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Hegemonising Post-Humanism and the Future of Education

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Abstract

The distinguished feature of the third millennium is *augmenting* and *endorsing* the use of digitalised tools until they have controlled our everyday style-of-living and, in some way or another, turned it into a digital one. Literally, smart gadgets have *bugged* humanity; they have become indispensable. Furthermore, it is commonly believed that life is impossible without them. Smart phones that have facilitated human access into the cyberspace have also paved the way to willing absorption into virtual realms to the extent that they have become the gateway to effective interaction with life and with peer human beings. By all means, technology is similar to an over-sweeping tide; technological advancements are numberless and immensely growing to the extent that it looks as if there would be a special technological innovation for each living soul.

If few years ago educators were discussing the problems of integrating technology into classrooms and the issues of training educators to adapt to the new trends, the current problem would be how to make benefit of the available AI technologies instead of denouncing them as means of ruining the education process. The greatest challenge that educators will shortly

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encounter is ChatGPT and Google Bard because they would ruin the zeal for proper understanding and any exerted effort for researching. As for the Cyberlife Androids, they are the principal future competitors for educators. Remarkably, if it is alleged that the task of the Cyberlife Androids with students will never be easy, it should be considered that they are designed to win. Yet, the greatest obstacle is Elon Musk's Neuralink brain microchip and the Chinese Brain Talker implants. Brain microchip technology is expected to be an *ipso facto* by the few upcoming years; it would be as vital as smart phones.

Education in a post-human era is a challenging mission. Accordingly, the task of educators will never be easy. They should be well-prepared for their mission or they would be replaced by digital versions sooner than expected. Thus, the article sheds light upon the post-human era with its technological advancements that have a profound impact upon humanity. It also attempts to propose a preemptive approach to deal with these inevitable technological leaps that might convert humans into cyborgs lacking proper cognitive knowledge, knowing that technological advancements are turning into an insurmountable dilemma that require special measures. The article also endeavours to envisage a friendly techno-human relationship that would better control the fall into a post-human space.

Keywords: ChatGPT/Google Bard, Open AI, Cyberlife Androids, brain microchip, Web 3.0

I. Introduction:

In his 1961 book *Thought Reform and the Psychology of Totalism*, Robert Jay Lifton argues that clichés create a "language of Non-thought" (1989, p. 429) or as he called it "thought-terminating" when clichés are employed as semantic stop sign that would stop an argument from proceeding any further, not with a logical viewpoint but with a cliché that intends to put an end to a debate (Gabbert 2013). Under the sham thought of riding the tide of the new era, digitalisation and the sweeping technological advancements are functioning as an

all-powerful cliché that would easily promulgate dismissing dissent or justifying fallacious logic (Bennett 2017). With unmatched exquisiteness, digital technological leaps have created *beta* humans whose trust and allegiance are for the smart digital gadgets they possess. The smarter the gadgets they have, the lesser ability to discover the dissonance of the totalising power of digitalism with the mega capabilities of the human cognition. Such a digital pitfall has exposed educators to a greater dilemma; they are neither able to come to reconciliation with the notions of Gen Z, who irrevocably succumb to the requirements of the digital era, nor able to upgrade their knowledge or even the available classroom tools so as to create an inventive education arena.

II. Education Technologies

II.a. YouTube:

Mixed up student-educator situation created cognitive mutual dissonance which major manifestation is issues of *trust* and *allegiance*. For students, they *trust* their smart devices and have full *allegiance* to the digital realms they join thanks to smart devices provides. The material presented on the diverse YouTube channels and, somehow, on social media, have ever acted as saviour; simply, they furnish students with the shortest cut for the search for any required piece of information; these sources are also available wherever and whenever needed and they are always accessible. In addition, the trove of knowledge on YouTube is expounded in the least complicated manner. For science students, online videos that project experiments and even surgical operations present a memorable experience that would be repeated endlessly and tirelessly. In addition, there are various channels that would present the same piece of information and each YouTuber has his distinguished style that would attract more views. This means that there are many educators online and all are available. Students are free to choose whoever stimulates their capability of comprehending and processing information; online

education channels have "adopted many different styles, formats and genres, creating a variety of categories that are difficult to classify and that have virtually no creative limits" (León and Bourk, 2018, p. 1). Virtual educational arena for students is a refuge where they exercise their uttermost *volition*, and, hence, it becomes a spot of power where they are determined to learn through videos no matter if the available content provides some kind of general knowledge. For them, online sources are a ponderable asset that would produce significant improvement to the method with which the curriculum subjects are expounded. Furthermore, education channels *poke* students' psychological hunger for freedom and authority.

II.b. Traditional Methods of Teaching vs Machine Learning

Educators are in a substantive dilemma. During their undergraduate, or even postgraduate studies, the academic curricula they study to prepare them to be educators do not, in so many aspects, consider the wide leaps of technology and its influence upon students. As for the pre-Gen X educators, they are commonly either still do not *trust* digital means of education or unable to adopt innovative approaches, or even both. Let alone the major problem of training, of which the third world educators suffer the most, schools are not equipped with labs and tools that would make them up to the new *trends* of education. Even if there is some lab that should serve all the grades at one school, administrators disdainfully allow its use or deem that labs and technological tools are a waste of time compared to the traditional methods of teaching. There are also some schools that adopted a Bring Your Own Device (BYOD) strategy in which students bring their laptops and other required smart devices to class so as to facilitate the educational process and improve the learning experience. However, this solution is not enough as schools are supposed to be equipped with a network infrastructure that can accommodate the additional number of devices and that is appropriately secure (Afreen, 2014). This is only in case of the *mindset* of the school administrators is open to the validity of using

the advanced technological tools in education. Some other school administrators believe that projecting videos and helping material excerpts is breach in the educational process. In a word, the *trust* and *allegiance* of the wide majority of educators and administrators are for the traditional methods of teaching. Evidently, this is exactly contradictory to the tendencies of students.

Assuming that all the problems of training and administrators have been overcome, educators are confronted with an exacerbating dilemma; namely, the rivalry of the online videos/reels with classroom education whether it enfolds digital content. It is a fact that the quality of the online educational videos does not meet the required educational standards. Furthermore, the online educational content is not, in the wide majority of cases, compiled, edited and presented by experts but by laypeople who label themselves as Edpreneurs. The spreading spirit of social mobility entice common users to generate some content not for the sake of simplifying knowledge but for the ultimate goal of procuring significant financial gains reaped out of the increasing number of views. Consequently, it is not expected that all videos should meet didactic standards or are even based upon school curricula (Kim, 2012). Edpreneurs hit for attracting subscribers and viewers by all means; hence, it should be expected that online videos handling educational material might contain *somehow* twisted or exaggerated facts for the sake of *theatricalising* the content and making it more exciting.

All of the aforementioned challenges, and even more, produce a sort of an inter teacher-student cognitive dissonance in which the contradictory perception of the educational process and methods are metamorphosed into psychological stress for both parties. The inter student-teacher discomfort emanates out of emerging disaccord in the ideas and precepts of the educators and students on the process of teaching/learning, though each party do all in their power to adjust their means and potentials until the learner-educator perspectives might

become consistent (Dawson, 1999). In the process, both learners and educators become recipients of innovative methods of teaching. Their major source of discomfort, however, is compromising their reactions, precepts and beliefs to reach the aspired for optimal method of education.

II.c. AI Applications

Though discussions on the improvement of the process of education and creating student-teacher-viewpoints reconciliation stopped at the use of YouTube and the online education channels, ChatGPT/Google Bard and the upcoming AI applications hit the set of the educational assets and beliefs of both the educators and the students with a new uncalculated for technological leap that proved that the brain microchip implant and even humanoids are an imminent feasible reality.

II.c.1. ChatGPT/Google Bard

Remarkably, ChatGPT/Google Bard is not an invention that has suddenly hit the world with an unprecedented information processing system, there has ever been rumors about the potentiality of developing it. However, it has not been prospected that it would materialise that soon; it was commonly believed that such a project would remain locked to sci-fi for a longer period. The preliminary step warning that an AI technology will soon metamorphose into reality was the wide international use of Chatbots that has established itself as an evitable concomitant to a customer service webpage or call service. In fact, Chatbot is originally designed to generate an online conversation simulating a human one through a software application. As that application could not pass the tests that would make it adequately maintain a natural conversation with human partner, Chatbot systems have been slowly upgraded to produce mechanical conversations according to certain data and rules via text or text-to-speech instead of providing direct contact with a live human agent (Caldarini-Jaf-McGarry, 2022). In

1994, Chatbot has been invented with the intention to create virtual human interface incorporating real-time animation as well as speech and natural language processing (Maudlin, 1994, pp. 16). Chatbot systems are not a satisfactory provider of knowledge; they function as an assistant with very limited capabilities that cannot run a fully autonomous dialogue. As a virtual human interface in a customer service position, it can only make use of common phrases; scan for some general keywords that would collect information; and help routing or provide assistance according to the database or the library to which the Chatbot system is associated. Though useful, Chatbots assistance is not intelligent and its assistance, in most cases, would not be complete without the intervention of humans who would solve problems or tricky matters.

ChatGPT, which has appeared before Google Bard, is an advanced type of Chatbot that has finally passed the Turning test[1] and started to tackle the incomplete responsibilities of Chatbot after being re-evaluated. Compared to Chatbot, ChatGPT is a natural language processing tool that has been enabled by AI technology to maintain a human-like conversation. Unlike Chatbot, ChatGPT potentialities exceed that of Chatbot; it can compose emails and essays. Moreover, it has the ability to write poems, noting that it has not been furnished yet with revolutionary database that would enable it challenge human poetry writing. As for drawing paintings, it also has the ability to produce them similar to other available online programs that generate images from mere written prompts.

Since its release in November 2022, the new Chatbot system, which has been given the name "ChatGPT," proved to the world that it will not be a mere search assistant granted with limited abilities, it has confirmed that it would assume that role of an indispensable technology

[1] The **Turning test** was developed by Alan Turing in 1950. He originally labelled it the imitation game because it is designed to test the machine's ability to exhibit intelligent behavior compared to that of humans.

for all the humanity. For students, it entices them to be the primary companion and source of information. Unlike the Youtube educational channels, ChatGPT, and now the more advanced Google Bard, will provide learners with whatever information, and well-articulated and organised researches they demand. ChatGPT and Google Bard can also solve the most complicated mathematical problems and tests in a matter of second. As for the role of the students, it is only demanding while this AI technology executes whatever order. ChatGPT and Google Bard are a transformative power that would change the face of humanity.

> [In] artificial intelligence . . . machines are made to behave in wondrous ways, often sufficient to dazzle even the most experienced observer. But once a particular program is unmasked, once its inner workings are explained . . . its magic crumbles away; it stands revealed as a mere collection of procedures . . . The observer says to himself "I could have written that". (Weizenbaum, 1966, p. 36)

New innovations at the beginning seem bizarre and, certainly, create a disruption to the familiar systems. However, by the passage of time, new innovations become integral to everyday aspect of life. In confirmation, Bill Gates has described ChatGPT as "fundamental as the creation of the microprocessor, the personal computer, the Internet, and the mobile phone". He also added, "It will change the way people work, learn, travel, get health care, and communicate with each other." (qtd. in Gerken, 2023).

In the modern era, ChatGPT/Google Bard is deemed one of the very few controversial technological innovations; it has stimulated a world curiosity to the extent that it "has become a global phenomenon for its wide range of capabilities, from crafting realistic art to passing academic tests to figuring out someone's taxes" (Kim, 2023). Along with its unmatched capabilities, however, it has raised many social and international fears that has geared Italy to

call for banning it temporarily and seduced Elon Musk among other experts to urge a halt in AI training; especially the AIs *above* a certain capacity for at least six months (Vallance, 2023).

Based upon the wide growth and the widespread adoption of ChatGPT, world fears has been stimulated though the available version is a mere pilot system of a more developed AIs that would be launched soon as a commercial product; new AI systems would be characterised with a more developed and much comprehensive database that would generate more coherent and improvised texts; Google Bard is an example. Open AI, the American artificial intelligence (AI) laboratory, in its zeal for creating a deep learning movement, revealed that its objective is moving "humanity closer to building real AI in a safe way" (Metz, 2016). Nonetheless, it seems that the AI experts and professionals when developing an innovated natural language and answering AI systems did not put into consideration the consequences of the invention and how to manage its pitfalls. Future of Life Institute, a not-for-profit organisation, which declares that its mission is to "steer transformative technologies away from extreme, large-scale risks and towards benefiting life," has been provoked by the launch of the pilot AI system Chat GPT. In accordance, its luminaries signed a letter in which they warn against the future risks of more advanced AI systems. In the letter they confirm, "AI systems with human-competitive intelligence can pose profound risks to society and humanity" (qtd. in Vallance, 2023). Undoubtedly, the stance of the luminaries as well as that of Elon Musk and the other experts is compared to of the position of the educators; they believe that it is "a threat to integrity which opens the door to cheating and plagiarism" (Kirk, 2023). Yet, the zeal of the Open AI laboratory professionals reflects that of the Chat GPT users whose numbers in just few weeks multiplied to tens of millions. They believe that its use will be "a tool to enhance learning and reduce teacher workload" (Kirk, 2023). The nuanced perspectives over its use did

not stop its leap from version 3 to 4 in, literally, a couple of months; this is an evident indication that the will-be-soon introduced AIs are as hugely transformative as Google was in 1998.

II.c.2. Brain Microchip

It is not only the AI systems that would indelibly change the future; educators have to consider other AI inventions, at the top of which is Elon Musk's brain microchip implant. In July 1999, Elon Musk has unveiled that his brain implant project; he has defined it as his "most sci-fi project thus far" (qtd. in Metz, 2019). The brain microchip has been created by his brain-computer interface startup Neuralink. It is designed to be implanted by a surgical robot into the human brain so as to produce electrocodes through which the users will control smartphones and other digital objects as the chip would collect electrical signals sent out by the brain and interpret them as actions. (Metz, 2019). In 2020, Musk revealed that his project will be ready in one year confirming that he has already tested it on rats and monkeys. His declaration, yet, unveils that he has already tested the microchip on human volunteers. Though Musk intends with his project serving quadriplegics, it is not certain that only this category will make use of it; especially when it becomes ready for commercial use. It is inevitable that it would turn into a luxury item, the same way cosmetic and dermatological procedures; i.e. plastic surgeries, fillers and Botox, are today.

According to Musk, the microchip which is compared to any nondescript hearing aid but implanted into the human skull will "enable electrocode threads to interface with certain areas of the brain" (Eadicicco, 2020). In addition, through these same electrocodes, it interfaces the brain with all the smart devices such as smart phones, computers and all the digital objects without even blinking; the interfacing process is more like how telepathy works.

This human-AI telepathy would also become "conceptual telepathy" as two people, or more, would "communicate electronically by thinking at each other instead of writing or speaking" (Shankland-Ryan, 2020). In short, in the near future, there would be "symbiosis" between humans and AI, as Musk describes the situation (qtd. in Shankland-Ryan, 2020).

- Musk's microchip project is not a science-fiction vision; it has been materialised in another country outside the domain of Musk's company Neuralink. In China, during the World Intelligence Congress, a more advanced brain microchip has been unveiled. Challenging Musk's brain-computer interfaces, the Chinese brain microchip, which has been dubbed "Brain Talker," picks "out the brain's neural signals from background noise," which means that it requires only thinking to control any digital object. In simple terms, the Brain Talker picks out "small electrical pulses in the brain and quickly decodes them into signals that a computer can interpret." Furthermore, the Brain Talker is "smaller, faster and more efficient than existing brain–computer interfaces" (Randall, 2019). At that same conference, it was announced that the chip would be used for education, medical treatment, entertainment, and security purposes. The Chinese device is expected to be one of many other devices that technologically advanced countries develop. In other terms, *Human-AI symbiosis* is inevitable.

II.c.3. Web 3.0

The forthcoming symbiosis is endorsed by Web 3.0 or the Third Generation of the Worldwide Web (www) that would be a decentralised version. Unlike the read only webpages version of Web 1.0 that was introduced to the world in 1991 with its limited range of information, Web 2.0 superseded that "static web" in 2004 allowing interactive features that were primarily used in social media granting it worldwide popularity. Late in 2005, the launch of the YouTube disrupted the technology standards as it "marked the internet's departure to an era of dynamic content. Users could now interact with web pages, communicate with each other and create

content." The experience became more personalised when smartphones followed in 2007 (Ashmore, 2003). For almost twenty years, there are a wide sector of people, especially the educators, who still struggling to adapt to Web 2.0 considering it an unprecedented revolution. The features of Web 3.0 are expected to produce more radical disruption; Web 3.0 is principally designed to serve AI purposes with its decentralised experience that aims at creating peer-to-peer interconnection excluding the role of the intermediaries and the surveillance of the authorities.

> In Web 3.0, data is stored securely and distributed across many devices, removing the need for centralized servers. Such a design also reduces the risks of massive data leaks because data is no longer centrally stored — making it more resilient to compromise. (Exper.ai, 2022)

Privacy and uttermost ownership over the data and digital assets are guaranteed in Web 3.0 and the users' transactions are secured and untrackable. Another crucial characteristic of We 3.0 is that it provides a "data-driven Semantic" that is intelligent and able to "adjust to the individual needs of each person experiencing it. Web 3.0 promises to be more dynamic and interactive" (Exper.ai, 2022).

Web 3.0 is the linking asset that serves all the AI future technological innovations; it will be more effective with ChatGPT/Google Bard and it will facilitate the inter human and inter human-machine telepathic communication when the brain microchip/Brain Talker is implanted into human brain. It should not be assumed that the brain-machine interface technology (BMI) would be opposed; there is already a segment of people who are enthusiastic about BMI, including members of the Transhumanist movement (Shankland-Rayan, 2020).

III. Ed-Tech Product Innovations and Deep Learning Movement

Invasive AI technologies and applications are all ed-tech product innovations that serve the deep learning movement that is only a branch of the broader machine learning methods; it

is based upon artificial neural networks along with representation learning, noting that the latter is meant to allow a machine to learn the set of techniques that detect human responses to any phenomenon or situation; i. e. 'features' as called in deep learning concepts, then use them to perform some specific task (see LeCun et al., 2015). These ed-tech innovations would re-transform humanity; it converts humans into what is termed as "cyborgs" who are the result of merging humans with machines; the final product is a hybrid of sorts (Gohd, 2017). The new breed is semi-human because there are some mechanical/robotic parts integrated into human body to extend its capabilities, and these parts are not easy to remove. Currently, the non-organic attachments to the deficient human body; such as the new version of prosthetic limbs or, somehow, heart-peacemakers, might be also accounted as robotic parts because they function better than the original ones. Thus, they turn humans into *cyborgs*, yet, of sorts. Remarkably, The BMI will accelerate converting humans into real cyborgs; especially after the commercial use of ChatGPT/ Google Bard and any other AI technologies due to the fact that humans will maintain the characteristics of living human beings and those of an AI robot. Cyborgs are "self-sufficient, self-aware descendants of today's robots and artificial intelligence systems" (Powell, 2019). In other words, they are enhanced humans who perform tasks that a natural capabilities of a human body cannot. Nowadays educators should accept the idea that future generations will be cyborgs.

IV. Future Educators:

The Ed-Techs would not stop at the use of ChatGPT/Google Bard, or any other similar systems, into the educational process. It would not also stop at transforming humans into cyborgs when integrating the BMI into their brains. Similar AI technological transformations related to the education system will be also applied upon the educators. Launching

ChatGPT/Google Bard has accelerated the pace of digitalising our human world and gave more reign to a post-human era.

IV. a. Virtual AI Educators

Virtual AI characters are coming to the fore paving the way to a full human-AI symbiosis. AI generated news presenters are finding their way to the real world, the Kuwaiti news presenter Fedha is just a beginning ("AI generated news presenter," 2023, *The Guardian*). A more terrifying experience is the appearance of an AI Tom Brady, an AI generated simulation of the NFL quarterback Tom Brady, at the Dudesy show, which is an improvisational humor podcast run by AI, with some human guidance. Knowing that Brady is targeting stand-up comedy career, his AI generated version improvised a comedy skit that has genuinely emulated the human-made ones (Lawrence, 2023; Scott, 2023). If AI generated characters similar to the Kuwaiti news presenter and Brady do not look convincing enough, though AI enabled them to emulate human logic, the virtual K-pop girl solos and bands are a replica of real humans but exist in the virtual world (Lee-Hemphill 2022). Theirs is an impeccable full human appearance that made them believable enough to the extent that they have gained millions of views in a very short period. Accordingly, it would not be strange if there would be soon some virtual character educators.

IV. b. (CGI)/Anime

Educators, currently, emphasise that students prefer YouTube and multimedia presentations or E-learning tools to traditional classroom teaching. It was also proved that such means improve the learning outcome (Malhorta-Verma, 2020; Golchai et al. 2012). Moreover, students evaluated that digital animation and videos is more useful and superior to textbooks in respect of representing quality eligible information material (Flores et al., 2013). Accordingly, the shift to animated educator would not be difficult for the near future

generations; it would be even preferable because it would spare students of the stress of severe regulations and/or tolerating a moody or grumpy teacher. In the age of wide *freedoms*, students are given the right to choose not only their dress code, speech and gender identity but also their identity, no matter if this happens on daily basis or permanently, as is the case with Anthony Loffredo, aka "the Black Alien." [2] Students aspire that the range of this freedom should include the identity of the educator. In the YouTube world, they are able, *somehow*, to materialise the freedom of choosing their educators and changing them whenever they like. In the world of animation, yet, the very essence of freedom is found; students would be able to change the character of the educator to that of a computer generated imagery (CGI) or a virtual character they prefer, knowing that they would also be able to endow any character of their choice with the personal qualities that meet their personal tendencies. In this respect, an anime future educator might have the looks of a parent, grandparent, friend or even a celebrity who owns personal characteristics and style of explaining complicated information that are engaging and entice students to accept whatever they expound. In fact, choosing the appearance of the educator, whether it would be a computer generated imagery (CGI) or a virtual character would not be hard job for anyone, as the AI technological applications would help students generate CGIs and virtual characters; the process would be as easy as creating a profile on social media.

Based upon the fact that students during the process of learning prefer animation videos to textbooks, and *certainly* to teachers (Flores et al., 2013), the shift to fully animated education would not be difficult. The millennials and Gen Z already prefer anime, as the grossing adult-oriented animated films reveal, let alone the children-oriented ones (see "Animation Industry," Gitnuxblog, 2023; "Animation Statistics," abdalslam, 2023). The integration of animation with AI accelerates the pace of creating the aspired virtual world that would spare humans;

[2] Anthony Loffredo, aka the "Black Alien" is a Frenchman who transformed his human appearance into an extraterrestrial one by undergoing bizarre body modifications.

especially students, of the stress of dealing with other human beings, not to mention the bullies who make it difficult for kids to go to school. As for the feeling with loneliness, it is a disappearing sentiment as world societies; especially during the long COVID-19 lockdown, got used to loneliness that is replaced with effective interaction with the virtual realm. In short, technological, social and psychological circumstances along with the rapidly developing AI versions push humanity to a cyber-reality.

IV. c. Humanoids

Unlike the Honda ASIMO humanoid ("ASIMO by Honda," 2023), which is a bipedal intelligent humanoid robot, the accelerating AI technologies will make humanoid (human-like) Androids possible. As intentional/unintentional prank, there was a wide-spreading video on YouTube, in which a human interviews the humanoid Android Chloé. In the interview, she asserts that she only needs a soul to become full human (see "Detroit Become Human," 2018; and, 2023). Genuinely, the accelerating deep learning movement pushes AI technology to ramify in every aspect of life. AI gave birth to ChatGPT which version 4 in few months was introduced and version 5 is on the way, and it also made the virtual Tom Brady character intelligently improvise a skit. Accordingly, it would not be difficult to develop a humanoid, robot/Android as the AI brain is there so as the prosthetic limbs are available. Evidently, the ex-machina robots will materialise in the few upcoming decades.

V. Near Future Education System

Shifting the education system from traditional learning to the deep one is extremely close. The lockdown years during the COVID-19 pandemic taught every single person on the planet that digital life is the safest refuge. For students, even after the lockdown, online classes are still demanded; freedom and virtual life aspects are becoming more popular. The complaint

of the lack of digital facilities and infrastructure at schools are surmounted by students themselves; they voluntarily bring their smart devices to class because they already use them outside it. Thus, bringing personal devices to class make students more comfortable, as they simulate their outside-school comfort zone.

Instead of repeating complaints of facilities, educators should prepare themselves to the sweeping tide that ChatGPT/Google Bard and the concomitant AI technological applications will produce. Objections against its use at school will never change the fact that it is already available and students use it, as well as educators when preparing their course material. The availability of the devices that enable entering the AI realms is not a hindrance, the real hindrance is the availability of educators who are able to cope with highly accelerating digital advancements.

Concerns towards full coverage of the curricula through videos will vanish when BMI technology is applied. Implanting brain microchip/Brain Talker will be as easy as going to a beauty salon to be injected with BOTOX, thanks to the robotics. Thus, students will be open to the whole magnanimous quantities of knowledge available on the internet and they will feel that there is no need to memorise any piece of information, as long as all is available, personalised and private, due to the chracteristics of Web 3.0. Moreover, disparities between the rich and the poor nations in respect of educationsystems and education facilities will almost lose their importance; technology is fast-spreading and easily-adopted like a very contagious disease. Consequently, privileged education technologies will not be only available for the rich; ChatGPT/Google Bard and similar AI systems will create a kind of equity, in respect of availability.

Nonetheless, the tremendous problem that would confront the worldwide systems of education will be penetrating the thick walls of any education arena where students are cyborgs

who communicate *telepathically* while educators are AI virtual characters or Androids. The sweeping tide of the AI powerful systems; i.e. ChatGPT and Google Bard harbinger the fact that robots will replace humans. "Studies show some jobs—surprisingly, some traditionally white-collar work—February be heavily impacted" (Johnson, 2023). A recent report from 'Goldman Sachs' estimates that "around 300 million jobs could be affected by generative AI, meaning 18% of work globally could be automated—with more advanced economies heavily impacted than emerging markets" (Johnson, 2023). Undoubtedly, the profession of a *teacher* will be one of the 'jobs' that robots would assumed. As for students, if they are handed over to AI, they will no long become smart beings and will give the chance to AI to exterminate the humanity.

VI. Preemptive 'Symbiosis'

It has never been late or impossible to change fate as long as wise humans insist on keeping sane logic. Preserving such a category of wise humans who know how to control the *Artificial Intelligence* whenever it attempts to enslave humanity requires keeping human cognition and faculty of thought *impeccable*. Educators and elders should accept the idea that, in the future, acquiring knowledge will be the easiest task that would even be performed without the need to know how to read and write; the BMI with the help of the AI Web will perform that task. Tendency toward acquiring uttermost freedom became substantially overwhelming to the extent that future generations might be enslaved by the AI digital machines under the sham motto of exercising their freedom of choosing the course of their life.

To overcome this intricate situation, educators should not lose their position as *controllers*; however, their task will be more complicated and requires a generation of educators who are not only equipped with mere educational knowledge, but also with aptitude in digital and psychological studies. Educators should be prepared to be the supervisors of the

AI digital educators whether in form of virtual characters, Androids or robots. They should also be the seminal educators of children. In the future free world that is controlled by AI, humans will be *ignorant*, no matter whether they possess the most advanced databases or the latest AI technological devices. To preserve the future generations of consummate illiteracy, students, in the very early stages of education, should be taught to develop the faculties of cognition and thought. Through cognition, they will set their aims. As for thought, it will assist them grope their destiny among a world that does not give them a chance to think. Coupling cognition with thought paves the way to metacognition which is the intentional process of thinking about one's own thinking and learning. Thus, metacognition is "the knowledge and regulation of one's own cognitive processes, which has been regarded as a critical component of creative thinking" (Jia et al., 2019).

Creative thinking is the human faculty that distinguishes man from AI technologies that attains its supremacy out of the stored human creative databases, experiences, speeches or even emails. AI devices only process the information they receive, while humans are capable of thinking about whatever their cognition perceives. The future AI realm is keen to create *mere* cognitive beings, though "cognition … belongs to all, and not only to intellectual or artistic work processes; . . . , it is a process with a beginning and end, whose usefulness can be tested, and which, if it produces no results, has failed" (Popova, 2016). Thus, the major task of future educators, in their capacity as surveillance body, would be developing creative humans who are capable to process the givens of their realms and creatively think about how to make use of them. In accordance, AI technological devices will ever remain subservient to man.

VII. AI-Friendly Future

In fact, the world appalled reaction to the accelerating AI technological achievements is reminiscent of what happened during the First Industrial Revolution that began at the second half of the 18th century (about 1750-1760). There was also a sweeping rejection as well as

doubting and apprehended reaction to the mechanical machines that would replace the human beings. The same doubts rose at the invention of the calculators and computers but in a toned down manner. In other terms, the first leap to any new phase is the most difficult one.

Surprisingly, the developers of the AI technology express similar fears, the same as anyone else. At February 2nd, 2023, the seventy five years old Geoffrey Hinton who is deemed "British Godfather of AI, QUITS Google over fears the 'scary' tech he pioneered 'February soon be more intelligent than us' - as scientist likens himself to Oppenheimer creating first atomic bomb" (Andrews, 2023). He regrets helping create the AI systems that established the basis of ChatGPT and GoogleBard. Unlike the common situation during the First Industrial Revolution, it is the developer, not the people, who "fears" that AI systems "could prompt the proliferation of misinformation and replace people in the workforce" (Andrews, 2023). Compared to Geoffrey Hinton's situation is Elon Musk's who principally believes in and develops technological leaps through his Neuralink; "The future is going to be weird," emphatically says Musk (qtd. in Shankland, 2020).

Unfortunately, nobody can turn the clock back; the AI technology has been thrown on humanity *exactly* like an atomic bomb; therefore, we have to develop an AI-friendly symbiosis; noting that we have no other choice. Discussing sci-fi uses of Neuralink, Musk says, "In the future you will be able to save and replay memories,". . . "You could basically store your memories as a backup and restore the memories. You could potentially download them into a new body or into a robot body." In accordance, instead of giving the chance to the AI technology to make use of human memories and actions without giving ourselves the chance to control and manipulate them, educated future cyborgs should through metacognition use this information to guide their peers. Guidance and surveillance is the *job* of the educators. The accelerating advanced versions of ChatGPT and Google Bard made sci-fi possibilities a near future reality. Education and the role of the educators is very complicated. However, they have

to cope with the bumpy position of man after being hit by the *atomic bomb* of AI technology. The task of the educators would be easier if they hoard the conviction that the AI technological achievements evolve the humanity into Nietzsche's superior species of Übermensch or 'supermen' (see Nietzsche, *Thus Spoke Zarathustra*, 1883).

VIII. Conclusion

The occurring world turbulence, due to availing AI technology to public use, has produced a tremendous disruption which aggravating consequences have not been fathomed yet even by its developers. The sector of education is the primary front that would receive the harshest strikes. AI technologies at the hands of the public would create an endless warlike world arena in which, like a video game, the victorious will be the one to jump to another level, while the loser will be totally crushed. Henceforth, in a world that have been suddenly hurled into a sci-fi realm, due to the sudden public introduction of unprepared for AI technology, sane human intelligence is the most precious trove that would enable humanity to be victorious in each level of the advancement game. Accordingly, the task of educators is crucial and necessitates immediate integrated efforts in which the system and the executive bodies/staff would collaborate to catch up with the accelerated pace of the AI leaps.

Plans to integrate mobiles, Youtube, and also ChatGPT/GoogleBard in the classroom arena are all fine. The educators who are able to perform that hard task should be appreciated because integrating those technologies in the classroom require personal resilience and sincere attempts to upgrade the education system/material that has principally obliged them to upgrade their education beliefs and ideologies. Nonetheless, all such technologies guarantee that students remain mere cognitive recipients not a *thinking* and *creative* human beings who are destined to be evolved into cyborgs. As a consequence, the separate efforts of the enthusiastic educators *must be* the norm that all the educators should follow. Students should be trained to use the available deep learning means and systems.

It should be taken into consideration that today's students are the cyborg educators of tomorrow. Thus, students should be taught how to *lead* and how to *guide*, instead of being led and *misguided* by the AI devices. It would be heartbreaking if the future will be led by ex-machinas; namely, robots and humanoid Androids with uttermost advanced AI systems. If this happened, humanity would be subservient to AI machines; a situation that evidently indicates that humanity has terminated itself with the hands of humans who created the dystopia. Henceforth, the common objective of education bodies and educators *must be* preparing students, who are the future generations, to be hard core leaders. Leadership is only attained through developing and endorsing the faculty of thought and metacognition in the current and future generations. Thought and sane reason are the line of demarcation between humans and the other living beings. As for metacognition, which opens the gates to creative thinking, it is the feature that would provide the humanity with distinguished human beings whose ardent intelligence keeps them ever smarter than the AI machines.

In brief, the task of current educators should be more of guidance than traditional education so as to help the nowadays generation to overcome the setbacks that the AI technologies have compulsively imposed. Surviving the consequences of the highly advanced AI systems by preserving human beings smarter than the AI machines would make Nietzsche's type of Übermensch the common norm of the future human beings. However, if our nowadays education systems/educators could not maintain and develop the faculty of thought and metacognition in the current and future generations, humanity would exterminated; human beings would be subservient inferior beings to the AI machines that their smart ancestors have created.

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Conflict of Interest

Author declares that they have no conflicts of interest related to this research.