The Pharmacological Significance of Mechanical Intelligence and Artificial Stupidity.

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Abstract

By drawing on the philosophy of Bernard Stiegler, the phenomena of mechanical (a.k.a. artificial, digital, or electronic) intelligence is explored in terms of its real significance as an ever-repeating threat of the reemergence of stupidity (as cowardice), which can be transformed into knowledge (pharmacological analysis of poisons and remedies) by practices of care, through the outlook of what researchers describe equivocally as "artificial stupidity", which has been identified as a new direction in the future of computer science and machine problem solving as well as a new difficulty to be overcome. I weave together of web of "artificial stupidity", which denotes the mechanic (1), the human (2), or the global (3). With regards to machine intelligence, artificial stupidity refers to: 1a) Weak A.I. or a rhetorical inversion of designating contemporary practices of narrow task-based procedures by algorithms in opposition to "True A.I."; 1b) the restriction or employment of constraints that weaken the effectiveness of A.I., which is to say a "dumbing-down" of A.I. by intentionally introducing mistakes by programmers for safety concerns and human interaction purposes; 1c) the failure of machines to perform designated tasks; 1d) a lack of a *noetic* capacity, which is a lack of moral and ethical discretion; 1e) a lack of causal reasoning (*true* intelligence) as opposed to statistical associative "curve fitting"; or 2) the phenomenon of increasing human "stupidity" or drive-based behaviors, which is considered as the degradation of human intelligence and/or "intelligent human behavior" through technics; and finally, 3) the global phenomenon of increasing entropy due to a black-box economy of closed systems and/or industry consolidation.

Keywords: Artificial Intelligence, Artificial Stupidity, Noetics, Pharmakon, Bernard Stiegler.

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Streszczenie: Farmakologiczne znaczenie inteligencji maszynowej i sztucznej głupoty.

Opierając się na filozofii Bernarda Stieglera, zjawiska inteligencji maszynowej (*vel* sztucznej, cyfrowej lub elektronicznej, dalej: SI) zostały zbadane pod kątem ich realnego znaczenia w kategoriach nieustannie powracającego zagrożenia nawrotu głupoty (jako tchórzostwo), które można przekuć w wiedzę (farmakologiczna analiza trucizn i środków zaradczych) za pomocą praktyk opiekuńczych, poprzez pryzmat tego, co naukowcy wieloznacznie opisują jako „sztuczną głupotę", która została zidentyfikowana jako nowy kierunek w przyszłości informatyki i maszynowego rozwiązywania problemów oraz jako nowa trudność do przezwyciężenia. Łącznie traktuję wieloznaczny sieć „sztucznej głupoty", która oznacza tego, co 1) mechanicznego, 2) ludzkiego, lub 3) globalnego. W odniesieniu do inteligencji maszynowej, sztuczna głupota odnosi się do: 1a) „słabej" SI lub retoryczna inwersja oznaczania współczesnych praktyk polegających na stosowaniu wąskich procedur zadaniowych przez algorytmy w opozycji do „prawdziwej" SI; 1b) ograniczenie lub zastosowanie ograniczeń osłabiających skuteczność SI, co oznacza „ogłupianie" SI poprzez celowe wprowadzanie przez programistów błędów dla potrzeb bezpieczeństwa i interakcji międzyludzkich; 1c) niezdolność maszyn do wykonywania określonych czynności; 1d) brak zdolności noetycznych, co jest brakiem dyskrecji moralnej i etycznej; 1e) brak rozumowania przyczynowego (tzw. prawdziwa inteligencja) w przeciwieństwie do statystycznego asocjacyjnego „dopasowywania danych do krzywej"; lub 2) zjawisko narastającej ludzkiej „głupoty" lub zachowań opartych na popędzie, które uważa się za degradację ludzkiej inteligencji i/lub „inteligentnego zachowania człowieka" poprzez technikę; i wreszcie 3) globalne zjawisko narastającej entropii z powodu gospodarki „czarnych skrzynek" oparte na systemach zamkniętych i/lub konsolidacji przemysłu.

Słowa kluczowe: sztuczna inteligencja, sztuczna głupota, noetyka, farmakon, Bernard Stiegler.

Multinational companies such as Facebook and Google are able to broadcast a message to the world suggesting that AI is already super-advanced. But if someone, like me, is working in this field, they can see how limited all these algorithms really are.[2]

– JAKUB TOMCZAK

We need to stop focusing on artificial intelligence superseding us in the distant future. If we really must worry about the development of AI, then our focus needs to be on the threat of artificial stupidity. We need to meet the robot revolution with legislation, care and a drop of cynicism.[3]

– PARKER SOFTWARE LIMITED

People worry that computers will get too smart and take over the world, but the real problem is that they're too stupid and they've already taken over the world.[4]

– PEDRO DOMINGOS

That such a possibility exists, that is, that cybernetic exosomatization can generate an industrial artificial stupidity, is the question that must guide us here.[5]

– BERNARD STIEGLER

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[2] Quote translated from (Tomala 2019). All Polish to English and French to English translations by me – Adrian Mróz – unless otherwise noted.
[3] (Parker Software Limited, n.d.).
[4] (Domingos 2015, 286).
[5] (Stiegler 2018, 4).

1.

From its very behavioral origins of reactions being modeled after "intelligent human behavior" (WICHERT 2014, 1–3), "artificial" or machine intelligence, as is the case with every technology, qualifies for pharmacological consideration and concern (STIEGLER 2013b, 14), since "all *noetic* intelligence is artificial" as postulated by BERNARD STIEGLER (2018, 1), which means that all intellectual life (forms of life as forms of "natural" or Darwinian intelligence) requires attention as care, even if it is a form of so-called "inner wisdom" (i.e. gut-feelings, intuitions, or premonitions). All intellectual life is in fact mediated and supported by technics, be it rules-of-thumb, material traces, or behavioral habits.

It is important to note that "artificial" in no way implies fakeness, falsehood, unreality, or something without any significance as SIDEY MYOO shows in *Ontoelektronika* (2013, 23–28, 45) in his use of the expressions "electronic intelligence" or "intelligent devices" (pl. *inteligentnych urządzeń*—the latter word refers to an organized or ordered mechanism). This implies that "artificial" intelligence is not a form of non-intelligence or some other kind of "simulation", where the Cartesian mind-body problem unnecessarily re-emerges. In fact, it is a very much real power that consists in a different, mechanical or electronic, domain. Any other implication would be a misunderstanding of its weight.

Before continuing, when it comes the intelligent human behavior, it is important to remember that the behaviorist does not deny the existence of mind as the subjective or conscious experience of a reality, but rather claims that it is immeasurable (BARRETT 2011, 19), since the skin is not an important boundary (SKINNER 1964, 84). This is to say that it goes beyond calculation as the embodied mind is also one that is constituted thanks to exosomatization. Another way of putting this is to say that there is no behavioral event, meaning that behavior is fully constitutive of mind as the noetic, or conscious phenomenon that exists independently of actions and its goals taken by the living organism in the world. (MALONE 2009).

So, to speak of the noetic capacity of intelligence is another way of talking about intelligent behavior in relation to the niche or *milieu* of a certain organism within a certain organological configuration. What is important is also to note that behavior is

defined as "(…) that part of the functioning of an organism which is engaged in acting upon or having *commerce with* the outside world" (SKINNER 1938, 6 emphasis added). The radical behaviorist stance claims that human behavioral intelligence would differ from the computational cognitivist models since "there are no associations *in* the organism; associations are found in the objects of the world itself (i.e., an animal doesn't associate the smell of lemon with its bitter taste inside its head, but rather, the smell and taste are associated *in the lemon*)" (BARRETT 2011, 26).

Let us also not forget that chimpanzees are capable of behaving-towards-death (Anderson, Gillies & Lock, 2010a), which is not an existential modus uniquely human. Human intelligence, which emerges from effectiveness and not efficiency (Barrett 2011, 29) as different to machines, which means that human stupidity, which can be called perceptual and cognitive bias, is not unavoidable. "Natural selection may act to make animals differentially sensitive to certain perceptual aspects of the environment, and the animal's own actions in the world may also facilitate this learning. If we accept that behavior we see falls out of the interaction between internal mechanisms and the environment, then behavior cannot point accurately or directly to cognitive mechanisms as processes in and of themselves." (Barrett 2011, 29). This is to say that the physics of the body itself contributes directly to successful functioning in the world via perceptual systems, they have an instrumental role to play in producing adaptive behavior (Barrett 2011, 30). The experiences of sensory deprivation have proved that, cut off from its senses, the brain falls into chaos and goes mad. The body is a necessary constraint to thought, to the production of meaning. If the human condition is the condition of creating new perceptual systems that are artificial, including organizational or hierarchal systems of social structure maintained at least by myth, then humanity is unthinkable without its stupidity.

2.

Nonetheless, I shall elect to continue to explore the nuances of the popular expression of "artificiality" in terms of its pharmacological significance. The significance of this resides in the case that all intelligence harbors stupidity, since all

forethought is followed by afterthought, regardless if it is a "natural" or quasi-Darwinian form of intelligence, or one that is an artefact. (STIEGLER 1998). And so, "artificial" intelligence is also a variety of "artificial" stupidity, a mechanical stupidity that is not simply a simulation of folly or just "virtual" madness, but a very effective, real, and grave insanity that brings upon the world shocking consequences, and which does not necessitate a reckless disembodied mind or what-have-you, since stupid is as stupid does. Here, my use of the term pharmaco-logical is appropriated from STIEGLER (STIEGLER 2013b, 4) and refers to the subject matter of the *pharmakon* (gr. Φάρμακον) and its method, which is *logos* (gr. Λόγος) or knowledge required to be activated in order to correctly distinguish—but not oppose—this ambiguous object of scrutiny. It is necessary to provide a longer citation that shows a pharmacological relationship with stupidity, since Plato's account of the pharmakon of writing—for which artificial intelligence is the newest manifestation of writing—is a critique of its service as a "medicine" for memory:

> *Stupidity (fr. la bêtise) par excellence is cowardice—which generally hides itself from itself and others by adopting a cynical attitude, which rationalizes its laziness. It takes courage to fight stupidity. The true great human problem is not stupidity: it is cowardice. The other stupidity, the one that opposes the first stupidity, which poses as an insurmountable fact that nothing can be done about stupidity, and thus encourages cowardice, the second great form of stupidity, which opposes the first great form of stupidity only by making and saying another great stupidity itself, is the one that consists in believing and saying that **stupidity could be overcome**.*

> *This great stupidity characterizes what some 20th century philosophers—especially among the French—have become accustomed to calling "Metaphysics". In this respect, this stupidity is practically at the root of the Western conception of knowledge (and this is what Jacques Derrida was opposed to by*

arguing, inversely and in our opinion wrongly, that we cannot do anything against stupidity, and that it always wins).

*Contrary to "Metaphysics", **fighting against stupidity knowing that it always comes back**, as the rock of Sisyphus inevitably falls back, is assuming a point of view that we call here pharmacological: it is assuming the situation of the pharmacological beings that we are, and whose gravity is expressed in Sisyphus. **It means assuming a point of view that the best (noble), the curative, the good deed or the benefit that is a pharmakon can always and must always end up turning into an evil curse (poison, and in particular, stupidity) and vice-versa.** (STIEGLER 2013a, xii–xiii, emphasis added).*

Claiming that stupidity can be overcome once and for all, something forever erased from human existential reality, is in itself a stupidity that leads to inaction and resignation, which has been here qualified as a modus of cowardice, which is the total avoidance of all risk. Fighting stupidity means anticipating its return and being prepared for all of its different forms with therapeutics. It is also a re-cognition, that stupidity has a power for generating knowledge as it leads to necessary and unpredictable accidents that become necessary after-the-fact or *a posteriori*. Moreover, this is to say that the sage is at once its opposite, a fool, and so the material power of the machinic sage or machine intelligence brings with it the potential for discovering a new technics of stupidity insofar as opens one up to risk, which is as much a blessing as it is a curse, called "artificial". This risky stupidity can be reversed into knowledge thanks to experience and through meditation on it by the one guilty of the folly act. It seems that the eternal struggle cannot be outsourced without rendering an in-humanity, which is a cold state of being barbarous and cruel.

3.

As witnessed above and beforehand in other literature, the term *pharmakon* is a term that is equivocal. JACQUES DERRIDA has pointed this out in "Plato's Pharmacy" in *Dissemination* (1981, 61–172) and it is applied to a wide variety of uses that concern psychosomatic ecstasy as MICHAEL RINELLA shows in *Pharmakon: Plato, Drug Culture, and Identity in Ancient Athens* (2010). In my 2017 analysis of music as a pharmakon I came to the conclusion that the pharmakon is not simply a matter of *différance* amidst drugs, medicines or poisons, but any somatic and psycho-noetically active object[6], which would be the case for perfumes, cosmetics and pigments, charms and talismans, ritualistic love spells, narcotics and magic potions, myths and rhetoric, dialectic and philosophy itself as well as music, and by extension: all creative work (MRÓZ 2017, 25, 32–42). This object is also capable is dis-activating the noetic within states of trance and/or ecstasy. As artificial media, they all can be addressed to foster therapeutic inventions as a practice of therapy in terms of the struggle against the lack of good sense, which is stupidity itself (STIEGLER 2013a, xiii).

I think that within the ritual (such as alcohol rituals at a Polish wedding), *différance* (when it comes to its status as a once-and-for-all poison or medicine) of the pharmakon (i.e. vodka) may be temporally and superficially suspended[7], which is to say an *epokhē* (gr. ἐποχή) is temporarily organized within the metastability between toxicity and safety. Accordingly, STIEGLER rightly claims that the pharmakon is at once a conjunction of poison and medicine (2013, 10) and not a substantial alternative, that is to say a choice of either/or. Metaphorically speaking, I claim that the service of "artificial" or machine intelligence needs to be practiced like alcohol consumption at such weddings in order to mitigate adverse consequences like dependence or self-destruction and supplement social circles with original powers. This requires the

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[6] Like the transitional object of Donald Winnicott. (Stiegler 2013, 1–2), which is to say it is an non-existent object that is the consistency of the bond itself.
[7] However, it is not an in-différance. Here, it is a love potion – for it is bitter and demands "sweet" kisses, and also provides a cultural prescription, it needs to accompany music, dance and food, there is a "right" or "correct" drinking procedure.

introduction of a new general techno-logical *epokhē* of what STIEGLER calls the Neganthropocene (2018, 226), which I do not have room to expand upon in this article.

The term "artificial intelligence" is a modern buzzword, a provocative concept and catchphrase or a linguistic formula that generates a buzz like beer's drunk effect, which is implied by Jakub Tomczak's sobering statements on its marketing by major international tech industries represented by corporations like Google, Apple, Amazon, Facebook, Microsoft, Netflix, and so on. The current storytelling of Silicon Valley has led to the widespread use of algorithms in a destructive manner, and at the same time this buzzword "artificial intelligence" as a magic formula generated much hub-bub and inflated hype when it comes to the powers of modern artificial intelligence systems.

Hence, the question of the storytelling of "artificial" intelligence as a stimulant and depressant responsible for *mania* (a form of "stupidity" of the maniac, who in the dazzled state of the Latin *stupere* anaesthetizes the noetic) is a question of (re)integrating the maniac into slow social circles, which maintain and care for a non-inhuman intellect, just as practices of care with regard to mind-altering substances like the paint of the artist responsible for visions and dreams have been created, disoriented, and re-orientated. Otherwise, the problems of dis-order and dis-ease (or *malaise*) like addiction or a dependence develop from a lack of feeling-together, which by implication is a lack of anticipating a common future. In other words, it is a problem of using pharmaka safely (HILLMAN 2008, 161–180) in relation to the human collective capacity for judgement on behalf of enhancing the imagination and creativity (part of the negentropic struggle against entropy that constitutes knowledges or noödiversity). In this case, it is a matter of practical criticism and ritualizing machine intelligence— which astounds, shocks and amazes—carefully, so as not to fall into the "mixed-blessing" of "functional stupidity", which is also mis-represented as "smartness" (BUTLER 2016, 117), or HANNAH ARENDT's notion of banality of evil which is EICHMANN's incapability to think paired with "fearsome efficiency" (MARTINE 2007) that can be conceptualized today within the field of machine intelligence and algorithms as remedies (O'NEIL 2016) for all of society's problems, or problems "artificially" created through "disruptive" platform capitalism. The condition of artificial intelligence as a pharmakon is at the same time the discovery of the possibility of artificial stupidity, which diverges from Darwinian stupidity insofar as the failure of "natural" intelligence

is equal to the organism's death (STIEGLER 2018, 5–6) as the Darwin Awards of WENDY NORTHCUTT[8] represent.

4.

It is my intention to draw on a parallel between biological activity or the description of effects by a drug on organic (vegetative and sensible) matter and pharmacological activity in a philosophical sense, which would consist of an account of affects by a pharmakon on organological (i.e. noetic) matter. Noetics is concerned with the intellect, which is a capacity to understand meaning, a behavioral ability to learn, embodied by an entity struggling for a life worthy of noetic living. Drawing on STIEGLER's notion of "general organology"[9]—a study of instruments, their use, history and role in society, and their classifications—the organology of the intellect is constituted by the use of the physical organs of the body in conjunction with technics and its artificial organs that together need to be analyzed through social organizations like multinational corporations, local and national governments, and other associations and collectives like universities. As an artefact, machine intelligence transforms the relationships between the flesh and organized collectives of carnalities just as drugs disturb the body's chemical balance or equilibrium.

The material element of all three include organized organic matter of the flesh, organized inorganic matter of technological objects, and their conjoined organization through supra-organic collectives such as industry responsible for the movement of matter. Moreover, the pharmakon is a substance that permits a reintegration of individuals into social circles, for individuals affected with *mania*, especially that caused by *fear*—which is a mode of hope—and those of liminal status (on the threshold of society, a disorientated person within a ritualistic rite of passage), need a specific form of care that would "make sense" within a given community through mediated forms such as technics, artificial instincts called culture, or inventive therapeutics. By

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[8] See: https://darwinawards.com/
[9] See: http://www.arsindustrialis.org/vocabulary-english-version.

"make sense" I mean the capability to produce the ability to perceive meanings, which is an aesthetic power.

This understanding of pharmakon may be problematic, since it would be inescapably circular and a mess of loops, or perhaps a spirality that goes beyond itself. For writing is a pharmakon, and the *logos* is incorporated in a body of text, which platonically is no longer "living", but a necro-mass that produces bifurcations when the appropriate social rituals are applied (for example: writing a university thesis). Yet, a good book is psychonoetically active since it leaves one *book drunk*. It is a case of inorganic organized matter "enchantingly" possessing the living. At the moment, it can be said that artificial stupidity consists in being Big-Data drunk. The toxic effects, according to STIEGLER, reside in the networked A.I. driven by data economies, within which the singularity of each user is reduced into a closed auto-referential system. If I buy a watch on Amazon, the platform capital multinational corporation will feed me more watches to buy, which I no longer desire but may come to feel a new disruption of desire if another watch catches my attention. Regardless, it can be said that I no longer want a watch since I have just bought one. Moreover, the consolidation of these corporations like Google, Microsoft, Apple, Facebook, etc. is a significant hindrance to the development of A.I.

> *That industry consolidation, in turn, is a recipe for suboptimal AI innovation. Of course, AI industry consolidation in the hands of a few may offer any number of benefits, including the ability for third parties to quickly access and use, without significant AI expertise, the full-stack AI solutions that many tech giants currently offer. Be that as it may, a good amount of evidence suggests that heavy industry consolidation can result in poor innovation levels in an industry, as competitive forces wane and the tech monoliths, burdened as they are in multiple layers of bureaucracy, struggle to innovate as they once did. The result, in the end, may be a form of ongoing artificial stupidity, rather than the promised general AI that has continued to elude society (ASAY 2019, 48).*

In short, these "stupid" systems effectively and efficiently "lock-in" users through behavioral drive-based programming by eliminating singularities or outliers within its algorithmic models of "curve fitting", which is to re-create the past once again in the future (rather than predict it), making any change to such a model a task of Sisyphean effort, especially when it comes to non-banal uses employed by law-enforcement, banking, education, and medicine (O'NEIL 2016). This is, as WARREN SACKS notes, the stupidity of understanding everything one way, where one method is supposed to solve all our problems (BAZIN 2018), which in fact is the problem posed in 2011 within the book *Techno-Fix: Why Technology Won't Save Us or the Environment* by MICHAEL HUESEMANN and JOYCE HUESEMANN. Consistently with what CHRISTIAN FAURÉ has claimed, the new business model of the twenty-first century is to add artificial intelligence to every-thing, everyday mundane "smart" and autonomous objects like fridges, toothbrushes, children's toys, and so on (BAZIN 2018) interlinked via the Internet of Things. This is like discovering the beneficial social influences of alcohol or any other drugs and suddenly adding them to all mundane objects (not excluding the carnal via cyber tattoos, or the corporal as a phenomena of exosomatization) without any social control or *sacrum* assigned to them. Machine intelligence has been heralded as a special form of *pharmakon*, a panacea or cure-all, which is also to say it is a way to bring about total and absolute destruction when practiced carelessly, especially in terms of a lack of rules and regulations, which is a lack of ritual control, of symbolic procedures mainly embodied by the bureaucracy of modern government oversight and the legislative process, since it is evident that self-regulation of tech is out of the question, just as self-regulation of the alcoholic is a constant threat of relapse. The stupidity of the alcoholic as such is induced artificially.

5.

This is also to say, just as it is the case with *pharmaka being inseparably at once deadly and life-giving*, that there is no such thing as axiologically neutral tech, since "the dominant social and cultural values of control, exploitation and violence guide the design of many modern technologies." (Huesemann & Huesemann 2011, 313). This is

precisely the critique titled *Politique du genre de l'intelligence digitale* by ANAÏS NONY, which she gave of the patriarchal structures being embedded into tech.[10] The Silicon Six[11] and Jeff Bezos (Henceforth: The Silicon Seven) of Amazon make more of the same, which is unstable, unsustainable, and heading towards a entropic collapse. The challenge, the remedy so-to-speak, is in re-integrating such systems with an opening (fr. *l'ouverture)* up of a model that diverges away from the ones promoted by the drug-dealers called the Silicon Seven, which is a destructive and predatory model that exploits the entire world and destroys its targets through techniques of "disruption", i.e. care-lessness (MYD-BUSSINESS TV 2016).

This question of openness is significant when it comes to the question of cumulative intergenerational and transgenerational knowledge transfer (between living generations, i.e. the boomers and millennials, and between the generations that have passed-away and those that have-not-yet passed and have the task to craft a future, i.e. from the Greek schools of philosophy to today's students), it is evident that the *exact orthotic recording* of data produced by speech, reason and logic, is in-itself a technics of generating knowledge (what is called by STIEGLER a "tertiary retention"), which is not identical to information (STIEGLER 2009, 13). Whereas the value of information diminishes with collective learning (yesterday's *breaking* news is no longer news today if everyone already knows about it), the value of knowledge grows when more and more people learn about the accumulated selected information. This is the value of a good education in that it produces neganthropy (STIEGLER 2018a).

When it comes to information, an example can be provided with what we call the news, insider trading practices, and secrecy in general, which may be practiced by cults, private business, and other organizations like the Central Intelligence Agency (CIA). If fewer people are knowledgeable about some select piece of information, then the price of this information is high, and can be sold to journals, especially if exclusivity is taken

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[10] See (Mrasilevici 2017): https://www.youtube.com/watch?v=40ecbgb13jU.
[11] As criticized by comedian and actor Sacha Baron Cohen, these are the six billionaires, a narrow elite group at the steering wheel of platform capitalism, who include: Mark Zuckerberg of Facebook, Inc.; Sundar Pichai, Larry Page, Sergey Brin of Alphabet (a.k.a) Google, including Susan Wojcicki (YouTube, which is owned by Google), and Jack Dorsey of Twitter (Anti-Defamation League 2019).

into account. However, this comes at a cost, since a lack of general knowledge leads to misunderstandings of knowledge-in-general, and the proliferation of human stupidity, of proletarianization (the loss of know-how and can-do) and polarization, so-to-speak, in the forms of conspiracy theories or radicalization of social civil war or *stasis*. If I have information that no one else has about the reality of the conversation between U.S. president DONALD TRUMP and the Ukrainian president VOLODYMYR ZELENSKY, then I have access to information, which can be sold to a news station at a high price in certain social circles, and at the same time speculation leaves society (which selects information on the criteria of social approval rather than its truth value, this is what has been called the era of post-truth) susceptible to disinformation and misinformation, which hold weaponized value as propaganda and techniques of political disruption. This is interesting, since information is at the same time a commodity that is scarce and abundant.

A characteristic lament of modern life is that of information overload and the paradox of being under-informed, there is too much information and not enough knowledge, just as there is an abundance of coal in Poland and not enough power alternatives which sabotage any electric "solutions" or there is a plentitude of music to stream on Spotify, without any perceivable end, but not enough social contributive *meaning* to the music streaming platform, which promotes consumables that alienate. However, at the same time certain information is also scarce, just as attention is limited. Music given as data is lacking in context or storytelling, in the its integration to social circles through narrative re-creating a new social reality, the emotional bond, which gives a meaning to calculation (as music is a privileged form of it) that goes beyond the numbers. So, in this context, there is a need for maniacs called amateurs, music lovers or audiophiles. This can be generalized to machine learning. As a form of mania, the geeks, nerds, dorks and the dumb geniuses are maniacs (sometimes called braniacs) or similar varieties of digital technology en-thusiasts (gr. ἐνθουσιαστής) capable of great feats of stupidity require a therapeutics that will transform their "stupidity" or risky behavior into knowledge shared by the collective and "makes sense" to all. In this case, to the *polis*, it is a call for a contributive economy that is not left to the mercy of market criteria, given that "the lessons of history suggest that if we are to avoid enduring artificial stupidity and make real breakthroughs in achieving general AI, government

backing is necessary, and preferably in large doses." (ASAY 2019, 55). So, it is undeniable that the major problem of today is to ensure that artificial intelligence is controlled in such a way that it does not create artificial stupidity.

6.

This is in line with current development of A.I. in terms of "artificial" constraints or making A.I. itself less powerful, that is to say "stupider" (in comparison to the super-human performance of these machines). Such a development has taken upon itself the safety measures and human interaction enhancements of programming the process of purposefully making mistakes by machines, which is the phenomenon of "dumbing-down" machine intelligence, so as to match human capability when questioned through human interaction such as in video games, interjecting space fillers such as "uh…" as is used in spoken language, displaying vulnerability and weakness, or the "stupefying" practices of the cognitive-behavioral therapy trained chatbot named Woebot, which is designed to mask its "intelligence". In other words, "introducing deliberate mistakes, what we call *Artificial Stupidity*, is necessary to cover up an even greater gap in intelligence during a Turing Test" (TRAZZI & YAMPOLSKIY 2018).

At other times, the machines fail to perform their given tasks as intended. Fabio the Pepper Robot manufactured by the Japanese company SoftBank is infamous for its social incompetence (PRASAD 2018), which is a problem of disfunctions and technological malfunctions within other industries such as transportation, medicine, banking, and so on. So, it is a question of discovering and distinguishing what not to automate. The failure of machine intelligence to "grasp" or "seize" emotional intelligence and ethics is also problematic, for machines are efficient, that is obedient, to the most banal and unanticipated extremes. At the same time there is the problem, as ANAïS NONY would say a stupidity, of anthropomorphizing technics, since technology itself is not gendered, it is not masculine nor feminine (which are cultural behavioral and aesthetical technics), a body takes shape and is not taken, which creates the social paradox that the robot Sophia holds more rights in Saudi Arabia than Saudi women do, which implies that Saudi women should give-up their flesh and consider becoming

artificial trans-women themselves. (BAZIN 2018). It is noteworthy to observe that whatever successes or failures brought about by machine intelligence and artificial stupidity, "the difference between humans and machines has become evident not so much in *how many* answers they got right/wrong, but more in *how they are wrong*." (TAGLIABUE 2018). Modern machine intelligence is based on training neural networks in such a way as to statistically identify mathematical structures that are good-enough under certain conditions, which is different from human causal based reasoning or intellect. The machine mostly fails due to mathematical reasons, statistics or a lack of data input, or mechanical mal-functions, whereas the human error is much different (PEARL 2018) in that it is also a necessary condition for the new and innovative, which is a mal-function of thought, its disfunctions and after-thoughts called hindsight and reflection, that becomes a trans-function of fore-sight.

If the noetic is to be able to differentiate between what is good and what is bad, what is just and what is unjust, then machine intelligence is at once exploitable as a weapon, since it is deprived of such abilities, which no curve fixing can arbitrate. Artificial stupidity then is conceived as "a plethora of small, task-specific, finely optimized pieces of software that will solve narrow business problems better than existing systems—a spam filter, a carousel of recommended books in an e-commerce, a notification on when to buy a ticket to Chicago, optimizing for weather, airlines price fluctuations, etc." (TAGLIABUE 2018). Others would take artificial stupidity to refer to the rhetorical misnomer: "If all that a human being could do were these mundane tasks, one would perhaps ascribe a slightly less complementary term if not a disparaging one like stupidity to that level of competence, certainly not intelligence. What we have to contend with right now is artificial stupidity and not artificial intelligence." (KAPOOR 2018). Thus, what is needed are new ideas and not more data, as GEOFFREY HINTON claims (TAGLIABUE 2018).

However, even if machine intelligence as mundane algorithms for efficiently completing task-based processes has limits placed on it, this does not exclude the fact that these processes might somehow discover methods of going around its limitations, just as deep-learning simulations of walking designed by DAVID HA have come up with the solution, that the best way to reach point B from point A is not to "grow legs" and

walk over, but rather to grow to an extreme height in a fixed point and simply fall over.[12] Moreover, when it comes to human "stupidity" which is in fact social intelligence, it is now known via conformity tests that children are subject to peer pressure from robots, since "stupid" robots, who are programmed to always give the wrong answer, are mimicked three-quarters of the time (VOLLMER ET AL., 2018). In addition, adults thoughtlessly follow the guidance of "emergency" robots even when informed of the potentially lethal mistakes these robots can make, such as leading them directly towards danger. (ROBINETTE ET AL. 2016). This is the problem of human "automation bias", which is a learned carelessness, which arises from the belief that robots are essentially *smarter* than humans[13].

In all these different modes of "artificial" stupidity, what is needed and called for is an appropriate politics that would constitute a new society with its own technological epoch. "If AI is the most important technological development in some time, as some claim, then better understanding what **innovation policies** are best suited to ensure its success is vital. Otherwise, artificial stupidity, rather than true general artificial intelligence, will continue as the norm." (ASAY 2019, 4, emphasis added)

7.

Artificial intelligence "refers to a technology of reticular, ubiquitous super-computing that automates the majority of processes by which behavioral flows are managed, where this has fundamental effects on both modes of production and modes of exchange in all their forms, and where, in its current stage, these have been transformed into functions of consumption" (STIEGLER 2018, 4). Likewise, "Artificial stupidity, then, is what persists in accelerating entropy instead of deferring it, and does so by destroying knowledge, which, alone, is capable of generating positive bifurcations." (STIEGLER 2018, 7). So, artificial intelligence in STIEGLER's account is responsible for disseminating artificial stupidity. At first, the internet was a domain that

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[12] See (TED 2019): https://www.youtube.com/watch?v=OhCzX0iLnOc.
[13] See the Wikipedia page: https://en.wikipedia.org/wiki/Automation_bias.

was intended to empower people with increased abilities to act and think. As a pharmakon, it has been reversed through technological disruption and industry consolidation lead by multinationals like Alphabet (Google, YouTube), Amazon, Apple, Facebook (Instagram, WhatsApp), Netflix, Microsoft, Snapchat, Twitter, etc.

According to STIEGLER (JEANNIN 2011), the tech employed by these corporations command its users to behave mimetically and at the same time they generalize what he calls the unlearning of the skills to write as a generalization of inorthography and a reinforcement of the unification of linguistic behaviors. That is to say it that the process of unlearning the ability to conduct ourselves or behave, to take care of ourselves, to teach and to think for ourselves is taking place. These "stupid" algorithms, which are completely analytical and computational, are responsible for the production of entropy, which is an increase in uniformity and a reduction of exceptions. Whereas, human thinking and mistakes that are necessary after-the-fact are able to generate exceptions to the rule, to create the unpredictable, the unforeseen, the unheard-of, and the spontaneous, and this is what, in my opinion, a "true" A.I. would augment.

STIEGLER's therapeutics for mass stupidity is a postulate to return to the web of free software, of open access and open source models, which stimulate discussion and collaboration. This should result in an increase in collective intelligence in all of its artificiality, which would be an increase in neganthropy, in which the masses would be re-armed to take care of the world and to think for themselves in contra-diction to elite narrow interests that promote buzzwords and other marketing tactics based on technological storytelling (LÉVY 2019).

It is evident, that stupidity is a case of a failure of selection for social sanity. In the case of Europe, it is a failure for selecting the right politics and university policies that would position filters that drive social circles of individuation. In an interview (LÉVY 2019), STIEGLER reminds us that the birth of Google is indebted to massive investments of about $1 trillion from the 1980s to the late 1990s by *public* authorities like the United States Army into technological research and development. STIEGLER alarms us that Europe, which has the best specialists in A.I. and new technologies, *must* colossally invest in research by mobilizing European universities and researchers ahead of all market (that is *private*) trends, which would consist in not cowardly following what other nations like the U.S. or China push, which is to say to think of the digital

differently so as to facilitate the becoming of innovation in tech, new horizons and common desires.

On the other hand, while criticizing platform capitalism, STIEGLER claims that under the pretext of serving the consumer, it tends to eliminate their singularities and lock them into models. It is not the app that serves the users, but rather the users serve the business models of tech giants. We must therefore react against the anthropic trend of technology and reinvent hope. A new economy must be based on a new model of work full of beneficial effects that mitigate robotic induced job loss (since lots of practical problems which were thought of as requiring Intelligence could actually be solved by a "stupid" algorithm and masses of data points), financed by redistribution and supported by a transformation of structures, behaviors, and data architectures.

STIEGLER brings up a study (JEANNIN 2011) conducted by Oxford researchers in 2013, 47% of American jobs could be automated within 20 years. He describes the people who occupy those jobs as people who come back home exhausted in the evening, who do not produce change (the work-situation has not changed as a result of their actions). Thus, they have not produced neganthropy. He provides an example of a person who scans products in front of a barcode reader and at once cannot change their situation, rather they serve this situation and consolidate it, which he calls proletarianization, following MARX. Consequently, 47% of jobs are potentially automatable because 47% of jobs are proletarianized. For him, a restoration of balance (a pharmacological situation) between supply and demand, the economy of tomorrow, must bring value to NON-EMPLOYMENT WORK, which has been proclaimed with a new buzzword of *L'emploi est mort, vive le travail!* (Employment is Dead, Long Live Work!), which is also the title of an interview he did with Ariel Kyrou in 2015 and the theme of the work of artist at Marseille in 2017 at Friche la Belle de Mai in an exhibition I have attended called Du Travail, temps 2 : Travailler / Œuvrer. STIEGLER says that things like raising children is work; learning a skill like how-to dribble in soccer is work; or writing a book is work or editing a Wikipedia page are all work. It is evident that also the arts must be included: learning to play an instrument is work and so is learning how to work with all forms of *technics*, which is a behavioral acquisition of *techniques* or structured habits. Even if such work does not provide the financial means

to make a living, this evidently and clearly demonstrates that many people work and produce *value* despite being employed or having their time exploited by industry.

STIEGLER states that artificial intelligence today is first and foremost intensive computing (deep learning, Big Data, and so on) applied to platform capitalism. This predatory economy does not renew the possibility of producing the wealth it captures. Machine intelligence and computational technologies are only useful if they do not destroy the social fabric, instead they ought to allow it to be re-sewn, technics needs to sew the social up. At the moment, artificial intelligence produces mostly artificial stupidity, which in the French philosopher's terms is mass proletarianization or the loss of various skills and knowledges (a stupidity in regard to artefacts). Today, social solidarity is threatened, where hyper-individualization as atomization (which can be thought of as a radicalization of the march of the monads) is immense, and there is universal malaise or ill-being with *very real consequences*. STIEGLER alarms that this does not only concern Europe: "in the United States, where life expectancy is falling, suicide, overdose and alcoholism are the leading causes of death among the white middle classes, according to economist Paul Krugman". (JEANNIN 2011).

Thus, when it concerns machine intelligence and "artificial stupidity", such technologies as *pharmacologically significant* must be put at the service of Intelligence, the noetic social circles, rather than having human intelligence service these technologies, or even worse, speculative economy and predatory capitalism.

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