POSTHUMAN E- INTELLIGENCE – FUTURE CHALLENGE FOR ACADEMIA.

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ABSTRACT

Man has been endowed with many unique abilities among which thinking ability, creativity and intelligence are prominent. The discourse on intelligentsia is as old as mankind. The human intelligence has always remained a controversial debate among philosophers, psychologists, educationists and scientists. In this paper, an attempt has been made to understand the human intelligence in context of latest technologies and advancements in the area of genetic field

Keywords: Human, Intelligence, Machine, Technology and Genetics.

Introduction

Humans saw themselves as distinct beings, in an antagonistic relationship with their surrondings. Posthumans, on the other hand, regard their being as embodied in an extended technological world.

The Posthuman Manifesto

Either from evolutionary or religious perspective, human being is always considered as crown of creations. Technology as a strategy of survival and evolutionary fitness cannot be alien to the human (Hayles, 2003). Man has been endowed with many unique abilities among which thinking ability, creativity and intelligence are prominent. The discourse on intelligentsia is as old as mankind. In every society, humans are being classified as intellectuals, creative people, innovators, common masses and stupid people. The human intelligence has always remained a controversial debate among philosophers, psychologists, educationists and scientists. A number of books have been authored across the globe on the discourse of intelligence from time to time and some of them generated big controversial debates. One such a book is The Bell Curve: Intelligence and Class Structure in American Life published in the year 1994 by American psychologist Richard J. and American political scientist Charles Murray. Central argument of the book is that human intelligence is significantly influenced by hereditary factors and is a better predictor of many personal dynamics, including financial income, job performance, birth out of wedlock, and involvement in crime than are an individual's parental socioeconomic status, or education level. They also argue that those with high intelligence, the "cognitive elite", are becoming separated from those of average and below-average intelligence. Arguing intelligence as genetic asset, authors created a new debate for researchers and psychologists.

Whereas a group of psychologists argue that human intelligence is neither fixed nor entirely hereditary but remains always in constant flux. It is believed with human intelligence is also under evolution and there is a substantial research available which argues that intelligence increases with the passage of time in human societies. That is what we call in psychological science as Flynn Effect. So from theoretical perspective of Flynn Effect, human intelligence is always in fluctuation. Similarly, in present

times, when everything even social relations and social norms are now "e" based, it is not wrong to label human mind of present times as "e-mind". We hear from our elders and old aged people that children of present generation are more active, clever and more quick in grasping the things and concepts than previous generations. I wonder when I see the kids of 2-3 years old very skilled in operating android phones, laptops and more surprisely, when I observe my own son operating YouTube very easily when he is Just 3+ years old. There is no doubt that with every generation the functioning of human mind also increases proportionally. Metaphorically, it seems good to label kids of our generation as 3G or 4G kids but imagine the kids of that generation which will be after 100 years? Will this generation 100 G or multiple of that? Let us put this question for imagination?

Human brain is just like a universe (Bell, 1999). We are supposed to owe to the research carried in the area of Physics, Neurosciences, Genetics and Psychology to a great extent when it comes to advances in the study of the brain and the mind-body connection. A significant portion of the scientific research articulates that how in the last 20 years researchers have gained more insights into the workings of the brain than in all the previous centuries combined. A famous scientist Kaku rightly claims that latest discoveries and innovations have more to do with physics than biology, for understanding the functioning of human brain as well as mind. The technologies that have permitted us to comprehend the brain in more detail than ever before come to us from the world of physics and Nero-science. These technologies include everything from magnetic resonance imaging (MRI) machines, CT scan machines to the positron emission topography (PET) scan. It is now gospel truth that without these machines, our understanding of how the brain works and mind evolves would still be in the proverbial dark ages. Research has proved that paralyzed persons can now move artificial limbs through the use of an exoskeleton that is directly controlled by an individual's thoughts through an EEG machine mounted in a helmet. Similarly, humans can now control various video games though thinking process. Not only this, researchers have managed to erase a mouse's memory and then reprogram it with new memories. Researchers have recently linked mouse and monkeys brains together, allowing the animals to collaborate–via electronic connection – to solve the problems. This is just beginning of shared thought which predicts future of human *blue toothing.*

The voluntary marriage between artificial intelligence (machine intelligence) and human intelligence shall give birth to a new intelligence that we call as, post human e-intelligence. The two smarter threads-smarter humans and smarter machines will inevitably intersect. Just as machines will be much smarter in near future because of the artificial intelligence, we can expect that humans who design, build and programme them will also be smarter. Therefore, the answer to the question, "will artificial intelligence and human intelligence by genetic modification have the greater impact in the next century? Is absolutely yes. With the advent of knowledge explosion and computer revolution, common masses of future generations have to accept e-intelligence as every day's technological need but with no deeper understanding how it is possible. We may even see human minds uploaded into cyberspaces. The potential for improved human intelligence is enormous. Genetic limits of intelligence seem to be over with the recent advancements in the genetic field. As a result of the human genome project, which is responsible for decoding the entire genetic structure of humans, it is apparent that there is a great potential for genetic manipulation of human intelligence. Cognitive ability is influenced by thousands of genetic loci, each of small effect. If all were simultaneously improved, it would be possible to achieve very roughly about 100 standard deviations of improvement, corresponding to an IQ of over 1000 says Stephen Hsu , a famous

scientist. We cannot imagine what capabilities this level of intelligence represents, but we can be sure it is far beyond our own as humans. .

Conceptualizing these advances in the area of brain research, it continues to marvel us with unique predictions about what is just around the corner and what the new challenges before the human arein the coming days especially for academia. What shall be the future of human intelligence, let us make some predictions. Imagine a future in which human memories will be recorded and exchanged like data transfer through Bluetooth or data cable? Imagine when a time will come, when a child have not to bother to memorize the knowledge because knowledge shall be transferred to his/her brain through data transfer techniques. Imagine a class rooms where a teacher will simply ask students get OXFROD dictionary downloaded to their brains at any cybercafé? Imagine a class room where students have not to bother about minimum levels of learning? Imagine when our memory and consciousness will survive forever despite we will be no more on this earth because our consciousness and memories will be downloaded o into computers as same can be seen later on.

What Ronald Barthes, in his book *Mythologies,* speaks of the "The Brian of Einstein", seems now virtually possible as he had mentioned in this book that when Einstein left this world, people bristled his head with electric wires and he was requested to think of relatively? This symbolic representation probably conveys that people want to benefit even from human brain after his death which is now scope full in the era of post human e-intelligence. Perhaps that day is not for away when we will be in a position to upload and download memories, knowledge and skills directly into our brains, this will fundamentally change what it means to learn, what it means to think. This will create a new paradigm not only in the field of academia but in the history of humankind also. The famous English movie "the Matrix" is sufficient to quote here it has been dramatized when Keanu Reeves's character, Neo, "downloads" the skill of kung fu (Kung Fu is Chinese term for learning skill related martial arts). In the said movie, his brain has essentially been rewired and he has a new skill at his disposal without learning it in actual settings. But the question anybody can pose is that has he "leant" kung fu? As a general principle of pedagogy, it is argued that learning involves individual choice and effort. If we can simply download and upload memories and knowledge directly into our brain through various technologies, both choice and effort will become irreverent for teaching –learning process. As much as these ideas seems nothing more than fantasy, but they are closer to reality than we think.

These possibilities are visible across the globe especially in Europe and West, where governments are also interested to finance such projects where focus is on brain and mind research. This is why in the month of April, 2013 Barack Obama Government launched a research project titled BRIAN Initiative which stands for Brain Research through Advancing Innovative Neuro-technologies (BRAIN). The U.S. government allocated over $3 billion to the Brain Research through Advancing Innovative Neuro-technologies (BRAIN) Initiative, which hopes to essentially engineer the human brain in new directions. With this kind of support, brain research is advancing at unprecedented rates, and things that once seemed impossible are now both possible and probable. Not only, USA other developed nations also invest into brain and mind research projects so that more hidden area of brain and mind are explored. We should learn lesson from the life of famous theoretical physicist and scientist, Stephen Hawking who is not in a position to speak because of motor neuron disease, however Hawking only thinks and writes but machine speaks on behalf of

him. In other words, his brain is connected to machines, not his tongue for communication purposes. This is one just concrete example to quote here the future of human cognition.

Conclusion

Keeping the present scenario of research in view, we cannot deny the probability of transmitting the knowledge to human mind through e-transfer. Therefore, good days are coming for kids and children when they will get rid from rote learning either by human Blue toothing or by e-transfer of knowledge. But the fundamental questions arise? Does the role of teacher and text books seem to be arrested in future days? What will happen to other cognitive processes like creativity, memory, perception, consciousness analysing, criticism and forgetting? When all the above quoted imaginations will be virtually possible, it will change the classical meaning of human being and human intelligence that is why author prefers to coin a new term Post Human e-Intelligence. Similarly, what will be future challenges of teaching profession with the era of Post Human e-Intelligence? It will be left to others to raise and discuss these questions in more depth. Such questions will shape the future discourse in the area of human intelligence. Let us wait for new paradigm in academia.

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