximalization of the *powers* of science, which are inherently mostly composed of various rituals of measurement and calculation. Yet, Istvan's campaign lacks to address exactly how such general healthcare rights should be

[1] Istvan, Z. (2014, December 08). Should a Transhumanist Run for US President? Retrieved February 11, 2019 from *Huffpost*: https://www.huffingtonpost.com/zoltan-istvan/should-a-transhumanist-be_b_5949688.html?utm_hp_ref=politics&ec_carp=3036486228793337834&guccounter=1.

implemented and enforced, which is debatable within the transhumanist community itself. If we are to take the current economic model of the U.S. as suggestive, then it would be reasonable to assume that these transhuman *rights* or freedoms would be attained similarly to the current capitalistic economic model, which deprives millions of citizens from accessing required healthcare via financial barriers or the logic of the market.

As symbolized by the coffin-shape of Istvan's *Immortality Bus™*,[2] if one tried to slow-down or hinder those who strive to accomplish the goals of the Epic of Progress (namely avoid death), then the accusation of being pro-death would understandingly be applicable to such a person. In fact, it is to oppose the stories that constructed an imagined yet necessary *technological determinism* in the great escape of humans from the species itself (i.e. *homo sapiens*) with the technical avoidance (or perhaps even a *différance:* to postpone or suspend death and differ life from it) of the defective biological processes that result in aging and death, which are viewed as avoidable problems rather than as a natural and inescapable stages of life, or in other words, the world can be remedied of death, at least nonvoluntary transhuman and posthuman deaths. Such a general narrative frames life and death as a *technical* problem, which demands solutions from the sciences such as engineering: the heart conceptualized as nothing more than a pump, or neuro-bioengineering: the brain as nothing more than a medium of replicable neurological patterns[3].

Not only does the phrase "president for life" bring to mind, in opposition, a hypothetical "*president for death*" and as such a metaphysical axiological dichotomy; it likewise signifies political vitality in a civic desire for eternality: a search for continuous vitality that ensures the ongoing existence of an organism, in particular human beings willing to supplement their vitality with technology that would theoretically provide support for the continuation of the processes that gave rise to that, which is called the living.

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[2] The Immortality Bus. (n.d.). Retrieved February 11, 2019 from: http://www.immortalitybus.com/.

[3] See Kurzweil, R. (2012). *How to Create a Mind: The Secret of Human Thought Revealed.* New York, NY: Penguin Books.

One article that I refer to is titled *The Eternal Promise*. It is a contribution to a political narrative that promotes cryogenics or "the promise of everlasting physical life for a price". It should be remembered that things like rituals, scripture, marriage, or tele-evangelism are techno-logical. Generally speaking, Istvan's position, as pointed out by Truman Chen, falls into a false dichotomy of framing political and social goals as either all-technological or as non-technological ones, where objective scientifically-supplemented human enhancement overrides and deliberately ignores real environmental and socio-political problems excluded by Istvan himself such as taxes and the economy, terrorism, border control, social security, or climate change; all simply for the potential of cheating death in exchange for money. The general claim is that technology will solve all of *our* problems, which is demonstratable to be false[4] and which does not distinguish who *we* are, which is to ask: whose problems? Likewise, Istvan's argument that "you can't argue against statistics" is also a symptom of dogmatic thinking, especially since Cathy O'Neil has demonstrated the existence of ritualistic faith held in data, algorithms and statistics, which are again human constructs not free from human error in spite of "objective" appearances, where outcomes are not necessarily predicted but created.[5] Moreover, the influence of abstract or non-material practices such as culture on human behavior are ignored or reduced to mechanisms, even though, at least in the case of emotion, there is no evidence of objective "emotion circuits" within the brain. Lisa Berrett, author of *How Emotions are Made,* calls this the emotion paradox and claims that they are culturally-constructed phenomena.

Astonishingly, what is most unbelievable comes from a lack of political nuance, where Istvan seems to claim that the prophets of Silicon Valley (such as those from Alphabet a.k.a. Google, Apple, Amazon, Facebook, and Netflix) are the "nice guys" that simply work as good-willed idols. He declares: "They seem a lot nicer. I think they're going to make it so that democracy and wealth actually does trickle down, faster than it has been in the past. It's not as fast as you would want it, but it's fast

[4] See: Huesemann, M., & Huesemann, J. (2011). *Techno-Fix: Why Technology Won't Save Us Or the Environment*. Gabriola Island, Canada: New Society Publishers.

[5] O'Neil, C. (2016). *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. New York, NY: Broadway Books.

enough"[6]. This case is one that is exemplary of the aesthetic crossroads present in today's landscape of unbelievable political promises that do indeed come at a cost and which have taken the shape of bluffs and empty gestures or perhaps even posturing, entertainment, and play.

Istvan was not necessarily gambling to win office, but rather to propagate his message into pop-culture and attract attention. However, it may be the case that Istvan has also failed in this realm as well, since the current narrative in US politics has been dominated by the rhetoric supplied by the 'Twitter President', i.e. Donald Trump. Although Istvan did not expect to win the election, he has had faith that his campaign could raise interest in the transhuman movements in such a way that it would provide credibility for positioning him as an advisor for the transhuman political issues raised. In other words, he was undertaking a task of marketing. One of his aims was to disseminate transhuman narrative, a task that requires one to consider how to make these vital goals politically marketable. However, his political ambitions have not come into fruition, since the role of the Head of the White House Office of Science and Technology Policy (or science advisor) has been vacant since Trump became president, at least until the appointment of Kelvin Droegemeier, who assumed office on January 2, 2019. In addition, Istvan's political aims have drawn criticism from members of the transhuman community; some of which may originate from an odd *a priori* withdrawal of transhumanism from the political sphere as proposed by Peter Rothman. Nevertheless, all technology (i.e. writing, without which there would be no laws or legal apparatus) necessarily is political in nature, since it is a matter of sharing well-being (and treating ill-being). The stories told to capture the attention of those, who have not yet been converted to the transhumanist movement, are thus also a matter of aesthetics, which is again a matter of politics, since it concerns a joint feeling-together orientated towards a common future.

A promise, in which we hope, evokes an image anticipating the fulfillment of an act of trust, which symbolizes that finally a being, no longer-only-human, is saved from all misery and limitations. Yet, with

[6] Chen, T. (2014, December 15). The Political Vacuity of Transhumanism. Retrieved February 11, 2019 from *Stanford Politics*: https://stanfordpolitics.org/2014/12/15/political-vacuity-transhumanism/.

the promise there is a shadow, time-dependent on the possibility of breaking it, which arouses a concern about the possibility of transforming what is superhuman into what is inhuman or barbaric. The credibility of a promise of salvation, coupled with the disbelief of living only in the brutal senselessness of survival, inspires primarily moods and emotions, which demonstrate that the diversity of co-living with others and with oneself-as-other has always been a caring transcendence (and sometimes transgression) over the realities one is faced with. To be able to await for a common future, we use a memory that has been jointly cultivated. Dialogically managed desires tend for life through non-living means, i.e. techno-logically. This requires knowledge, including how to live, how to act, how to conceptualize and how to recognize, which is conditioned by the ability to see, i.e. to *know how* to use at least the eye. What will be emphasized later, knowledge and information do not equate. Meanwhile, a danger is lurking from the threat of oblivion, which is a collapse, an affront or a Gehenna. This threatens with the necessity of an apocalypse, since the passage of time itself no longer promises, but it ensures that death will take away all forms of life, which is an *entropic* warranty. A temporary peculiarity locally opposed to entropy is called negentropy. Nowadays, calculation-based capitalist political and technological reality is dis-orderly, that is entropic.

Bernard Stiegler, as I will soon clarify, distinguishes Anthropocene as Entropocene, where entropy as a measure of irreversibility is produced on a mass scale. He postulates that, based on neganthropology, we must move into the epoch of the Neganthropocene, which does not reduce knowledge to a finite and calculable signal (like information). The current geological classification of the Anthropocene has come as a mark of human irresponsibility in terms of preserving the environment (or a rise in the irreversibility of losing ecosystems). The Earth is experiencing hastened entropy given the additional rise in the amount of junk, trash, and pollution generated by consumption, of which only an elite few are mostly responsible for the majority of increased entropy or disorder. Human existence has recognizably left its mark in the geological record thanks to this era that James Moore dubbed “The Capitalocene”. Renamed by Stiegler as the Entropocene, this era is characterized as one of sudden and an increased rate of entropy

threatening the biosphere everywhere on Earth. Just as negentropy is understood as Erwin Schrödinger has in terms of negative entropy or the organisms struggle against falling into a state of increased disorder, neganthropy is understood as negentropic (vital) diversification or the human struggle against the impoverishment (lack of diversification) of the world via technological pathways. In Stiegler's view, anthropy is a function of stupidity, or a form of massive standardization that is damaging for diverse forms of *knowledge*. One form of knowledge is embodied by storytelling, which concerns quasi-causality, care, and a *vital* ordeal of truth. Conversely, calculation is *anthropic*, since it produces closed entropic systems that reduce knowledge to information, and ultimately increase the amount of stupidity or thoughtlessness (fr. *la bêtise*).

The most important issue that needs to be addressed by the Neganthropocene in my reading is the question of whether life is worth living. This is manifestly within the domain of philosophy, not science. As I see it, the value of life is an incomparable value, which means that it cannot be computed nor calculated. It is mostly treated by the incalculable practices of myth, religion, or culture, such as the arts. Conversely, the value of death would also be inexplicable, since it divides by a radical and absolute zero. I imagine that it would indeed be a singularity when some autonomous and automatic electronic intelligence would quantify the value of suicide, which has always been an ordeal of questioning the infinite. In this hypothetical case, theological metaphysics, along with eschatological issues, could judge the dead god. For this is the power to pass judgment on the infinite unfulfilled future.

It seems to me that the transhuman promise of everlasting existence derives from the Cartesian dualism between *res extensa* and *res cogitans* with a metaphysical guarantee of certainty conceived meditatively and introspectively in the form of God. The subjective experience signaled by the proposal "I think" (I doubt therefore "I am") provides self-evidential existential claims based on beliefs that do not raise doubt from a first-person perspective. This led Descartes to mind-body dichotomy, where the mind controls the brain. This has survived today in the form of mottos such as "mind over matter" and the narratives presented in films such as *Transcendence* (2014), Self/less (2015), or

the Netflix series *Black Mirror*. The common premise, simplified for the sake of argument, is that the mind or *consciousness*, is separable from its vehicle and transferable to another medium (such as moving a ball from one box into another). This certainly resembles possession by spirits, demons, or ghosts. Such claims suggest, figuratively, that the essence of a book is not the paper, ink, or whatever, but the message it conveys (and which can be copied – even though books are not self-aware). It is primarily an informational being and not just a physical one. Putting it in terms of spiritualism, we should be able to vitally *possess* or *haunt* technology such as computers with *conscious* personal and distinct entities called minds. The fallacy then would be found in the presumption that minds are entities separate from anything they interact with, which may not be the case.[7] Besides, it may be as Spinoza has asserted[8] (Scheidt, 2015, p. 321), that the mind is in fact the ideal of the body, which has become today various modes of study called embodied cognition, privileging the body over the brain. Whatever its ontological status, the understanding of mind is not free from bias, in accordance with what Daniel Dennett declares, namely the mind-body bias results from his position that the mind is simply a user-illusion of the body. In other words, there is in fact no substance that could be transferred, duplicated, or deleted from one body into another[9]. There is no reason to imagine the promise of everlasting life being fulfilled by implanting ghosts into a machine, as conveyed by the storytelling of pop-transhumanism. Even if consciousness is an emergent property of a complex physical system - regardless of computational metaphors - it is not necessarily an informational system, and could be viewed as a system of sub-personal agents, which are not specialized as functions of awareness. However:

> Mind uploading looks for and rests upon the absolutes of anthropological dualism and strict reductionist materialism. This approach is actually

[7] Intra-Action. (2016, August 15). In *New Materialism*. Retrieved Febraury 11, 2019 from: http://newmaterialism.eu/almanac/i/intra-action.html.

[8] Spinoza, B. (1992). *Ethics*. Trans. S. Shirley. Indianapolis, IN: Hackett Publishing, IIP11, IIP1.

[9] Furthermore, mind-uploading also raises a plethora of questions concerning mind-deleting, mind-transfer, mind-uploading, mind-remixing, etc. Would it be possible to "delete" consciousness from the human body (create zombies)? How about body switching, that is transfer the mind of one man into the brain of, let's say, another woman and vice-versa (which is temporarily possible through the means of virtual reality thanks to illusions such as the Rubber Hand illusion).

> more reminiscent of the practice of theology, as Merleau-Ponty describes it in his essay, "In Praise of Philosophy." Philosophers, he writes, do not make claims about final transcendence and do not place hopes in any destiny, remaining instead committed to an understanding of the unfixed nature of our relations with nature and the contingency of history. To deny this contingency constitutes a nonphilosophical position—that is, a theology or an inverted theology (Merleau-Ponty's term for fixed an-titheism or atheism). (Scheidt, 2015, p. 325).

If we take the case of Cartesian mind uploading seriously, then why not start with more familiar territory such as transplantation? While ignoring minds, we can claim that brains, which do not operate linearly nor exclusively through electricity like computers, cannot be transplanted, at least not yet. Animal heads that have been transplanted (called Head Transplants or Full-Body Transplants) have not been successful. Moreover, neurons do not reside exclusively in brains, they extend to the organs. This means that perception is nothing like the kind described in Gilbert Harman's Brain-in-a-vat thought experiment. If, for the sake of argument, a head was successfully attached to a new donor's body, there is still considerable biology that cannot ensure that such patients would be victims suffering a worse version of locked-in syndrome. In fact, they would literally be like "souls", who are "prisoners" of their body, assuming that their biology functions idealistically.

In any case, neuroscience or science in general cannot be a means of justifying actions and qualifiers such as forgiveness, blame, free will, etc., that is to say they are not compatible with science, neither quantifiable nor reducible to a calculation. Note that a trap consists in the metaphorical power of language, which influenced religious, techno-scientific and philosophical views. One linguistic aspect concerns storytelling. Humanity has survived and evolved thanks to the fact that our survival strategy is based on cooperation with other members of our community. Christian Salmon claims in *Storytelling: Bewitching the Modern Mind* that a factor organizing cooperation, including filtering perceptions and arousing useful emotions, is the creation of stories, which today are widely used by marketing and politicians. Yuval Noah Harari also asserts in *Sapien*s and *Homo Deu*s that creating commonly professed myths and imagined orders is a criterion for mass cooperation between strangers.

In *The Act of Thinking*, Derek Melser says that cooperation, what he calls a form of concerting or synchronization of learned behaviors through a developmental psychology, determines how we "think" about thinking. According to him, every state of mind result from different ways of talking about action, which is a position of analytical or logical behaviorism. Melser considers that even the cognitive sciences have been misled by the metaphorical power of language. For him, the very act of thinking is an act, it is an action, something we do. This applies to all terms related to the mind such as: belief, faith, imagination, desire, hope, being conscious of something, and so on. It is an action that is acquired, learned, as well as voluntary and judged morally. Biological processes are not like this and we describe them in a different way in spite of metaphorization, certainly not through empathy or by performing activities. This is to say that natural processes like gravity cannot be actions. Meanwhile, the brain itself, according to Melser, is not a place where thinking takes place even though that is where many subprocesses co-occur within the body[10]. According to Melser, thinking cannot be studied as a natural process given its philosophical question of education, ethics and will. Hence, the mind *should not* be thought of as an exclusively natural process, but one that is *artificial* in the sense that it philosophically emerges thanks to social habituation, technological "exteriorization" with supports such as notebooks (or exosomatization) and most of all*, learning*. Being able to perceive even thinking itself requires empathy, given that we perceive in the broad context of action, as either activity or accessories of action. Melser claims that:

> Teaching brings about changes in the body (and, presumably, particularly in the brain) that enable pupils to perform actions they couldn't perform before. These changes include the creation of anatomical structures - such as effective new synapses and other elements of a firing pro-

[10] Possibly its due to patterns of firing or we can think of the mind (as a personality) as mostly as what we perceive or observe due to the sub-personal process of the frontal cortex (even though there is significant overlap between all brain regions, and information also flows bottom-up, that is from the limbic system). When we *mind the gap*, we express a function of self-control, which is paramount for any rational being. If the frontal cortex is damaged, social behavior is no longer inhibited, and the individual becomes much more flamboyant, aggressive, illogical, or hypersexual. Although, in another state, during REM sleep (or during orgasm), the frontal cortex is also hypofunctional, and when it is stimulated then dreamers become more self-aware.

> gram, and muscle mass – that would not otherwise have existed. If you teach a person how to drive a car, you change that person physically (Melser, 2004, p. 240).

I would also add that if we learn stories, common myths, about ourselves on the basis of collective or cultural upbringing, then transhumanistic stories will strive to understand that which is inconceivable in familiar ways of conceptualization, such as in a religious and mythical way. Learning about such things would surely create "artefacts" that would be also uploaded, which would create a premise of looking at the "singularity" as a continuation of human dogma. Besides, As Meghan O'Gieblyn discovered, there are striking similarities between the promises of transhumanism and the promises of Christianity. The source of the word "transhuman" derives not only from Julian Huxley but rather from Dante's Divine Comedy, in which the author portrays the conversion of the human body entering heaven into a new, "trans-humanistic" form. It should be noted that this movement is pluralistic, and quite inclusive, given that the transhumanist movement has amongst its ranks the Christian Association of Transhumanists, which seems odd due to the common rational and no-nonsense scientific subculture, but it makes sense considering the common promise both ways of life offer.

Beth Singler, in turn, pointed out that Transhumanists possess:

> A god-like being of infinite knowing (the singularity); an escape of the flesh and this limited world (uploading our minds); a moment of trans-figuration or 'end of days' (the singularity as a moment of rapture); prophets (even if they work for Google); demons and hell (even if it's an eternal computer simulation of suffering), and evangelists who wear smart suits (just like the religious ones do). Consciously and uncon-sciously, religious ideas are at work in the narratives of those discussing, planning, and hoping for a future shaped by AI (Singler, 2017, para 23).

Elsewhere, she indicates the significance of narration or storytelling:

> The odd thing about the anti-clericalism in the AI community is that reli-gious language runs wild in its ranks, and in how the media reports on it. There are AI 'oracles' and technology 'evangelists' of a future that's yet to come, plus plenty of loose talk about angels, gods and the apocalypse. Ray Kurzweil, an executive at Google, is regularly anointed a 'prophet' by the media – sometimes as a prophet of a coming wave of 'superintelli-gence' (a sapience surpassing any human's capability); sometimes as a 'prophet of doom' (thanks to his pronouncements about the dire

> prospects for humanity); and often as a soothsayer of the 'singularity' (when humans will merge with machines, and as a consequence live forever). The tech folk who also invoke these metaphors and tropes operate in overtly and almost exclusively secular spaces, where rationality is routinely pitched against religion. But believers in a 'transhuman' future – in which AI will allow us to transcend the human condition once and for all – draw constantly on prophetic and end-of-days narratives to understand what they're striving for (Singler, 2017, para 4).

One strand, Libertarian transhumanism promoted by Ronald Bailey and Glenn Reynolds, proclaims that the right to human enhancement is best guaranteed by the free market, which in their opinion is the economic system that creates the most wealth and personal freedom. But if we take a look around us, we can see that this is manifestly false, at least in the context of what I shall call "eudemonics" or a concern for the sharing of whatever makes life worth living. Bernard Stiegler does not distinguish which particular current of transhumanism is, in his view, a threat, perhaps all of them are grouped together, especially since his polemics mostly concern the algorithmic rule of contemporary capitalism, for which calculation is the very foundation of decision making. However, he does make reference to Chris Andersen and Ellon Musk as heralds of transhuman marketing. Simplifying Stiegler's view, the storytelling or marketing of transhumanism is an attempt to justify the subordination of *selection* to market criteria. This act is unjustifiable from the systemic point of view, i.e. entropy. This constitutes a radicalization of the shocks caused by the modern market, which is geared towards short-term profit. Furthermore, it is a threat to biodiversity and the diversity of intellects, i.e. the human intellect or the Aristotelian nous, which is the basis of knowledge, understanding or consciousness, which enables one to think sensibly or reflectively. Without a noetic stand, we plunge into non-reflective and reflective stupidity. Stiegler demands a geopolitical alternative. There is no question of criticizing the use of technology in a ludic or excessively conservative way. By no means. Rather, the issue is a concern about the future, our common technological future-to-come, as a care for the process of exosomatization of humans, which has been going on for centuries. It is a kind of eco-neuro-geopolitics practiced in order to protect slow circles of social and noetic relations, which are dwarfed by technologies operating at a speed of 'two thirds of the speed of light'. One solution, I suppose, might be to use automation so as to signal and

gather together various people in the same place in order to reflect and guard against thoughtlessness, which is functional stupidity or new barbarism. In other words, the goal is to produce noetic circles opening up the opportunity for new cognition as an episteme. It is a struggle against transhumanism understood as a pseudo-scientific ideology embodied by a global industrial project in the form of strategic marketing. In a footnote in The Neganthropocene's collection of lectures, it is clarified that

> Stiegler, *La Société automatique 2* has the specific goal of showing that this new age of ideology (in the sense of The German Ideology) coincides with a new age (in the way we refer to the age of gold or bronze or fire) of exosomatization, which the transhumanists understand as requiring no criteria other than that of the market, that is, of calculation, in order to non-allagmatically effect the choices generated by the artificial selection through which, for the last three million years, technical life has exosomatically pursued the organogenesis of the living. (Stiegler, The Neganthropocene, 2018, footnote 463, p. 310).

Memory is conditioned by selection, i.e. retention, which is understood in the Husserlian language as primary and secondary retentions and protentions. The contribution made by Stiegler is the question of tertiary retention, in other words broadly understood technics. Tertiary retentions condition the way in which memory "retains" itself or selects its primary and secondary retentions and protentions. In addition, it happens in a collective context. The organogenesis of life, in turn, is understood as the process of creating new organs such as biological organs, artificial organs (technology) and social organs (institutions, organizations, etc.). Historically, the selection process has been carried out on the basis of an exchange of what can be received and conveyed, which is a neganthropic *différance* that has been produced by exosomatization, which delays and differs from the effect of entropy (and anthropy) in a noetical organo-logical locality, which is relatively scalable. The relationship between economy and education was driven by that which is magical, supernatural, religious and political. When exosomatization, conceived as social solidarity, is broken or shocked, then society disintegrates, which we should beware of. During a 2016 lecture given in Paris, he explains:

> For if the primary evolution of hominids led to the stabilization of their cerebral structure, this movement continued with the creation of artificial organs, for example by cutting flint. We speak of digitization in Eng-

> lish to describe digital technology, but let's not forget that the basis of this word is the fingers of the hand, which shows the creative function of technology.[11] (Sermondadaz, 2016, para 2, all Trans. – A.M. unless otherwise noted).

The point is that the very act of creating tools, the *tekhnē* itself, epistemologically determines what we are as living beings. It is not a scientific fact that the mind is reducible to the brain. Despite the neuropathology of the following example, the challenge would be to explain how a 44-year-old man could function normally throughout his life without 90% of the brain, as described by Lionel Feuillet, Henry Dufour and Jean Pelletier in 2007. It is conceivable that a significant part of mind cultivation is conditioned by the immersion of the embodied brain into a specific organological or social environment, from which the mind emergently springs up and maintains itself as a metaphor for action. Then there is no substance, no *res cogitans* to be encrypted by computers or even supercomputers, since they would have to encode the entire universe and the social realities in order to simulate or generate *res cogitans*.

Stiegler stressed that "in my opinion, relying on a market economy to determine which innovations should be developed and which should be eliminated, as postulated by transhumanists, is a delusion" (Sermondadaz, 2016, para 4)[12]. We might suppose that this is an illusion akin to the methods of constructing World Images by market and political forces. So, it is something that is essentially the domain of narration. He goes on to say that "It is a form of social and economic Neo-Darwinism between those who are capable of living forever and everyone else" (Sermondadaz, 2016, para 4).[13] Here he points to the problem of technology distribution in society, since the technology of tomorrow is not available to those who do not have sufficient capital[14]. The conclusion can then be drawn that "the program of transhumanism

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[11] Car si l'évolution primordiale des hominidés a conduit à la stabilisation de sa structure cérébrale, ce mouvement s'est poursuivi par la création d'organes artificiels, à travers par exemple la taille des silex. On parle de digital en anglais pour qualifier le numérique, mais n'oublions pas qu'à la base, le mot désigne les doigts de la main, ce qui montre la fonction créatrice des technologies.

[12] Selon moi, s'en remettre à l'économie de marché pour décider des innovations à développer et de celles à tuer, comme le prônent les transhumanistes, c'est du délire.

[13] C'est une forme de néodarwinisme socioéconomique entre ceux qui pourront vivre éternellement et les autres

is a proletarianization of everything for the good of the oligarchy." (Sermondadaz, 2016, para 5).[15]

In Stiegler's account, information is conceptualized as not the same as knowledge, even as it's opposite. The argument goes that the value of information is that of diminishing returns when more people learn about it, since they lose an informational advantage over others. Contrariwise, the value of knowledge is one of growing returns, since the passage of time and intergenerational co-participation of producing knowledge of many people enrich it. In other words, the more people learn the more valuable knowledge becomes. Whereas the informational value of yesterday's news disappears, it can accumulate in terms of knowledge, or at least cultural capital. Foremost, knowledge is not only an interpretation of sense data or information, but it also is organized by curiosity, by what exceeds understanding, and commonly by surprise, since it leads to a stance of expecting the unexpected and to incalculable accidents that diverge away from an average. It is composed of moments of confronting one's knowledge with their non-knowledge or ignorance. Moreover it is the passing-around of feelings. Learning about an event such as the death of a loved one is not informational per se, but a participation that transforms the person learning about it, which then allows one to affect others with that that has stirred such an affect.

The ultimate goal should not consist in changing knowledge into a function of computation, which capitalism has done. What is needed is not necessarily an alternative to capitalism, but to entropy with a good dose of a critique of reason, where computation is a tool and not an end. The Neganthropocene's denizens then should re-appropriate technology's dynamics via the logic of the process of exosomatization, which is accidental and systemic. This, of course, is not self-sufficient and demands a logic of harm and remedy. New technology causes an interruption of behaviors that require its socialization in the aftermath of technological disruption. It also demands a transmission of what is unknown, of questions and problems rather than simply proposing consumable solutions.

[14] I would like to note that such issues were explored as early as the 19th century by H. G. Wells in the novel *Time Machine*.

[15] Le programme du transhumanisme, c'est la prolétarisation de tous au service d'une oligarchie.

Returning to accusation of Neo-Darwinism, what should be noted is that Darwin's account of evolution is concerned with the evolution of species, and not individuals, which is what transhumanist narrative proposes. The individual (perhaps not yet perceived as a result of a process of individuation) is both the subject and object of scientifically controlled evolution through individual supplementation by technics, which *aims* at creating a new species of humans. In light of this, it can be argued that human enhancement is a cultural goal and is characterized by features (everlasting life, etc.), which are only valuable culturally, at least not in a strict Darwinian sense, since evolution has no goals. Transhumanistic marketing is effective only in the short-term, since its ambitions could not be realized without implementing a centralized, global, and unified implementation scheme of unforthcoming authoritarianism. This leads to a future always disrupted by a danger of becoming obsolete before it has arrived:

> In effect, we may assert the existence of a dangerous gap between the transhumanist vision of evolution (and thus how to impact or steer it) and biological knowledge of these processes. Such a gap obviously does not favour a favourable reading of transhumanist proposals by biologists, physicians, and other members of the natural sciences, which is crucial for the success of posthumanity. They would probably not truly augment our capabilities, but rather prove to be only mere gadgets, as none of them would actually impact our biological, evolutionary-determined condition (Bardziński, 2014, p. 111).

What then of storytelling? It is a fundamental human need to understand the world around us by establishing different types of imagined orders that organize chaos and make sense of entropy, which is a need for teleological organization. Science satisfies this as the sole method of discovering objective knowledge and truth. It is a way of achieving transhuman ideals, which are themed by motives of control or mastery, progress, self-creation, and human superiority (framed as the human aim for divinity, or a divine mode of existence), and take-over of the galaxy. It establishes an understandable imagined order, or Scientific Image. By "basing teleological thinking upon 'objective' science and weaving it into supposedly pure, rational theories, while satisfying their imaginative needs and need for meaning, they end up expecting something rather analogous to religious salvation for humanity" (Franssen, p. 15). Whatever myths are disseminated, each modern

transhumanist must somehow perceive themselves, which is accomplished with the use of some source of energy limited thermodynamically, and hence a subject of entropy.

Altogether, in the light of these considerations, it can be concluded that an important task in the field of transhumanism concerns aesthetics, i.e. the capability to appropriate transhumanism and compose the promised Neganthropocene in one's stories and proposals. The Neganthropocene results from the intricate ability of living organisms to temporarily and locally delay entropy, i.e. death. The very act of exosomatization makes it a question of anti-anthropy, or neganthropy, because the mode of action can be either curative or toxic, in other words pharmacological, for noetic forms of life. If this is abandoned, then automatic calculation processes will accelerate a collapse into a hegemonic reality of world optimization at the detriment of the majority for just the benefit of the few. Transhumanism founded on the principles of the free market is a dangerous form of Neo-Darwinism, because natural selection understood as the survival of the fittest systematically disintegrates communities, oppressing those who are not privileged in hyper-industrialized and late capitalist society. Market forces exploit bodies in a way that contravenes cultural heritage systems and the transfer of knowledge, which is already a reinforcement of the power of entropy and anthropy, the stupidity of a new barbarism.

BIBLIOGRAFIA

Agar, N. (2011, November). Ray Kurzweil and Uploading: Just Say No! *Journal of Evolution and Technology, 22*(1), pp. 23-36.

Agar, N. (2014). On the Prudential Irrationality of Mind Uploading. In R. Blackford, & D. Broderick (Ed.), *Intelligence Unbound: The Future of Uploaded and Machine Minds* (pp. 146-160). West Sussex: John Wiley & Sons, Inc.

Anderson, C. (2008, June 06). *The End of Theory: The Data Deluge Makes the Scientific Method Obsolete*. Retrieved from Wired: https://www.wired.com/2008/06/pb-theory/

Bardziński, F. (2014). Transhumanism and Evolution: Considerations on Darwin, Lamarck and Transhumanism. *Ethics in Progress*, pp. 103-115. Retrieved from https://pressto.amu.edu.pl/index.php/eip/article/viewFile/9365/9069

Barrett, L. F. (2017). *How Emotions are Made: The Secret Life of the Brain.* New York: Houghton Mifflin Harcourt.

Brooker, C. (Creator). (2015-2018). *Black Mirror* [TV Series].

Chen, T. (2014, December 15). *The Political Vacuity of Transhumanism*. Retrieved from Standord Politics: https://stanfordpolitics.org/2014/12/15/political-vacuity-transhumanism/

Dennett, D. C. (2016). Illusionism as the Obvious Default Theory of Consciousness. *Journal of Consciousness Studies*, pp. 65-72. Retrieved from https://ase.tufts.edu/cogstud/dennett/papers/illusionism.pdf

Feuillet, L., Dufour, H., & Pelletier, J. (2007, July 21). *Brain of a white-collar worker*. Retrieved from The Lancet: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(07)61127-1/fulltext

Franssen, T. (n.d.). *The Mythological Roots of Transhumanism.* Retrieved from Academia.edu: https://www.academia.edu/1789552/The_Mythological_Roots_of_Transhumanism

H+Pedia. (2017, July 04). *Elon Musk.* Retrieved from H+Pedia: https://hpluspedia.org/wiki/Elon_Musk

Harari, Y. N. (2014). *Sapiens: A Brief History of Humankind.* New York: Harper.

Harari, Y. N. (2016). *Homo Deus: A Brief History of Tomorrow.* London: Harvill Secker.

Huesemann, M., & Huesemann, J. (2011). *Techno-Fix: Why Technology Won't Save Us or the Environment.* Gabriola Island: New Society Publishers.

Intra-Action. (2016, August 15). Retrieved from New Materialism: http://newmaterialism.eu/almanac/i/intra-action.html

Istvan, Z. (2014, December 08). *Should a Transhumanist Run for US President?* Retrieved from Huffpost: https://www.huffington-post.com/zoltan-istvan/should-a-transhumanist-be_b_5949688.html?utm_hp_ref=politics&ec_carp=3036486228793337834&guc-counter=1

Keep, E. (2015). *President for Life: Can Zoltan Istvan beat Hillary, Trump and death itself?* Retrieved from The Verge: https://www.thev-erge.com/a/transhumanism-2015

Keep, E. (2015). *The Eternal Promise: Meet the individuals offering im-mortality - at a price*. Retrieved from The Verge: https://www.theverge.com/a/transhumanism-2015/cryogenics-hu-man-research

Kurzweil, R. (2012). *How to Create a Mind: The Secret of Human Thought Revealed.* New York: Penguin Books.

Melser, D. (2004). *The Act of Thinking.* Cambridge: The MIT Press.

Mercer, C., & Trothen, T. J. (Eds.). (2015). *Religion and Transhumanism: The Unknown Future of Human Enhancement.* Oxford: ABC-CLIO, LLC.

Moore, J. (Ed.). (2016). *Anthropocene or Capitalocene? Nature, History, and the Crisis of Capitalism.* Oakland: PM Press.

Morello, L. (2019, January 03). *Donald Trump finally has a White House science adviser* . Retrieved from Nature: https://www.nature.-com/articles/d41586-019-00015-1

Nabet, F. (2019, February 04). *Le transhumanisme n'est pas une option*. Retrieved from Transhumanisme et Intelligence Artificielle: https://iatranshumanisme.com/2019/02/04/le-transhumanisme-n-est-pas-une-option/

O'Gieblyn, M. (2017, April 18). *God in the machine: my strange journey into transhumanism*. Retrieved from The Gaurdian: https://www.theguardian.com/technology/2017/apr/18/god-in-the-machine-my-strange-journey-into-transhumanism

O'Neil, C. (2016). *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy.* New York: Broadway Books.

Ott, B. L. (2016, December 23). The age of Twitter: Donald J. Trump and the politics of debasement. *Critical Studies in Media Communication*, pp. 59-68.

Pfister, W. (Director). (2014). *Transcendence* [Motion Picture].

Salmon, C. (2017). *Storytelling: Bewitching the Modern Mind.* London: Verso.

Scheidt, H. (2015). The Fleshless Future: A Phenomenological Perspective on Mind Uploading. In C. Mercer, & T. J. Trothen (Ed.), *Religion and Transhumanism: The Unkown Future of Human Enhancement* (pp. 315-328). Oxford: ABC-CLIO, LLC.

Sermondadaz, S. (2016, December 14). *Bernard Stiegler: "Le transhumanisme est un néodarwinisme dangereux"*. Retrieved from Sciences et Avenir: https://www.sciencesetavenir.fr/high-tech/le-transhumanisme-est-un-neodarwinisme-dangereux-avertit-bernard-stiegler_108864

Singh, T. (Director). (2015). *Self/less* [Motion Picture].

Singler, B. (2017, June 13). *Why is the language of transhumanists and religion so similar?* Retrieved from Aeon: https://aeon.co/essays/why-is-the-language-of-transhumanists-and-religion-so-similar

Stiegler, B. (2014). *Symbolic Misery - Vol. 1: The Hyperindustrial Epoch.* Cambridge: Polity Press.

Stiegler, B. (2017, August 30). *The New Wealth of Nations.* Retrieved from Academia.edu: https://www.academia.edu/36919042/Bernard_Stiegler_The_New_Wealth_of_Nations_2017_

Stiegler, B. (2018, April 29). *Hangzgou Seminar, 29 April 2018.* Retrieved from Academia.edu: https://www.academia.edu/36540202/Bernard_Stiegler_Hangzhou_Seminar_29_April_2018_

Stiegler, B. (2018, April 9). *Sculpting and Cultivating the Neganthropocene: Hangzhou Seminar, 9 April 2018.* Retrieved from Academia.edu: https://www.academia.edu/36875964/Bernard_Stiegler_Sculpting_and_Cultivating_the_Neganthropocene_Hangzhou_Seminar_9_April_2018_

Stiegler, B. (2018). *The Neganthropocene.* (D. Ross, Trans.) London: Open Humanities Press.

Stiegler, B. (2018, January 11). *The Ordeal of Truth: Causes and Quasi-Causes in the Entropocene.* Retrieved from Academia.edu: https://www.academia.edu/35772749/Bernard_Stiegler_The_Ordeal_of_Truth_Causes_and_Quasi-Causes_in_the_Entropocene_2018_

Stiegler, B. (2018, March). *The Power of Knowledge and Art in the Twenty-First Century.* Retrieved from Academia.edu: https://www.academia.edu/36659950/Bernard_Stiegler_The_Power_and_Knowledge_of_Art_in_the_Twenty-First_Century_2018_

The Immortality Bus. (n.d.). *The Immortality Bus*. Retrieved from http://www.immortalitybus.com/

Wikipedia. (2018, February 14). *Body transfer illusion*. Retrieved from Wikipedia: https://en.wikipedia.org/wiki/Body_transfer_illusion

Wikipedia. (2019, January 29). *Transhumanist politics*. Retrieved from Wikipedia: https://en.wikipedia.org/wiki/Transhumanist_politics#Libertarian_transhumanism

ABSTRACT

A Stieglerianesque Critique of Transhumanism: On Narratives and Neganthropocene

While drawing from the philosophy of Bernard Stiegler throughout the paper, I commence by highlighting Zoltan Istvan's representation of transhumanism in the light of its role in politics. I continue by elaborating on the notion of *the promise of eternal life*. After that I differentiate between subjects that are proper for philosophy (such as the mind or whether life is worth living) and science (measurable and replicable). The arguments mostly concern mind-uploading and at the same time I elaborate on a simple critique of mind-body dualism, which is one of the key imagined orders exploitable by technologies in the narratives of transhumanism present in popular culture. This is reframed as a problem of action. The focus of this article is on the claim that certain transhumanisms are dangerous forms of Neo-Darwinism. It comes from a critical assessment of capital and the exploitation of bodies through market forces. Entropy is a process of growing disorder, while neganthropy is an anthropological struggle against exploitation, not only of bodies, but of all ecosystems of the Earth. The arguments of Stiegler from a collection of lectures are recapitulated, and his claims are presented through the prism of transhuman narrative, with a particular focus on Christian Salmon's position in the book *Storytelling: Bewitching the Modern Mind*.

KEYWORDS: Neganthropocene, Critique of Transhumanism, Bernard Stiegler, Storytelling, Marketing.

ABSTRAKT

Stiegleriańska krytyka transhumanizów: o narracjach i negantropocenie

Czerpiąc w całym tekście z filozofii Bernarda Stieglera, rozpoczynam od prezentacji transhumanizmu Zoltana Istvana w świetle jego roli w polityce. Kontynuuję rozwijając koncept *obietnicy życia wiecznego*. Następnie rozróżniam tematy właściwe dla filozofii (takie jak umysł lub to, czy życie jest warte życia) i nauki (to, co mierzalne i powtarzalne). Przedstawiam argumenty dotyczące przede wszystkim transferu umysłu (*mind-uploading*), a jednocześnie omawiam prostą krytykę

dualizmu umysł-ciało, który jest jednym z kluczowych, wykorzystywanych przez technologie wyobrażonych porządków w narracjach transhumanizmu obecnych w kulturze popularnej. Przeformułowuję to jako problem działania. Artykuł skupia się na twierdzeniu, że niektóre transhumanizmy są niebezpiecznymi formami neodarwinizmu. Wynika to z krytycznej oceny kapitału i eksploatacji ciał przez siły rynkowe. Entropia jest procesem narastającej dezorganizacji, podczas gdy negantropia jest antropologiczną walką z eksploatacją nie tylko ciał, ale wszystkich ekosystemów Ziemi. Argumenty Stieglera ze zbioru wykładów zyskują podsumowanie, a jego twierdzenia przedstawiane są przez pryzmat transhumanistycznej narracji, ze szczególnym uwzględnieniem stanowiska Christiana Salmona wyłożonym w książce: *Storytelling: Bewitching the Modern Mind*

SŁOWA KLUCZOWE: negantropocen, krytyka transhumanizmu, Bernard Stiegler, narracja, marketing .