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THE FANTASY OF MIND-UPLOADING. *DEFAULTS* AND THE ENDS OF JUNK.

Adrian Mróz

Abstract: From a behaviorist perspective, the desire to upload "minds" is *already* being realized on a mass, hyper-industrial scale thanks to the convergence of cognitive computing and Big Data. The accusation is that the "mind" is not an entity that exists intracranially. Instead, it is conceived as a process of individuation, which occurs in different modes and numbers. Some narratives of mind-uploading and technics in popular culture are explored: *Transcendence* (2014, dir. Wally Pfister) and *Player Piano* by Kurt Vonnegut. The discussed issues consider Bernard Stiegler's phenomenological notion of *originary default* and Thierry Bardini's analysis of junk. Several questions are raised regarding miscalculations, accidents, in addition to Nicolas Agar's discussion on the end of humanity, and Daniel Dennett's Multiple Drafts theory within the context of exteriorization, which is considered as constitutive of interiority.
Keywords: *Homo Nexus*, Mind-Uploading, Data Behaviorism, Psychoinformatics, Post-Humanism, Alienability

Abstrakt: Z perspektywy behawiorystów, postulat *uploadowania* „umysłów" jest już realizowany na masową, hiper-przemysłową skalę dzięki inteligentnego przetwarzania dużego i różnorodnego zbioru danych. Następuje nawiązania do argumentu, że „umysł" nie jest bytem, który istnieje wewnątrzczaszkowo. Raczej jest on pojmowany jako proces indywiduacji, który przebiega w różnych trybach i w różnych ilościach. Przeanalizowane są niektóre z występujących w kulturze popularnej narracji o wczytywaniu umysłu do komputerów i o technice: *Transcendencja* (2014, reż. Wally Pfister) oraz *Pianola* Kurta Vonneguta. Poruszane zagadnienia uwzględniają fenomenologiczne pojęcie *originary default* Bernarda Stieglera oraz *junk* Thierry'ego Bardiniego. Kilka wątków związanych zostało z pomyłkami, przypadkami, a także z dyskusją Nicolasa Agara na temat końca człowieka i teorią *Multiple Drafts* Daniela Dennetta w kontekście eksterioryzacji, która traktowana jest jako konstytutywna dla wnętrza. **Słowa klucze**: *Homo Nexus*, mind-uploading, behawioryzm danych, psychoinformatyka, post-humanizm, obcość.

I claim that the question of mind-uploading is posed incorrectly. Suppose we accept the methodological behaviorist paradigm and, in addition, consider the "mind" as Derek Melser proposes, i.e., the covert tokening of the overt tokening of concerted activity (2004, p. 56), together with the context of Big Data. In that case, we could claim that we are already uploading minds to data networks. For most users, this is a process that is underway without a proper understanding of the situation, so without genuine consent. Contemporary industrial mind uploading is being developed today by complex new data behaviorism (Rouvroy, 2013) powered by psychoinformatics (Montag, Duke, and Markowetz, 2016; Gupta et al., 2018). User profiles are models of the patterns of observable gestures and actions measured, recorded, stored, and processed. Such systematic network behaviorism creates digital doppelgangers that are a sort of copy of users' minds for the sake of predictability and the reduction of risk, the singular, through hyper-synchronization. What is worrisome is the priority of increasing the speed of commercial access to brains within such an industrial context (Stiegler, 2014, 2015). Moreover, an essential part of our identity is nonidentical, such as how information and noise are relevant to each other, where what I cannot understand is constitutive of knowledge itself. For example, I can never know the time of my death, which is the most fundamental Heideggarian nonknowledge for *Dasein*.

Technology, junk, chaos, mistakes, and story-telling profoundly involve and bind the relationships of individuation amongst the singular, dual, and plural collective selves and non-selves and their proper milieux for making sense, including the aesthetic and sensible environment of the noetic and sensorial. Through exosomatic organogenesis (Stiegler, 2017) or exteriorization, the other constitutes the selfsame—inalienability characteristically involves alienability. To phrase it in a catchier way: we human beings are always more our accidents than our choice (Marquard, 1994, p. 132). It is a matter of engaging and playing with frequent and

deliberately unforeseeable accidents, or the defaults of making decisions in the form of behavioral choice architecture, or else their alienization qua routine (Ariely, 2009).

Such phenomena would ensue an exteriorization and grammatization of will itself, as controlled losses of control – like the famous Jarocin Festival in communist Poland, which supposedly functioned like a safety valve (Karendał, 2014, p. 51). Today, such a safety-valve in the times of data behaviorism demands the exteriorization of what Kant calls the faculties of judgment, their automatization and predictability, which also brings the threat of the proletarianization of will, which the climate crisis of the Anthropocene, i.e., Capitalocene or Entropocene, exemplifies (Stiegler, 2018; Internation Collective, 2020). In this sense, mind-uploading is an intensification of the loss of all kinds of knowledge, hyper-proletarianization, since it presupposes the loss of the unpredictable, given that the automated cognizant mind is subordinated to out-of-body control, a performative project based on misleading assumptions about identity (Mróz, 2019a). However, it is essential to note that automatization is a condition of autonomy, or dis-automatization, not its loss.

Before we learn to identify ourselves, we need to adhere to an identifying being, locate it. The only way this is possible is by anticipating it, projecting it. As a perception, this is a kind of hallucination. In other words, the self does not exist, but as Bernard Stiegler would say, it consists; it is a Husserlian eidos, and it is always inadequate, at least up to the moment of death. Stiegler argues that we cannot measure or see what we do not already expect (2011). Keeping this in mind, we can follow Dominic Pettman in *Human Error*, who asks and replies: "where is the human? […] *wherever there is a constitutive technology of self-recognition*. Whether that technology is a camera, a gun, a broken-in horse, a wife, or the U.S. Constitution itself matter less than the capacity to register, record, and transmit this recognition" (Pettman, 2011, p. 52). We may add language, DNA or "junk DNA" (Bardini, 2011, p. 7) to this list with which we individuate the self in different numbers (singular, dual, plural), and

modes (biologically, post-biologically, and institutionally) which in Pettman's argumentation would be another part of the Anthropological Machine.

> For Giorgio Agamben, the primary motor in this autogenetic, narcissistic narrative of humanity is the "anthropological machine": an abstract apparatus comprising of all those potent symbols, figures, and trope of belonging and exclusion. […] it sorts the humans from the nonhuman, subhuman, inhuman,post-human, and so on. For Agamben, the crucial component of the machine is the way its optics have been rigged (in both senses) to encourage self-reflection and nurture a sense of exceptionalism and superiority by virtue of one's proper humanness.
>
> (Pettman, 2011, p. 8)

The Anthropological Machine intensifies diffraction through which the selves pass in their co-constitution, a vanity mirror for the human species where the spectacle to behold would be our dispersed and alien minds. It is a circumstance of alien semantics, i.e., a hyper-virus. (Bardini, 2011, p. 179). At the same time, Nicholas Agar affirms that "[…] there is no consensus on what it means to be human" (2010, p. 19). We cannot distinctly locate ourselves in mode and number, just only reduced to ontological minds embodied in flesh. Furthermore, we may accent that humanity has no exclusive access to technologies or feelings since they are observed in the animal world. In addition, the work *Vampyrotheuthis Infernalis* is a hybrid mirror, where we see that humans, like squid, live as functions of their objects (Flusser and Bec, 2012, p. 63; Winnicott, 2016). According to Pettman, a cybernetic triangle of human, animal, and machine (2011, p. 5) articulates that we are sites, the traces we leave behind, or what Stiegler describes in terms of tertiary retentions. Mind-uploading, transhumanist story-telling attempts to personify the Anthropological Machine by excluding location, the biological, incorporating only the post-biological, abstract, and incidentally, the bureaucratic, i.e., algorithmic. However:

> The body is sight and site, we know as representation, even when we fix our gaze on the three-dimensional breathing body of the self or the other, in that we "consider" the data recorded by the retina via language, whether spoken or silent, and language is, perforce, representation (and not reality).
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> (Leppert, 1995, p. xx)

Whatever the case may be, the mind most certainly is a case of mistaken identity. Humans attribute a great deal of effort in trying to understand the concept of consciousness, even as a hallucination as Daniel Dennett attempts to address via heterophenomenology, in which the processes and counter-processes of consciousness are misrepresented, perhaps, by cognitivism, i.e., as reduced to something finite, computational (Stiegler, no date). Nonetheless, in terms of the Heideggerian *Sein zum Tode*, or the fear of death, proponents of what Agar describes as post-humanist radical enhancements wish to continue infinite sentient life after death (Mróz, 2019a). They have the right spirit, a vital attitude, which continuously struggles to make a différance: reverse, deflect, delay, and defer entropy. However, as thermodynamics dictates, negentropy and anti-entropy can only be temporary and localized processes. Set forward by Ray Kurzweil, the idea of mind-uploading is an attempt at prolonging mental existence indefinitely and through a calculated order, but such a fantastic attempt towards out-of-body mental experiences forgets and leaves behind all out-of-order experience. Such systematic exteriorization orthopraxically valorizes the junk-ridden and ironically excludes anything incalculable or unmeasurable – the methodological behaviorist definition of the mind – and the unfortunate, the alien, and experiences of the flesh, including dis-ease and dis-comfort (Mróz, 2019b).

In 2014, Johnny Depp starred in the film *Transcendence*, directed by Wally Pfister, as an academic hero, Dr. Will Caster, confronted by the immediate coming of death due to radiation poisoning. In an attempt to save the

scientist's life, his significant other and colleagues connected his brain to a quantum computer that would create a digital copy of the patterns of his consciousness in the informatic universe of software and hardware. The mind-upload was a success. The uploaded mind of Caster then grew beyond limitation by orchestrating the actions of others to create an environment hospitable to its post-humanistic being. In the end, humanity was hostile, terrified, and awe-struck by its complexity and supercomputer tactics. The effects of such modeling are much less exciting today, and the algorithms described by Cathy O'Neil are already replicating the past as the future in systematically negative ways, bypassing the infinity of knowledge (2017). Returning to the movie, humans formed a plan to destroy the post-upload and out-of-control Caster by sending a virus. The plot ends in a tragedy reminiscent of the Shakespearian *Romeo and Juliet*. Caster's digital mind sacrifices itself by encountering its virus-infected romantic partner; both are united in death. Still, a part of it (or them) remains in an isolated part of their garden, leaving the viewer to fill in the gaps.

Ray Kurzweil could be considered the real-world counterpart of Caster (obviously in desire, not in fact). The primary fantasy of mind-uploading would be eternal life resulting from reaching The Singularity, a concept of a utopian next-gen existence, where the corpus of such a mind would be the entire matter and energy of the existing universe. Kurzweil points out that mind-uploading may be more gradual than depicted by the film *Transcendence*. It would be achieved by neuroprosthesis, the like of which Elon Musk is currently developing with NeuraLink. The idea is to replace non-computational components with computational ones part by part, passing from the biological to the post-biological. The mythology of Hephaestus, the god affected by default and master of automatons and motion, comes to mind. The fact that he is married to Aphrodite, who is drawn to the god of war, is significant for technics and desire. The enigmas of mind-uploading boil down to the possibility and infinite desirability of a future, which would be jeopardized by its short-circuiting, to put it in Stieglarian terms.

Agar claims that mind-uploading will most definitely be a radical existential change. It would be a situation, where we in biological terms, exit the species of *Homo Sapiens*. Perhaps a new post-biological species would follow, such as *Homo Nexus* (Bardini, 2011, p. 145) or *Homo Deus* (Harari, 2019). Nevertheless, it is challenging to attribute irrational traits to hardware and software. Perhaps we would be dealing with a new branch of life itself, that is if it could be classified as life, or what Stiegler calls the pursuit of life through the non-living. Furthermore, Agar argues that the post-human would "neither [be] capable of thinking like human brains, nor indeed of entertaining a single thought." (Agar, 2010, p. 39). We could say that this absence of thought would be due to the *originary default* of thought (Stiegler, 1998a, 1998b).

In addition, there is a hope, part of Agar's following argument, that "the uploaded mind would be more of an upgrade than a copy" (Agar, 2010, p. 40). This argument takes into account the fact that energy travels faster in electric circuits than in biochemical wirings. Modern decision-making software travels at the speed of light, while human thought slogs on painfully slow. Such high-*techne* is implemented in places such as Wall Street. As Stiegler frequently points out about the 2008 Financial Crisis and Alan Greenspan's confession that no one understood why this happened, proletarianization is a universal effect of hyper-industrialization.

Furthermore, Agar argues that mind uploading equates with death itself, depending on technological advances. We could add that the Kurzweilian singularity would rather be a situation of entropic hyper-deindividuation, a hastening of the processes drifting towards the most probable distribution of matter and energy, hyper-entropy. It is also worth recalling that Shannon's definition of information is formulated based on entropy.

Furthermore, John Searle's Wager (parallel to Pascal's Wager) considers existential death if weak AI is the destination of our uploaded minds of their former destroyed brains. The technological possibilities seem to be full of speed bumps that distance the possibility of mind-uploading—

especially considering that holistic behaviorism considers the body and mind as one (Sybilski, 2007, p. 11), notably in terms of non-cranial cognition. All in all: "Uploading requires not only a completed neuroscience – total understanding of what is currently the least well-understood part of the human body – but also perfect knowledge of how to convert every relevant aspect of the brain's functioning into electronic computation" (Agar, 2010, p. 67). The presumption forgets the brain's exteriorization of its computations to other parts of the body, which is more like a *holobiont*, a complex interwoven relationship of alien organisms that make up the human organism.

In Dennett's heterophenomenological account, he proposes an argument for narrative selves, often comparing them to a machine but not necessarily suggesting a post-humanistic alternative (but he does take robotics as a possibility). Strictly, Dennett is trying to grasp an understanding of our human consciousness. According to Multiple Drafts Theory, conscious experience results from Darwinian adaptation and the aesthetics and carnalities of sexual selection that created the biochemical reactions that result in consciousness shared through pandemonic thought processing. This account forgets the integral role of technics in shaping consciousness, i.e., episteme, as Stiegler argues (Stiegler, 1998a, 1998b). Many animals from lower branches of evolution have the components that we do. In Aristotelean terms, human mental experience affects the historical development of vegetative and sensitive souls as conditions of the noetic. Consciousness itself is not a continuous experience; it is segregated and erratic. Stiegler argues that the same is true of the noetic soul, which suffers from noetic regression. Such a regression does not equate to the conditions of a sensitive soul, precisely because it is a noetic regression, which the French philosopher designates as acting-out, and which I would supplement with being hyper-vigilant, or acting-in, too much self-control, which is symptomatic of the pathologies of what could be called sexual anorexia, or toxic repression of the erotic, desire (Carnes and Moriarity, 1997). In this context, we may raise an interesting circumstance of double individuation:

> Two or more bodies sharing a single self! There may actually be such a case, in York, England: the Chaplin twins, Greta and Freda (Time, April 6, 1981). These identical twins, now in their forties and living together in a hostel, seem to act as one: they collaborate on the speaking of single speech acts, for instance, finishing each other's sentences with ease or speaking in unison, with one just a split-second behind
>
> (Dennett, 1991, p. 422).

Dennett advances the Chaplin twins as an example in the context of Multiple Personality Disorder. Mind-uploading is an ableist concept, and there is an undecidable default: which mind would we upload? At the moment, it is even more challenging to imagine a computational machine that runs simultaneously many operating systems, unless it is a quantum computer, but that for now is not a plausible industrial option for mass production. And why just humans? Wouldn't mind-uploading be anthropocentric and a form of species chauvinism as well? Any organism capable of responding to stimuli must have some dimension of sentience.

Furthermore, Dennett writes, "a person is not just a body; a person *has* a body. […] The boundaries of Jones are not identical to the boundaries of Jones's body" (Dennett 452). It is part of a belief environment. Identity is stuck in being's web (or becoming as some authors prefer – such as Pettman and Bardini) and grounded into realism.

Suppose consciousness has a body and is part of the world, then understanding DNA also is hopeless for mind-uploading as a radical enhancement. Why? Because it is a bunch of junk, as argues Bardini, 98.5% of the DNA we carry is noise and fossilized copies of past viruses, bugs, and errors. It may provide some functional creative forces for adaptation. However, most of it is not expressed and not researched (only the 3% or so is) and are compared to fossils that inhabit the human genome – humans share 99.9% genetic identicality, where the 0.1% difference is one that evolutionarily matters. From Richard Dawkins' Selfish Gene, memeplexes, to bio-photonic emissions, as a much more

holistic level of being, to virus and retrovirus replication, Bardini presents a magnitude of positions, which illustrate the problems of naming things, as well as the problems of the identity of the post-human. *Homo Nexus* is the interconnected and networked being, a knot, which modern psychoinformatics anticipates within the context of the contemporary belief in Data Religion (Harari, 2019). Most of the biofeedback is stuck in a loop. Bardini writes:

> Today's Truth is that nobody know what junk DNA can still hide. For Junk DNA is the black matter of the ontogenesis of the machine of the fourth kind. The dunce concept that I have in my guts is that DNA is a whole unity, and not only by numbers, continuous or discontinuous quantity, matter or bare existence. That the pre-individual could after all be in each individual; that each singular DNA participate in a whole DNA ecology. And all living beings are connected by the powers of junk.
>
> (Bardini 137).

Despite the difficulties in pinpointing what the becoming we call human is, it should be more relevant to retain the integrity of human becoming during a mind- upload enhancement; we would need to consider much more than just the simple act of neuroprosthetic enhancement. It would more likely be a case of mind-uploading the entire universe – if I may go out on a limb and make such a radical statement for illustrating the point of existential intra-connectedness and the ever-changing paradigms of science.

In the final chapter of Vonnegut's *Player Piano*, the despotically suppressed dystopian society witnesses a lower-class revolt, an aesthetic feeling of disgust against symbolic misery, of humans paradoxically revolting due to newfound freedom from labor, which was automatized and done by machines. Such a mutiny is an insurrection against deindividuation qua being free from doom (Bardini, 2011, p. 131). They resist the technocratic and cybernetic performance rules and aims of political programs calculated by the higher class of managers and

engineers, mostly doctorates coordinating society. The landscape in this scene is littered with what Bardini also calls junk, which could be helpful but may also be potentially waste, garbage, or trash, increasing evermore (Le Brun, 2018). Its potential usefulness is what stops us from tossing it into a bin of annihilation. If it would be harmful, then existential prejudice would resist its creation (Agar, 2010, p. 175). The reader of Vonnegut's dystopian universe is confronted with an image that includes the normal expectations resulting from a violent conflict – lots of bodies and an overall mess. The writer accents mostly junk-like rubbish laying within ruins:

> In the early light, the town seemed an enormous jewel box, lined with the black and gray velvet of fly-ash, and filled with millions of twinkling treasures: bits of air conditioners, […], garbage disposers, […], transformers, turbines, vacuum cleaners, vacuum gauges, vacuum tubes, venders, vibration meters, viscosimeters, water heaters, wheels, X-ray spectrogoniometers, zymometers…
>
> (Vonnegut, 1969, pp. 390–391).

Celebrating their anticipated victory over mechanization, the crowd gathers around an Orange-O Machine to toss in a coin for a sip of its product. Then a keen observer notices:

> "But the light behind the Orange-O sign didn't light up," said a woman. "Supposed to."
> "We'll fix that, won't we, Bud?" said another voice from behind the machine.
> "You people get me about three feet of that red wire hanging out of the shoeshine machine, and somebody let me borrow their penknife a second."
> The speaker stood up and stretched, and smiled contentedly, and Paul recognized him: the tall, middle-aged, ruddy-faced man who'd fixed Paul's car with the sweatband of his hat long ago.
>
> (Vonnegut, 1969, p. 393).

The fragment above is an eye-witness fictional account of junk coming to life, usefulness from necessity, and the fact that it happens to be readily available, even if not necessarily constructed or designed for the particular usage of repairing an Orange-O light. The following fragment would relate *Junkware* to Agar's arguments in *Humanity's End*, Dennett's heterophenomenological conception of self-narrative, and Pettman's interpretations of The Anthropological Machine and Cybernetic Triangle. The story goes on:

> The man had been desperately unhappy then. Now he was proud and smiling because his hands were busy doing what they liked to do best, Paul supposed – replacing men like himself with machines. He hooked up the lamp behind the Orange-O sign. "There we are."
>
> (Vonnegut, 1969, p. 393).

Indeed, there we are, as Marquard upholds, humanity as a collective of accidents that we could change and those we cannot. We can never truly, by choice, make final self-actualized decisions because we are finite beings with a limited perspective determined to die. We do not know nor understand what we want (Agar, 2010, p. 140). Death, entropy, is a necessary default: "by desiring to bring heaven to hell, it is hell that is exalted." (Flusser and Bec, 2012, p. 72). Indeed:

> It is true that all of our political activity is likewise directed against our biological condition, against biologically predetermined inequalities. The difference is that our biologically predetermined inequalities also have a significant and overlying cultural component. Our political struggles are thus against this cultural superstructure, which we strive to rebuild. Moreover, we can imagine cultural structures ("Utopias") with which even our biological constraints are done away.
>
> (Flusser and Bec, 2012, p. 58).

Likewise, as Vonnegut's novel concludes, so do I. Even though (as in the book) humans have revolted against their degraded, dehumanized and alienated, status to machines, in the end, they start to reconstruct the society that they have just overturned—starting from simply repairing a silly Orange-O machine. Perhaps the fantasies of post-humanity set humanity in an analogous condition that will constantly be pushing in unexpected directions thanks to "the error, known as focalism" (Agar, 2010, p. 145).

BIOGRAPHICAL NOTE

M.A. (Jagiellonian University), is a classically trained musician from the I.J. Paderewski Academy of Music in Poznań. Currently, he is a PhD Candidate at the Department of Aesthetics of the Institute of Philosophy at the Jagiellonian University researching Behavioral Aesthetics within the framework of Bernard Stiegler's philosophy of art. www.adrianmroz.com

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