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Contents

Vidyankur: Journal of Philosophical and Theological Studies is a peer-reviewed interdisciplinary. It is a bi annual journal published in January and July, seeking to discern wisdom in our troubled times. Inspiring and brief academic articles beneficial to the educated audience are welcome. It attempts to foster personal integration through philosophical search, theological insights, scientific openness and social concern.

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The cover depicts the gentle gaze of AI on our precious earth within the cosmic background
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Editorial

Life of Technology

Right from the beginning human being were tool-using technological animals (*Homo technologicus*). Technology may be most broadly understood as the things, both material and immaterial, created by humans through the application of mental and physical effort in order to achieve some value. In this usage, technology refers to tools and machines that may be used to solve real-world problems. Initially human beings used technology for their comfort and convenience, mostly at the physical level.

Technology has evolved and shaped our workplaces in many ways, unimaginable even thirty years ago. With the emergence of Fourth Industrial Revolution (FIR) through the creative tools like the internet and email for communications, word processing, spreadsheets and presentations for office productivity, electronic databases for record keeping, and robots and artificial intelligence for automation, we are entering into a new mode of living. FIR denotes the blurring of boundaries between the physical, digital, and biological worlds. It's a fusion of advances in artificial intelligence (AI), robotics, the Internet of Things (IoT), 3D printing, genetic engineering, quantum computing, and other technologies.

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True, technology has made our lives far easier and better through better communication. The role of technology has successfully made the communication aspect much easier and better for us humans. The user experience and interface have drastically improved with the upcoming modern age technology. FIR continues to make technology advance at an exponential pace.

The danger confronting us is: Are we becoming slaves of technology? Is technology shaping our lives, beyond any return? Where lies the dignity and worth of human beings, especially the poor and the vulnerable, in our rapidly growing technological society?

It may be noted that the articles in this issue are not technical, since they invite ordinary educated audience to appreciate the role of technology in the society. So, no mathematical knowledge is presupposed.

This issue of the *Vidyankur: Journal of Philosophical and Theological Studies* takes up some of these issues from moral, philosophical and sociological perspectives. We ask ourselves: Are our lives itself being technologized?

May we learn to live with technology, without becoming slaves of it! May we guide technology, so that it becomes useful tools and not enslaving masters for the whole of humanity. We may learn to live with (and not for) technology meaningfully and humanly! May technology help us to lead a Covid-19 free and humane life!

The Editor

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Artificial Intelligence
A Threat or a Boon to Humanity?

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Abstract: Machines are evolving and we humans are witnesses to this evolution. Our lives are changing rapidly during this age of Artificial Intelligence. From Google search to our money transactions Artificial intelligence plays an important role in our day to day life. Despite of learning and engaging with this new technology we can't help but worry - Is AI really coming for our jobs? If yes, which jobs and sectors will be affected by it and which won't? There are various controversies over the rise of Artificial Intelligence. This write-up will shed some light on various aspects of Artificial intelligence, it's advantages, disadvantages and help us decide if AI is really a threat or a boon to humanity. It's time we figure out our role as humans in this age of Machine evolution, or should we say, machine revolution?

Keywords: Artificial Intelligence (AI), Artificial General Intelligence (AGI), Technology development, Artificial Intelligence applications, Machine Learning.

Introduction

It was today morning; I came across a news article on the internet saying "Amazon Opens A Supermarket With No Checkouts" (Golden 2020). Very intrigued I clicked on the link to read more. I found out that Amazon has opened a supermarket in Seattle with no checkout operators or self-service tills, all with the help of computer vision and machine learning. It uses hundreds of ceiling-mounted cameras and electronic sensors to identify each customer, tracks the items they select and adds them to customers' Amazon Go account. There's no need for any human interaction at all! This has left me wondering, how far are we in the age of AI? Moreover, what it's like being human in the age of AI?

This essay will take us through various aspects and applications of AI and how most people misinterpret it as something to be scared about. It explains how we can benefit from AI and use it for the development and betterment of humanity.

While some of us are still trying to figure out the difference between artificial intelligence and machine learning, AI is fast progressing. This breakthrough technology has already become accessible for any software developer; tech giants are currently competing to dominate the field of artificial intelligence. China has taken serious steps to become the leader in AI. Technology has come a long way. Previously humans had a lot of vanity as to being the most intelligent species on earth, thanks to Dietrich Prinz and Christopher Strachey who collaborated and proved us wrong in 1951 by writing the first working AI program to run on the Ferranti Mark 1 machine: a checkers-playing

program. Since then machines have been beating humans at complex tasks that seem tailored to the strengths of the human mind, including poker, the game of Go, and visual recognition.

Role of AI in the Industrial Workforce

There are high chances you must have read or heard somewhere "AI IS COMING FOR YOUR JOBS!" A lot of people think their jobs will be affected by AI but this isn't true. AI will take up mostly routine tasks and not jobs which need cognitive thinking. This simply means that humans will be left for higher-level jobs which will, in turn, boost their morale. This will be beneficial to us as humans get bored by daily routine tasks which hamper their productivity and job satisfaction. Handing down these jobs to AI will actually work in our favour. For many high-stakes decisions that still need logical reasoning, like doctors diagnosing patients and judges setting bail, experts often favour experience and intuition over data and statistics. This reluctance to adopt formal statistical methods makes sense. Thus, these kinds of jobs won't be completely automated, there will always be scope for humans in fields like these which need critical thinking. AI will also take over jobs which are risky and life-threatening. For example, in bomb defusing, mining etc. robots can save thousands of lives. Businesses will need to change their organizational structure to adapt to AI. Humans and AI together will make up the workforce for organizations and will work together for the benefit and profit of industries.

> Consciousness is almost impossible to achieve in AI with the technology we currently have. It's like we're still stone-age men when the idea of building consciousness in AI is taken into consideration

Is AI Really a Threat?

There was a recent debate on the topic "Is AI an existential threat or a great leap forward?" Needless to say, a lot of lousy science fiction movies have tricked us into thinking AI is a threat to human race. We are all familiar with such movies and have come across such poorly thought out scientific cinema which is solely based on earning good revenue. The truth is AGI is very beneficial to humans if built properly, undertaking AI safety measures which are yet being researched by scientists worldwide. It may also be that the media have made the AI safety debate seem more controversial than it really is. After all, fear sells, and articles using out-of-context quotes to proclaim imminent doom can generate more clicks than nuanced and balanced ones (Naudé and Dimitri, 2020).

Many AI researchers roll their eyes when they see this headline: "Stephen Hawking warns that the rise of robots may be disastrous for mankind" (Hawking, 2014). And many have lost count of how many similar articles they've seen. Typically, these articles are accompanied by an evil-looking robot carrying a weapon, and they suggest we should worry about robots rising up and killing us because they've become conscious or evil. On a lighter note, such articles are actually rather impressive, because they summarize the scenario that AI researchers don't worry about, the scenario that combines as many as three separate misconceptions: concern about consciousness, evil and robots. Consciousness is almost impossible to achieve in AI with the technology we currently have. It's like we're still stone-age men when the idea of building consciousness in AI is taken into consideration.

If the goals of humans and AI machines are aligned, we have nothing to fear. The concern about advanced AI isn't

malevolence but competence. A super-intelligent AI will be extremely good at accomplishing its goals, and if those goals aren't aligned with ours, we have a problem. You're probably not an evil ant-hater who steps on ants out of malice, but if you're in charge of a hydroelectric green energy project and there's an anthill in the region to be flooded, too bad for the ants. A key goal of AI safety research is to never place humanity in the position of those ants. The main purpose or goal should be communicated to them in order to synchronize the efforts of humans and AI together for the betterment of humanity. There is also no reason for us to be concerned about the intelligence of AI overpowering us since there are always people smarter than us in this world but rather than fearing them, we communicate our ideas and thoughts with them for our own intellect. Similarly, we should learn to communicate ideas with AI robots and encourage their contribution like any other human's for research and development wherever possible. It's about walking hand in hand rather than competing with one another.

The ultimate goal is to use AI to help the human mind, not replace it. The human brain is the most elegant computer in existence. We process millions of sensory inputs automatically and constantly, allowing us to learn and respond to our environment. Imagine the wonders we could do if we complement all of our amazing ideas with not just more data, but also more data processing capability (Venkatachalam 2017). We could rethink every single problem that exists today and work towards finding an optimum solution. Even with today's primitive forms of AI, there is enough technology out there to start doing exactly this. The magnitude of social impact possible when we couple AI with human skill and ingenuity is going to be unbelievable.

Impact of AI on Our Personal Lives

Sophia**,** a social humanoid robot developed by Hong Kong-based company Hanson Robotics was enough to fascinate millennials worldwide with her human-like gestures, facial expressions and speech during interactions. Ben Goertzel, the former chief scientist for the company that made Sophia, acknowledged that it is not ideal that some think of Sophia as having human-equivalent intelligence, Sophia's presentation conveys something unique to audiences: "If I show them a beautiful smiling robot face, then they get the feeling that 'AGI' (artificial general intelligence) may indeed be nearby and viable."

AI is going to be a boon to us in our personal lives too. Personal Assistant AIs will get to know us and our preferences better as they learn more and more about our daily routines. I can imagine the day I need not worry about preparing dinner. My AI will know what I like, what I have at my home and when I get back from work all my groceries will be waiting at my doorstep, ready for me to prepare that delicious meal I had been craving all day. If you prefer not to cook, it might even cook your desired meal for you and you don't even have to worry about your food being a little bit salty or your *Gajar ka halwa* (carrot pudding) being too sweet for your taste since your AI personal assistant will know exactly how many milligrams of salt you prefer or how sweet you like your *Gajar ka halwa*. AI is going to make a huge difference in our lives at a personal level. It's going to take a huge burden off your shoulders of the minimal tasks you have to do every day for survival, like doing your laundry or dishes or even cleaning your room. You can ask them to do daily chores for you and they won't even complain since they're not going to

get tired of it. You can peacefully go to bed not having to worry about a pile of clothes staring at you the next morning!

I believe that the focus of AI should not be just on cool home gadgets or on process optimization and automation. Instead, AI can be used to fundamentally rethink how we solve the world's problems. AI has the potential to greatly improve things like healthcare, education, poverty, security and various environmental issues. AI machines have done some very beneficial things already that humans would take a long time to do. If we leverage that to augment what humans do well, AI could positively impact society, business and culture along with the internet itself.

AI: Education

Researchers are also constantly looking at how AI can reshape and inform the modern classroom, for teachers and students alike. Personalized tutoring programs help students in everyday learning and analyze how students process information. Whenever students have doubt it's easier to provide additional, customized support with the help of AI. This software is especially helpful for students with learning disabilities, ensuring they receive an individualized approach that matches their needs. Other AI applications include services that automate common teacher tasks, such as marking tests or recording grades for future evaluation. It helps on a large scale in conducting online examinations for institutions worldwide.

AI: Businesses

AI has the potential to increase industrial growth. An amazing example of this is Walmart. While so many other legacy retailers are struggling, Walmart has posted growth figures for the last 11 consecutive quarters. Notably, this has been driven by a 63% year-on-year increase in online sales all with the help of Artificial Intelligence and predictive analytics. Walmart takes data instantaneously from its point-of-sale systems and incorporates this within its forecasts to assess which products are likely to sell

out and which have underperformed. Walmart has received much acclaim for its willingness to adapt to the digital age and its ability to link the online and offline worlds to compete with Amazon.

AI: Transportation

AI has stepped into many fields that indirectly affect our personal lives. One of such fields is transportation. Driverless trains and metro subway systems are being used at various levels throughout the world. While fully autonomous cars are still in the distance, Tesla recently announced that its Model S car is now semi-autonomous, and they released this feature to tens of thousands of already owned cars via a software update. With rising use of autonomous cars and autonomous vehicles in general which run on batteries rather than fuel has turned out to be really beneficial for the environment.

AI: Security

AI applications ranging from personal home alarms to international surveillance are being implemented everywhere around us. AI plays a massive role in keeping individuals and countries safe. Services like intelligent video surveillance analyze footage to identify and report unusual behaviour. AI also helps enforce cybersecurity by identifying abnormalities in online patterns. In digital world, AI helps keep data secure and helps us to communicate and take on our day to day online activities without the fear of compromising our personal information.

AI: Environment

Artificial Intelligence also finds application in a wide array of environmental sectors, including resource conservation, wildlife protection, energy management, clean energy, waste management, pollution control etc. Controlling industrial emissions and waste management is a challenge that can be dealt with the advanced learning machines and smart networks that could detect leaks, potential hazards and

diversions from industry standards and governmental rules. For example, IoT (Internet of Things) technology which interconnects various computing devices embedded in everyday objects, enabling them to send and receive data, was incorporated into several industrial ventures, from refrigerators to thermostats and even retail shops.

As scientists still struggle to predict climate changes and other potential environmental threats due to lack of algorithms for converting the collected useful data into required solutions, Microsoft's AI for Earth, a 50 million dollar initiative, was announced in 2017 with the sole purpose to find solutions to various challenges related to climatic change, agriculture, water and biodiversity.

Conclusion

To sum it all up, I would like to quote Rodney Brooks "Artificial intelligence is a tool, not a threat." AI is already here! True, the technology is still in its inception phase, but intelligent systems are fast learners and we can expect to see significant transformations in near future. Some sectors are at the start of their AI journey, others are veteran travellers. Both have a long way to go. We're going to unlock new possibilities at every level with the help of AI and might even find answers we've been searching for along the journey. AI is a boon to humanity given that all safety measures are undertaken and the ultimate goal is the betterment of mankind and life in general. The change in AI technology is going to be revolutionary. Being human in the age of AI is going to require us to retain the qualities that make us human, such as the ability to love, have compassion and to be creative as well as open our minds to various possibilities that AI brings. The age of AI is inevitable, are you prepared for the future?

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The Mechanical vs Bio-Spirit-*Homo-Technologicus*

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Abstract: Five years down the line, things would change a lot from what it is today. The road that we traverse daily won't even give a clue if you skip yourself from that place. The realm of change is out of the bounds and of our hands completely. The interesting factor is that most of these changes does not happen completely by the rudder of our brain. The sophisticated programs that erupted in our brains, flooded onto the technical systems, eventually protruded facts and interesting numbers which made us to fly towards more interesting historical decisions and events. One might ask, can you find a human in midst of these sophisticated turnouts? Well the answer might procure a period of seconds for us, but from a personal perspective, human intervention and the bio-spiritual living is livelier in this era, when the science demands it has reached its peak, as it has always.

Keywords: Artificial intelligence (AI), Brain studies, Rationality, Bio-spirit, *Homo technologicus*

Introduction

This article provides a fringe of knowledge on the influence of AI realm and its implications on the *Homo technologicus.*

What if Artificial intelligence (AI) would baptize your child one day? That would be a highly exaggerated thought, right! But if the unending socialist slogans that were raised during the infancy of the industrialist era could not replace the room size machines from grabbing their jobs, then the day when robots anoint you might not be too exaggerating. But the fact of celibacy and humanity would be a great hurdle for the machine to overcome. Leave out the 'priest', just have a thought on the impact happening on earth 50 years from now. Every human is running at 100 miles per hour today. Each being has its targets to be achieved. Once its accomplished new targets are defined, and the cycle goes on. Thus from my perspective, deficiency in genuine relationships are one of the grave drawbacks of this ultra tech era.

Before further analyzing the tragic repercussions brought in by AI, let's see some of the new acquaintances that turned out to be the welfare and doom for mankind.

The Progress Leading to AI

In this section, we trace the movement from material things like wood and iron to AI and to the possible Superhumans.

From Wood to Iron

The *Homo sapiens* started his traversal of life in woods, which in turn made his life to circle the woods. As humans required more tools for an easier life, he initiated the phenomenon of inventions, both knowingly and unknowingly. At first everything was made of wood and the first 'wheel,' was a great invention. Although durable for a certain timeline, the wear and tear of the wooden wheel was always a standing problem.

Then came the molding, casting and shaping which brought forth the iron wheel. The introduction of iron into the daily life brought in a huge change in the living pattern of man.

From Static to Dynamic

The introduction of iron to daily needs was just the beginning. The cyclical motion of iron initiated a big impact, but when it went to the next stage, where the iron parts started to clamor with each other, it inscribed a new history. As Alvin Toffler says in his famous book, 'The third wave', the industrialist era changed the whole face of the earth. Even the word 'success' was properly defined and came into a primal existence in the dynamic era. Before that man's life was simple, doing the daily livelihood works, earn something for the drinks, if felt moody to sit idle the whole day and particularly no great aim. People were in peace and calm and no hurry-burry as that of today. They were contented with their life. But the mechanical era turned everything into a dynamic mood and even the word 'idle' seemed as a blasphemy.

Everyone wanted more, the industrial lives flocked with workers who came in at punctual times. The punctuality which was actually a new code of conduct for the common people eventually came into the pattern to achieve 'more'. The one who is most productive, creative and dynamic was esteemed as successful.

Manual to Automotive

Soon the capitalists realized the manual labour performing repeated work-sets could be replaced by automotive machines. The machines could work on limitlessly without tiring themselves and at the same time would never demand any wages for its labour like humans do. Even though the initial investment was quite high the profit factor, in the long run, stood outstanding. Thus long lines of machines got installed in the workspace, replacing thousands of individual workers. Obviously, strikes were called on against the loss of labour but it could not subdue the strength of the capitalist and machines.

Those who were prudent took up different jobs soon and continued the life pattern. Thus the machine king reigned on evolving itself year after year.

Automotive to AI

The long line of machines was indeed a strength for the industrialists, but every machine installed required a human to do the working, i.e. to control it accordingly. But within a few decades new inventions came up that attached 'brains' to the machines which again replaced a good number of labourers. This is the era that has started to work on its own. From washing machines, oven, fridge, television, sound mixers, computers, tablets to table fans, the AI has been driven into whatever things possible, with the caption, to make human life easier. Indeed the human life has become easier because there was a time when a house lady had to walk to stores to procure the stuff she needs, goods been transferred between countries took weeks, communication to be made between different poles on earth took days and even travelling to the nearest metropolitan city took hours, but now the AI has rewritten every concept. Thus, everything has become simpler in terms, but new challenges have risen. What is simpler today does not seem the same tomorrow.

So we are ever striving to make it smaller and cheaper. The competition between the countries is primarily to enhance themselves in artificial intelligence as far as possible because it is what drives everything today.

The IoT (Internet of things) is everywhere and it will be omnipresent in the near future.

Human to Superhuman

This is the future era. Extensive experiments are widely and secretly done in almost all countries, to enhance homo-sapiens. They say humans are vulnerable. Man can be easily manipulated, is highly vulnerable to diseases and has a very

short lifespan. But when it comes to the AI integrated human, the vulnerability can be brought down up to 13%. With further enrichment and experiments the error can be diminished too.

One of the latest news in the tech world is of the famous 'Reuters' media group. They have launched their news channel where the news is composed by an AI and at the same time, it is also presented by an AI-developed- character interface. The human intervention here is literally zero. This is not a minor development, because professional news composing and the news reading is not an easy task and normally it takes years for a normal human being to get to the professional level. But the advancement of AI helped it to grab this target too. Humans are relieved of the jobs, which we believed could be done 'only' by us.

The Rational Artificial Brain

The basic dictum by which philosophy distinguished man and animal is by 'man is a rational animal'. But today this rationality can be found in all tech devices. They purely use reason, maybe better than us, to take decisions whereas we humans are lot influenced by our emotions and second thoughts. But for the artificial brain there are no second thoughts, which makes it more rational. Thus what I noted at first, was not just an exaggeration, but their might come a day where the whole mankind will be controlled by the 'Artificial brain' for efficient living, which is almost evidently seen in today's society, like the pre-controlled room temperature, automatically parking cars, auto development of research documents, intruder detection and warning, the list goes on endlessly. Even in medical care there are robots capable of doing a complete surgery without having the smallest intervention of a doctor and at the same time the efficiency of the surgery would be higher than a surgery done by the human hand. But it is a great relief that a 'heart' capable of beating like a human heart hasn't been found yet. If it had been we would have replaced our biological hearts way before.

But 'stents' used as a replacement for damaged veins are being experimented and developed with high precision. The people undergoing heart problems find it real helpful with these inventions

to their rescue. In the sequence of Terminator movies, the greatest invention of mankind, i.e. advanced AI for warfare, rationally decides that the mankind which have been inhabiting the mother earth for centuries did not properly take care of the planet earth, rather being as the custodians they lived as the exploiters. And the AI realized if the current pattern continued, humans would simply put the earth to utter destruction. So it decided that the humans is the most tragic creation of all species and it must be exterminated. Thus, the AI comes into war with humans and the humans does their best not to live, but to survive. Eventually they retaliate but soon they realize, attack is the best defense. This is the basic outline of the story and for the past two decades 'Terminator series' is almost telling the same story in different perspectives. They are shouting out the danger of giving an artificial rational brain the freedom to act upon humans.

Humane Artificial Intelligence

The latest hit Malayalam movie *'Android Kunjappan Version 5.25'* speaks of a robot who takes care of the elderly. The film in its first half depicts the care and passion that a robot shows to its master, which is happening because it's coded so. And the film shouts out the human care that's negligibly seen in the present society and how people tend to leave out their parents for a "selfish" comfortable life. But at the end the very limited rational brain of robot reaches its limit and turns out to be a rogue robot and at the same time it makes the master addict to its robotic care.

We develop all mechanisms to give human a better life and the prior concern is always the immediate fruits. In most scenarios the distant effect of a particular project is not analyzed in humanizing ways and the results are not always pleasing. The robotic nursing is already in execution in China, Germany and some other countries. The reports state the results are positive but the ultimate purpose of the machinery is always under question. The machines have become part of our lives such that we humans tend to love more the machines than the beings

around us. This make us less human. We tend to close ourselves in our comfortable boxes and evacuating everything and everyone, who dares to create a pinch of disturbance to us.

The 'selfie' culture has been adopted by the society for a few years now. The name itself denotes that selfie gives more importance to the 'self'. Before the selfie era, people used to take most number of photos in groups, but now everyone focuses on their self. Likewise, a lot many changes have been adapted in the present decade. The virtual media has found its unresisting growth in this era, which has altered even the psychological structure of human thinking. People live in the virtual world today than the reality. People often believe that being approved in the media world is what they want and they try to improvise the virtual world as their reality.

Conclusion

The human brain is not just rational, I would say. It surely is a mix of rational, emotional and surely a ton of second thoughts, and that's what make us human. We tend to care not because of our rationality but because, the being of human means to care, according to Heidegger. But this care factor is rarely seen these days. As I have mentioned we all are in an accelerated mode trying to achieve more and more. The word 'enough' is not inscribed in our dictionary. During this limitless run what we leave back is actually our being. We forget who we are and especially the AI helps a lot to make this happen. There are places were only humans can step in, like relationships, and no AI or sophisticated AI could ever replace this.

Through this paper I was not just trying to relate the AI realm with the human realm but was trying for a floccinaucinihilipilification. I wouldn't say AI is completely to be banned from human life but it must be stopped or restricted at the pit stops that it is supposed to be stopped. The machines surely make our life easier and we can't live without it too. Even now I have used 'Grammarly', an artificial intelligence platform that corrects grammatic and linguistics errors, to complete my work. The growth factor is inevitable in this era, but it must go hand in hand with the natural cycle of our mother earth.

Humans are being of care, but when AI is allowed to apprehend above the human freedom, danger follows.

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Being Human in Scientific and Technological Era: Reaching to the Higher Level of Consciousness?

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*Abstract***:** Today the human beings are facing the identity problem of self, others and the world as well. The scientific age has progressed rapidly and discovered and manufactured sophisticated machine and electronic gadgets which have made our life very easy. At the same time priorities over machine than human has confused human being at this juncture of life. The modern era has downed with artificial intelligence which seems to subdue human intelligence. It raises many questions for humanity concerning their survival, existence, domination, and identity. Human values seem to be in danger of being extinct or replaced by modern gadgets. This paper tries to synthesize humanity and artificial intelligence and tries to show that science and humanity are not contradicting to each other but together growing towards higher level of consciousness.

*Keywords***:** Artificial Intelligence, Natural Intelligence, Easy Flipping, Framing Nature, Embedded Self, Humanity, Relationality, Rationality, Spirituality.

Introduction

Human person is a unique being on this planet. He is endowed with wisdom, knowledge, intrinsic values of love, kindness, generosity, and service, feelings for and with others. All these values unite human species together as species having consciousness greater than other species in the world. Science has proved that matters in a different form can render excellent service to humanity. Artificial intelligence has played a vital role in this scientific age to achieve unimaginable dreams. Therefore, being human for the human person has become a great challenge today in this scientific and technological age.

The Body, Mind and Soul of Being Human

Being human in the modern era is understood more simply by the elaboration of the given phase 'Being human in Scientific Era'. It can be segregated in three parts, mainly 'Being human and human being' is the first, secondly – 'in scientific', and the third – 'era' that is the timeline. Let me raise a question – who is a human being? To respond to this question, I would say that human being is a biological being, a physical reality as an existing person on this planet. Therefore, it implies a human person has a *body*, *mind* and *soul*. So, a human being is combination of three existing realities – a body, which sustains the physical reality of being alive and does all the physical activities as a human person. The second part of the human being is the mind which is responsible for the rationality of human being, knowing faculty of our being. The third part is the soul; we also associate it with our experiencing faculty. The soul is implanted by God during the conception in mother's womb is the belief of the believers. The atheists don't believe in the existence of soul in human being.

This essay shows the challenge to be truly human and appreciate the development of science and artificial intelligence and tries to synthesize both towards higher level of consciousness.

What does being human imply? We imply it is a *human person*, *fully alive* with *rationality, relationality* and *spirituality*. Human rationality is that aspect of humanity through which a person can think, imagine, dream, give articulation to his thinking in language form, express this thinking through art and culture, dance, music etc. Relationality is all that a person can relate to oneself, to divine, others, environment and to the entire universe. Spirituality is that aspect of human person through which he experiences finitude in his being and tends towards infinity, beyond finitude. It is a way of life based on certain values. Being human means all the qualities and value system a person can have in his life which distinguishes the person from other being on this earth. A person who knows good and bad and has the freedom to choose good for all and for everyone could be considered as being human. The second part is 'in scientific or modern' which means material development where electronic equipment, machines are produced and machine intelligence or artificial intelligence is used for their operation.

The third part of the topic is "Era" means the timeline of existence. From the scientific point of view, we understand the beginning of the existence of the universe from the big bang theory. Therefore, our universe is 20 billion years old. Humanity is only 4 million years old in this timeline. "Era" indicates a particular time period of our existing where something has happened during that period. Therefore, it is the time period of the starting of artificial intelligence and scientific growth and its dominion over the human being. Artificial intelligence is the machine intelligence or the

intelligence demonstrated by the machine which is in contrast to the natural intelligence performed by human mind. Artificial intelligence (AI) has progressed so rapidly that it has emerged successfully in the area of knowledge representation, problem-solving, reasoning, learning, planning, natural language processing, motion and manipulation, perception and other areas as well. Its advancement can be seen to the depths of the sea to the height of the universe, even the unknown planets are no more hidden from the knowledge of the human being through the help of the Artificial Intelligence. The entire earth is positively and negatively affected by this intelligence. Life of human has become very comfortable, easy, effective, organized, compact and productive. The impact of artificial intelligence is so much in our lives today that it becomes very difficult to live without it. In any sector of life, be it personal, social, relational, official or governmental it has become the part of us without which the system seems to collapse or seems to shut down our life itself. Therefore, it is appropriate to put forward the views on "Being human in scientific Era".

Self-Understanding

How do I understand myself in the Modern Era? I, as a human being on this planet, have a unique identity. I am not a machine, nor a plant, neither an animal but a human being, having consciousness greater than other existing things and lives on the earth. Therefore human being is a unique being, valuable being and has inviolable dignity. We are aware of our knowing and willing. Freedom plays an important role in our life. Human experiences tell us that we belong to nature but at the same time we are radically different from it. Therefore, we come to this earth with a purpose, dreams, hopes, aspirations and full of life.

We experience contingency and finitude and live between birth and death. Human beings do not bring themselves into existence and they do not have the power to keep themselves into existence. Everywhere we notice beginning and end. In this world, nothing seems to be permanent. At the same time human being experiences in their depth a longing for and a movement towards transcendence. Therefore, our goal is not ourselves and our meaning is not within us. We seek to go beyond ourselves in freedom, knowing and in loving. In this journey of living and progress the artificial intelligence helps human being to understand the meaning of life better and who they are in a relationship with the matter, with the self, with others and with the universe.

Looking at the progress and the web of artificial intelligence that has spread over the earth and the universe, it often triggers us to think – 'will the artificial intelligence overcome human being'? I would reflect it this way that artificial intelligence is the creation of the human mind and human being is not the creation of artificial intelligence. The evolution theory of Charles Darwin highlights the progress of life from the matter to cells, plants, animals, Homo sapiens and ultimately this matter reaches the higher level of consciousness in human being. This human being tries to understand the functions of matter in form of machines, electronic gadgets, computers, sensors, detectors, other equipment used in different platform of life through commands, programming, algorithms, arithmetic calculation, binary numbers, flipping property of electron and sense of the matter and non-matter objects. They use it for the betterment of human life. Therefore the one who creates is always greater than the created one. Each individual human possesses a unique and inviolable dignity. The value of a human being doesn't depend on the possession of material goods. The value of the human person is not possession, not doing aspects but it is very much being aspects. What he/she

becomes in the process of doing and achieving in life is more significant in the real-life scenario. Human being also has a social dimension which is the intrinsic quality in them. This social dimension comes from very much being born as a human in a family with a mother and having the father which is the first felt realization of human society. Therefore, we can't imagine a human being getting replaced by artificial intelligence. If we look at the human being only as an object on this earth, they exist only for the work and neglect the very aspects of unique and inviolable dignity, their preciousness in the society, then we will be missing the track and this artificial intelligence will take over the human being. We find in the history that human beings were treated as an object in many parts of the world when slavery was very much prominent in society.

When we think about the social dimension of a human being, the concept of relationship plays a very significant role in life which distinguishes us from other being to some extent. We are social being so we need the relationship, communication, human touch, human solidarity, celebration, dance, sympathy, tolerance, understanding each other, collaboration, friendship and all that human experiences which touches our hearts and revives, energizes and gives hope to live life meaningfully. Artificial intelligence has enhanced our socializing process. Now the distance of the world is no more unreached, families and persons living in a different continent are no more apart from each other but very much known to each and every one. You can travel from one end of the world to the other end within a day. You can converse with the person living in a different country by looking at him through social media. Transportation, travelling, communication gadgets, networking webs etc. have made our socialization process very quick and rapid

and within the fraction of second, we can do everything. The whole world has become one home, in our Indian tradition it is understood as *vashudhev kutumbkam*. I quote from the book *Teilhard de Chardin and the Mystery of Christ* by Christopher F. Mooney (1968), "The peak of ourselves, the acme of our originality, is not our individuality but our person; and according to the evolutionary structure of the world, we can only find our person by uniting together." The sad reality is that we have failed to be a true human being in the process of socialization. The artificial intelligence which is helpful for us to become the extension of our being, part of ourselves. Machines, mobile, electronic gadgets have occupied my being than my family members and my neighbour next to my door. It seems to us that we are becoming less human by the use of artificial intelligence and neglecting our human values. We have harmed not only ourselves but to the birds, creatures, and eco-system by the overuse of modern gadgets. The waves generated by the use of electronic gadgets especially mobile have destroyed nominal life form. Our life seems to be very difficult without this AI but at the same time it has brought many inconveniences to human life and the environment.

There are positive and negative impacts of AI on the growing population especially the employment of the youth today. The quality and efficiency of work have rapidly increased. The adequate example for this is Huoshenshan hospital in China for the coronavirus patients were made ready within 10 days. At the emergency time, AI has really become a blessing and helpful for people. The whole wealth of India is accumulated by only a few people, which are also the cause of unemployment. India has sent the people to the moon (Chandrayan mission), launched many satellites, made the bullet train, trying to make a driverless car, these are all the advancement of AI but these have taken away the employment of the people. The jobs of hundreds of people are taken by one

JCB for the construction of the road and buildings which causes unemployment.

Challenges to Being Human in the Scientific Era

The challenges that are brought by the artificial intelligence could be in the area of reasoning, problem solving, knowledge presentation, social intelligence and general intelligence. Besides these, I would like to highlight some other challenges as digitalization, time of capturing reality, human existence and human relationship.

Today the entire world is digitalized. All the works are done by digital objects. Human seems to be digitalizing self through the use of all gadgets which is giving him the realization that artificial intelligence is the extension of self. By the manufacturing of robotic human and its works and all other developments of the machine, humans are confused about their potentiality and identity of being human. Advancement of artificial intelligence is surely a blessing for us at the same time science has reached to the age where human have made lots of destructive weapons. A powerful atomic bomb can destroy the entire earth within a fraction of time. If a person having this power goes out of his mind, then no one can stop him from using this destructive weapon. The time is in his hand to capture the entire world. Similarly with the people in the plane which can be hijacked with those responsible persons for destroying others. One of the leading scientists of our time Steven Hawking had rightly expressed his concerns about human existence saying that if the human being has to continue to exist then we need to send some into other planets. We also see the threat to the earth due to the rapid change of climate. We could probably guess after 50 years

the earth temperature will rise more than 80 degree Celsius and survival of life will be really question mark. Incurable and new deceases like cancer, skin decease, coronavirus, etc. threatening and taking away human lives raise questions about our existence. All these are the indirect effect of uncontrolled use of artificial intelligence. Human authentic relationship is in danger today. Artificial intelligence and electronic gadgets have become the centre of human relationship today. We walk side by side but the distance is too far that we don't even look at the person and talk to him instead we are busy talking to someone who is in another country or place. It might be right to say that a child who is born today is a digital child because the child is exposed to artificial intelligence as natural part of its growth.

The Humanity and Science Growing Towards Higher Consciousness

Some of the ways, we can reach a higher consciousness may be the following:

Easy flipping: One of the most important areas where scientists have contributed enormously for the advancement of artificial intelligence is reducing the size of matter in order to increase its property and store more information. Matter acts in its nucleus level and performs better work than ever before. The magnetic property of the flipping of the spin electron creates vast change in the property of matter itself which are used for the storing of data and information. Similarly, human beings have to flip easily. They have to reduce in size that is not physical but 'ego' in order to create more space in their being for others and for humanity. They need to act in nucleus level that is human heart so that whole humanity becomes their own and work not for oneself but for everyone. It is not in the

aspects of domination and lordship on the other but equality and dignity for humanity must be emphasized and practised.

Embedded nature: For the better functioning of material used in technology which we say artificial intelligence, material scientists are embedding two or more different materials into one and coming out with new material with completely different properties. This technology is taking the world forward much faster in this artificial intelligence. Here the social aspect of the human being comes to be exercised and learned from artificial intelligence. The human being needs to embed together, putting the mind and heart together and experience a new being, that is a new society which will function better for human and creation and grow to a higher level of consciousness. Materials don't say that I am aluminium, silicon, arsenic; we can't come together because we have different property. In the same way human being in spite of having a different ideology, different culture and tradition, practising different faith might come together to form a new human society where humanity should take priority than other things and ideas. This calls for the change of horizon and vision. As individual and social being you have dignity and worth as a human being.

Framing self: Everything, where the artificial intelligence is used, is framed beautifully from the outside. This framing is to protect the main functioning part from corrosion, outer reaction, and danger and to serve the purpose for which it is manufactured. This also serves the esthetic sense of beauty for those who purchase it. Today human being needs the frame for oneself. This frame for a human being can be divided into three levels. The first level is clothing, housing which is the basic need for the

human being. The second level of framing self is society, in which human being finds one-self as dignified, valued, precious and in relation with the fellow human being. The third level of framing self is the values the human being have in their heart. These values are love, forgiveness, kindness, care, compassion, justice, peace, mercy, harmony, equality, liberty, fraternity and all those values which promote life. The third level framing serves the purpose of second and the first level framing and together it serves the purpose for which we are created. This elevates oneself into the realm of experience which moulds human's heart, and in return, human begins to act for good of all.

Becoming the prism of life: Prism is a glass in which white light falls and disperses into its seven constitutive colors. The beauty is not seen in the single beam of white light but when it falls in prism and disperses then the beauty of spectrum is admirable. Artificial intelligence has used to understand the phenomenon of light, travelling of waves in different angles, propagation of messages through these waves in medium and vacuum and its speed in all mediums. The human being needs to become prism of life. The singularity of the human being is its humanity. The colour, caste, languages, food, belief, nationality are all the different colours of the same humanity. The beauty lies in its different colours of humanity. Diversity in being human opens the door of ever nonstop evolution than stagnant homogeneity of being human.

Being human in scientific age urges humanity to be sensitive to the lives on earth and the non-living materials as well.

Conclusion

Being human in scientific age urges humanity to be sensitive to the lives on earth and the non-living materials as well. The development of science and the birth of Artificial intelligence make us alert that the rhythm of nature should not be controlled and manipulated but it has to be respected and cooperated by a human being. Science has helped humanity to achieve unimaginable dreams, making robotic human, assisted humanity to expand their life through the medical facility, and provided test-tube baby. AI has helped scientists to achieve long-awaited theory that is the detection of the gravitational wave through LIGO. AI has even reached to the stage where a person can keep all his possessions, money, and bank account in a chip and insert it in his body and he can just scan it to get money from the bank. We need to strike balance somewhere between AI and being human and follow the principle which says – 'as far as AI helps us to be truly human we must use it and make it part of us but the moment it becomes a hindrance for us to be truly human one must become aware of it'. The artificial intelligence must serve the progress, promotion of human life and expansion of human life with all its beauty. Finally, humanity is growing to the higher level of consciousness along with material reality provided he/she sees everything the extension of self and gives due respect and care for the living and non-living reality

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The New Age of Digital Evolution: Call to Be Human and Be Responsible

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*Abstract***:** Evolution and innovation are two similar terms nowadays that can be understood as a synonym for transformation. Both are related to humankind as they move on history by bringing in the world a change that helps everyone to survive. In this age of information, the prominent concept of Artificial Intelligence has made many of the dreams of the past into reality at present. Indeed, the benefits of such innovations are not equitably shared in society as human beings are also undergoing an evolution in this digital age. In this digital age, therefore, true innovation is possible only if every person is an opportunity for transformation and every person becomes a responsibility of the other. In every possible manner, innovation should be understood today as a manner of interdependence in this digital era.

*Keywords***:** Artificial Intelligence, Sociality, Environment, Technology, Genetics, Digital Age

Introduction

Although the field of Artificial Intelligence (*AI*) is making truly revolutionary breakthroughs, we have to put its progress in perspective with pros and cons. Moving forward from remote-controlled robots, our next goal is to design true automation, robots that have the ability to make their own decisions requiring only minimal human intervention. (Kaku, 2018) The profound shift in technology lifted civilization from the curse of ignorance and poverty and took us into the machine age. AI is concerned with building machines that can act and react appropriately, adapting their response to the demands of the situation. (Finlay, 1996) We, humans, have temporal consciousness in addition to spatial and social consciousness. However, we are constantly preparing for the future and even for beyond our own life spans. (Kaku, 2018) Now, it is high time to think of being human in this age.

Artificial Intelligence: Its Identity and Purpose

We can understand better the identity and purpose of AI enquiring its "Being for Others" and making a social critique of it.

Human Life: Being for the Other as the Purpose of AI

The duty of any human being as the social animal, as Aristotle says, is to be present in the need of the other. As they are part of a society, the relationships have always a role to play to bring together all of the members in your neighbourhood as well as in your families in order to identify and realize them as we see through a plane glass panel as your own brother or sister. Unlike all other life-forms on this planet, which must passively await their fate, we humans are masters of our own destiny. Fortunately, we are now creating the tools that will

defy the odds given to us by nature, so that we may don't become part of those life-forms destined for extinction. (Kaku, 2018) As products of a blind process of replication and selection, human beings as a whole – body and mind – differ only in degree of complexity from robots or machines. (Slingerland, 2008) The key to moving successfully through the world, according to Zhuangzi, a Chinese thinker, is simultaneously keeping both perspectives in mind, seeing the human in the light of the Heavenly and thus seeing through to its contingent nature, while at the same time acting in accordance with the constraints of being a human in the world of humans. (Slingerland, 2008)

Influence of AI in the Betterment of Agriculture

To be successful, AI innovations will need to overcome understandable human fears of being marginalized. AI will likely replace tasks rather than jobs in the near term, and will also create new kinds of jobs. But the new jobs that will emerge are harder to imagine in advance than the existing jobs that will likely be lost. Changes in employment usually happen gradually, often without a sharp transition, a trend likely to continue as AI slowly moves into the workplace. Many middle-aged workers have lost well-paying factory jobs and the socio-economic status in family and society that traditionally went with such jobs. *LinkedIn*, the popular social network for business people offers many advantages. *LinkedIn* makes it easy to find candidates who are not actively searching for work. (Tapscott, 2009) AI is combining information from global satellite imagery with the weather and agronomic data to help farmers improve crop yields, diagnose and treat crop disease and adapt to changing environments. This approach to

farming is known as precision agriculture and it can help increase farm productivity to feed more of the growing population.

Young people, and with them the entire world, are beginning to collaborate especially regarding environment through activists like Greta Thunberg. For the first time in history, young people have affordable, global, multimedia enabling them to research, collaborate and organize in order to bring about this needed change. Their hopes, determination, knowledge and facility with the Net are being applied to one of the greatest challenges which is to save the planet earth. (Tapscott, 2009)

AI and Its Educational Influence Today

Technology influences forms of learning. Computers, especially, Artificial Intelligence, facilitate a greater degree of collaborative learning through peer exchange and interaction among equals. Social networking sites provide an experiential space for actively taking on, rather than merely acting out, the trace of technology in the human self (Zylinska, 2013). The implications of digitization of print on literature, literary studies and research are only beginning to dawn upon scholars of literature. In the case of 'real-time' teaching, the instructor can use a projected image of a text. In a wired classroom, the instructor's system can control all other systems. The electronic classroom will textualize classroom discourse (Nayar, 2004). Virtual Learning Environments (VLEs) are essentially course delivery systems and generally include course materials, assessment facilities, conferencing and chat softwar. (Nayar, 2004). Internet databases such as *JSTOR* or *Project Muse* available on subscription enable students and researchers to access the full text of articles from major journals (Nayar, 2004).

Artificial Intelligence and Genetics

The gene by itself is inert, and can only express itself when located in a body. The human is seen as an expression of the gene, where the genetic code is the language that makes meaning in the form of human. Gene therapy is a medical intervention at the level of the cell and the molecule. It renders the body into increasingly smaller sections for analysis, but also for intervention and modification. Research rates have been high towards the advance in research, mainly in genetic engineering and immune suppressive therapy which has helped to improve survival chances greatly. Electrical and biochemical stimulations for neurological dysfunctions are also available. Gene therapy offers the potential of a one-time cure for inherited ailments and diseases. Nanomedicine is the application of nanotechnology to the treatment and prevention of disease. Genetic reprogramming enables the body to experience the world differently, especially when that body has been unable to do so previously due to corporeal problems or disease.

Being Human: Social Concern in the Present Age

The process of enhancing ourselves is not new but has been happening for all of human existence. Throughout history, we see examples of how humans have used artificial means to enhance our power and influence. In the future, we might live in the mental age, where our thoughts control the world around us. (Kaku, 2018) We do not normally associate machines with emotion. Indeed it is the ability to perform rationally, logically, without the baggage of emotional response that makes an intelligent machine powerful. Emotion is the mechanism by which we take account of shared human experience in our

decisions. The new sociality is based on contingency and immediacy, of shifting and altering loyalties. It is also based on information gathering, dispersal and appropriation of information.

Considering the relationships in the world today, mutual respect always has the prime concern. Respect for the person, therefore, means doing nothing contrary to personal either relative to the part of being the person already obtained or relative to the part which a person seeks to obtain (Rosmini, 1994). Sociality is based on social performances, communication and linkages. We present a self to the world, and the world responds to it. Although human beings can draw advantage for themselves both from the use of things and the use of persons, the use of things differs essentially and infinitely from the use of persons.

The notion of a good of a human being is not only a biological notion. Human welfare is associated with the satisfaction of needs and desires. In our society, training in skills and acquisition of knowledge are seen as components of the welfare of members of society. But choosing something by an individual must be aimed at the benefit of another person and that is the reason why we distinguish between self-regarding and other-regarding virtues (Smit, 2014).

A Social Critique on Artificial Intelligence

A social critique of AI is facilitated by exploring the virtual world first and then that of AI.

Virtual World: A Mirror which Makes You Self-Reliant

AI expert Rodney Brooks wrote, "My prediction is that by the year 2100 we will have very intelligent robots everywhere in our everyday lives. But we will not be apart from them – rather

we will be part robot and connected with the robots" (Kaku, 2018). Virtual reality need not be a prison. It can be the raft, the ladder and the transitional space. Virtual spaces may provide safety for us to expose what we are missing so that we can begin to accept ourselves as we are. We don't have to reject life on the screen, but we don't have to treat it as an alternative life either. We are all dreaming cyborg dreams, which means dreaming of a situation where man is in a machine. While children imagine morphing humans into metallic reptiles, our computer scientists dream themselves immortal (Turkle, 2002).

If a video game player has already merged with the computer, he is already a cyborg. It is an age where we feel fragmented and alone as individuals looking at the mirror would see themselves alone devoid of relations, even though we find many mythologies emerging to put the world back together again. The digital world is often disconnected or make us disconnected from many of the world's problems by virtue of its members' affluence and social standing. The blog or any form of New Media self-representation can be seen as an integral part of identity-making in the fragmented postmodern age. The digital young do need to develop coherent philosophies for responding to the very problems that the exhausted current system fails to address like racial hostility. The Digital Revolution or AI needs to offer solutions for eradicating poverty, ignorance and war in radical ways (Katz, 2002). Digital technologies free us from the constraints of space and place. As computers are able to perform more and more of the tasks currently performed by people, there will be less need for human-human contact. This shift from other people to reliance on machines may cause a

breakdown in social structures and social responsibility (Finlay, 1996).

Artificial Intelligence: A Wall Against the Other

In 1955, a select group of researchers met at Dartmouth and created the field of Artificial Intelligence. But they made a crucial mistake assuming that the human brain was a digital computer. The concept of AI as an area of science was more close to fiction. However, the idea of AI is no longer a fiction, but a reality that has become part of our daily lives (Poola, 2017). AI systems are still quite crude, and they are extraordinarily inept at many tasks that are accomplished with ease by a five-year-old human. Similarly, there is still only a mere understanding of how the body-brain serves even quite basic functions as memory, emotion and self-consciousness. (Slingerland, 2008) With AI, there has been the minimal occurrence of errors especially when typing since the computers can predict what we are going to write and make corrections.

People can get lost in virtual worlds. We must understand the dynamics of virtual experience both to foresee who might be in danger and to put these experiences to best use (Turkle, 2002). Reality is the result of our interface through the body's various senses of the physical world. In the digital age of AI this reality is 'mixed reality'. The body interfaces with the world in a different way today, and all reality is the mix of the virtual space of electronic communication and information. If the humans understand the right use of AI, a machine-oriented environment, and as language differentiates them from other animals, humans can become culture-creating and self-conscious creatures who evolve into moral beings knowing what is right and what is wrong. They should become rational

animals responsive to reasons considering the norms and values of society (Smit, 2014).

The electronic society is characterized by more adult-like children and more childlike adults; more career-oriented women and more family-oriented men. As we move forward in case of AI and technology, our society also spirals backwards. If AI is possible in machines then humans are reduced to little more than machines themselves. The middle and upper classes are moving towards the behaviours once associated with the illiterate lower classes. (Meyrowitz, 2002) To recognize the new paradigm of inter-being is not to deny the obvious truth that we perceive ourselves as separate, independent beings, but to understand that this separateness is an illusion. (Barash, 2018) The individual is not a destination. Every individual is a route to something more or something else. The new sociality is a series of proliferating paths rather than destinations. Humans are social animals and without considering the importance of relations in their life, they are easily drawn to loneliness. The use of mass media to relieve such loneliness is frequently found in modern society (Severin and Tankard, 2002).

Human Being as a Commodity Today

The rise of posthumanism as a philosophical paradigm, treating the human as co-evolving with the other species and refusing to treat the human body or consciousness as autonomous and sovereign has resulted in new views of the human itself. It shows how the human can always morph into something else, adapt to a device or a context. Posthumanism redefines the term ‘nature’. When cloning, genetic engineering, nanomedicine, chip-implants alter the

human body, the distinction between 'nature' and synthetic break down at the interface because the synthetic is incorporated into the natural body and all bodies, therefore, become cyborgs.

Computers, globalization and Information and Communication Technologies (ICTs) have transformed contemporary culture. It has been in the realm of consumer culture which also considers every human being also as a commodity (Nayar, 2004). Mass culture, therefore, apparently erases true authenticity, autonomy and subjectivity of a human being. Utilitarianism which is the greatest good for the greatest number is unable to solve the problem of how justly to distribute the total good (Kauffman, 2014). Besides making people incapable of thinking and doing, the market-culture is taking away the power of decision as well. In this free world, we are not actually free to decide for ourselves. We can no more decide what to wear, what to eat and what to drink. Gradually even the very ability to think and to decide for ourselves is drained out from us (Puthenpurackal, 2015).

A Theological Critique of AI

The church is always against any method or technological advancement which affects human dignity like Artificial Reproductive Technology (ART). It can include anything from choosing the gender of children to women delaying the birth of the first child until after they have established their careers (Nayar, 2004). Cloning involves the use of genetic information from a single cell to create an entirely new human being. Gene therapy is the use of genetic manipulation for the treatment of disease. The aspect which is important in this Age of Reason is that we miss spirituality at a fundamental level. We give our faith to science and rationality. Our adoration of technology from washing machines to thousands of apps becomes the

strongest case among the neo-atheists, overconfident in their science to think that any belief in any form of God, monotheistic or not, is stupid. (Kauffman, 2014)

Question of Human Dignity facing AI Today

The quality of human life can be enhanced while human bodies and consciousness can be augmented through technology. The amount of time and energy people spend communicating or trying to do so, is stupendous and perhaps literally immeasurable. With the revolution in computer-assisted communication: e-mail, cell phones, texting, Twitter, Youtube and growing interest in understanding how these new modalities impact our ancient predilections, there are also new threats to privacy along with these electronic assists. (Barash, 2018) Artificial Reproductive Technology (ART), cloning and prosthetics alter the physiological and other processes of the body, thereby making these processes the effect of the human-machine interface.

AI for the New Millenium

As we are witnessing in the present age the vulnerability of human existence as an individual being and social being in keeping human relations today, I think in the light of theological and scientific introspection some suggestions can be made regarding the betterment of relationships in this Information Age of gadgets and supercomputers.

- There should be the assistance of AI in every field where the basic needs of people are not met with like food and shelter.
- Successful scientific experiments with the help of AI should be also influencing the rural people in the villages today.

- The mentality towards human dignity should be enhanced not considering human beings merely as a commodity.
- AI should be a great help in enhancing human life in the world today.
- AI can be a great help in different fields especially in the lives of the differently-abled in every possible manner.

Conclusion

Human beings are moving through Stone Age towards the Information Age where the money is no more visible but is flowing as liquid cash. Being human in the world is possible if the people are aiming at some good through a united effort. Even though Artificial Intelligence can be considered a boon in the various areas of current human and social development, strict monitoring is required where the dignity of the human being maybe tarnished. Every person, including Christians, have the responsibility to make the necessary steps to consider the human being as a neighbour and not the commodity of personal gratification. Humans can claim to have created a better world, and the world can claim to have made growth, only insofar as it gives greater light and better form to the humans in the society. To contemporary humans, it seems to be a disturbing reminder. The basic identity of human beings is radically questioned in the present world and if the humans give way to machines, the world as a living universe will remain an illusion. Now it is in our hands to explore or to enhance the world around us through our own hands and not rely exclusively on a machine or platform.

Even though Artificial Intelligence can be considered a boon in the various areas of current human and social development, strict monitoring is required where the dignity of the human being is tarnished.

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Finding Meaning in This Time of Crisis: Contemporary Applications of Logotherapy

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Abstract: Covid-19 pandemic has confined humans to follow social distancing and stay at home. Confining ourselves at home has made us to be in solitude and by ourselves. The new generations are not attuned to be in solitude as it pierces their very existence of finding meaning. According to one survey the suicide and criminal rates were on the rise during this pandemic. What gives us meaning? Is it our wealth or our parents or our social media friends? Each life is precious. Suffering or solitude cannot take away our will for living and being cheerful. This write-up will enlighten our minds and hearts to find meaning and value our lives.

Keywords: Meaninglessness, Logotherapy, Happiness, Meaning, pleasure, power, determinants, suffering, encountering, experiencing, psychotherapy, depression, suicide, trauma, mental, co-relation.

Introduction

Meaninglessness is a frequent visitor to the therapist's consulting room. A sense of meaninglessness is by no means always bundled with searching for God or losing religious belief. It could manifest itself simply as a certain inner emptiness, a feeling that some vital ingredient has gone missing from our life. Particularly in these 'age of Gadgets' we find there is something lacking

in our life. However, we have temporary companions in the form of electronic gadgets (smart phones, tabs, laptops etc.). These gadgets try to give us the interim happiness and companionship. But, they lack in the perpetual happiness which is possible only through us. To solve this mystery of meaninglessness Logotherapy comes into play. Logotherapy a concept developed by the famous 20th century neurologist and psychiatrist Victor Frankl etymologically means 'meaning therapy'. Before Victor Frankl, Sigmund Freud spoke about humans 'will to pleasure' and Alfred Adler culling from Nietzsche spoke about the 'will to Power'. Meaning plays an important role in each one life. Some find meaning in their profession and some find meaning in the miniscule work they do. Ultimately, it is the meaning or the goal in life that keeps us going. Suicides are in great number because of this loss of meaning. We feel that we do not belong to this world once we lose meaning in our lives. Logotherapy is based on the existential analysis of Soren Kierkegaard's 'will to meaning'. According to him meaning is not equal to knowledge but meaning is a lived experience and a quest to find one's values, beliefs and purpose in meaningless world. As a staunch Christian this meaning comes through the word of God.

Some Features of Logotherapy

Victor Frankl's Logotherapy was founded on the belief that the primary motivational force is to find meaning in life. Furthermore, life has meaning under all circumstances, even the most miserable ones. We all have freedom to find meaning in what we do and experience. According to him Human spirit is not spiritual but the will of human being. He emphasizes on the search for meaning which is not equal to God or supernatural being. However, there are barriers of affluence, Hedonism, materialism etc. Frankl observed all these during his stay at the Nazi concentration camp where he saw humans' pursuit of pleasure and acquiring and consuming material

goods. We humans discover meaning by creating work or doing a deed, by experiencing something or encountering something and by the attitude we take toward unavoidable suffering. We know everything can be taken from a man except one thing, and that thing is human freedom. Human freedom is the key we possess. So, we are the masters of our own life. If we are depressed in life we need to try to see the reality from the others perspective and balance the matter in an equivalence.

Frankl believed in three core properties on which his theory and therapy were based:

1. Each person has a healthy core.
2. One's primary focus is to enlighten others to their own internal resources and provide them tools to use their inner core.
3. Life offers purpose and meaning but does not promise fulfilment or happiness

Going a step further, Logotherapy proposes that meaning in life can be discovered in three distinct ways:

1. By creating a work or doing a deed.
2. By experiencing something or encountering someone.
3. By the attitude that we take toward unavoidable suffering.

Importance of Logotherapy

Logotherapy as will to meaning is the only psychotherapy because there is no psychotherapy other than theory of man. Though Freud and Adler spoke extensively about 'will to pleasure and power' respectively, yet they fail to affirm because they try to project human existence negatively. Therefore, existentialism plays an important

role here. It's existentialism not of machine model or rat model but of freedom. In his observations at the Nazi camp Frankl saw that humans can never be free from every condition- there are biological, sociological and psychological determinants. However, Humans are capable of resisting and braving even the worst conditions. For this to happen humans have to detach from situations, choose an attitude about him/her, determine his/her own determinants and shape his/her character. Finally, we are individually responsible for our own life.

Practicality

Frankl even used this therapy practically in a number of occasions. For example to relieve the stress of pilots it was told to the pilots just before the flight to know the purpose of the journey. A greater result was observed. Moreover, there was a highest enthusiasm seen during these things. According to Frankl, Depression has three dimensions- psychological, physiological and spiritual. Psychologically we feel depressed because feelings of depression root from undertaking tasks beyond our abilities. When we fail and get discouraged we feel depressed. For example, in the game of football when someone misses a goal he feels depressed and loses his confidence. Physiologically we feel something called "Vital Low" which diminishes our physical energy. Spiritually there is a tension between who he actually is in relation to what he should be. For example, in religious life very often we mask our life at some moment of time.

"A therapy for the sick, support for the sufferer, education for the confused, and philosophy for the frustrated … logotherapy has developed methods for working with clients who suffer from phobias in their sexual behavior, have incurable diseases, or lead empty and meaningless lives" (Faramarzi & Bavali, 2017). This shows the variety of contexts logotherapy can be applied to.

Logotherapy can be used by itself to treat a mental health disorder, as most early psychotherapy was used. It can also be used in a positive psychology context to help people with no discernible mental health disorders live a life with meaning, and in turn higher levels of well-being. Logotherapy can also be used in a group or family therapy setting to help people deal with a number of stressors. The versatility of logotherapy is clear when looking through its modern-day applications. Logotherapy has recently been used to help support students, whether it's in the context of giving elementary school students a sense of meaning and lowering their levels of depression , or in the context of giving first-year University students logotherapy-based support . Logotherapy has also been used to improve the quality of life of adolescents with terminal cancer. Logotherapy has further been advocated as a treatment for trauma

Criticism

Frankl was not without his critics. Some felt he used his time in the Nazi camps as a way to promote his brand of psychotherapy, and others felt his support came only from religious leaders in the United States (indeed, he did recruit ministers and pastoral psychologists to work with him).

In 1961, his ideas were challenged by psychologist Rollo May, known as the founder of the existential movement in the United States, who argued that logotherapy was equivalent to authoritarianism, with the therapist dictating solutions to the patient. In this way, it was felt that the therapist diminished the patient's responsibility in finding solutions to problems. It is not clear, however, whether this was a fundamental problem of logotherapy, or a failing of

Frankl as a therapist himself, as he was said to be arrogant in his manner of speaking to patients.

In this way, it may be that logotherapy argues that there are always clear solutions to problems and that the therapist has the task of finding these for the client. However, Frankl argued that logotherapy actually educates the patient to take responsibility. Regardless, it is clear that in the application of Frankl's theories, it is important to highlight that the patient must be a participant rather than a recipient in the process

In Everyday Life

How might you apply the principles of logotherapy to improve your everyday life?

- **Create something.** Just as Frankl suggested, creating something (e.g., art) gives you a sense of purpose, which can add meaning to your life.
- **Develop relationships.** The supportive nature of spending time with others will help you to develop more of a sense of meaning in your life.
- **Find purpose in pain.** If you are going through something bad, try to find a purpose in it. Even if this is a bit of mental trickery, it will help to see you through. For example, if a family member is going through medical treatments for a disease, view your purpose as being there to support that person.
- **Understand that life is not fair.** There is nobody keeping score, and you will not necessarily be dealt a fair deck. However, life can always have meaning, even in the worst of situations.
- **Freedom to find meaning.** Remember that you are always free to make meaning out of your life situation. Nobody can take that away from you.

- **Focus on others.** Try to focus outside of yourself to get through feeling stuck about a situation.
- **Accept the worst.** When you go out seeking the worse, it reduces the power that it has over you.

Survey Results

A systematic review of research evidence pertaining to logotherapy conducted in 2016 found correlations or effects pertaining to logotherapy in the following areas or for the following conditions:

- Correlation between presence of meaning in life, search for meaning in life, and life satisfaction, happiness
- Lower meaning in life among patients with mental disorders
- Search for meaning and presence of meaning as a resilience factor
- Correlation between meaning in life and suicidal thoughts in cancer patients
- Effectiveness of a logotherapy program for early adolescents with cancer
- Effectiveness of logotherapy on depression in children
- Effectiveness of logotherapy in reducing job burnout, empty nest syndrome
- Correlation with marital satisfaction

Conclusion

We know goals are unreachable. When we chase these unreachable goals we are sure to fail. Furthermore, we lose a sense of future and meaning and go into depression. Logotherapy – a positive psychotherapy comes into the

picture in this situation. Sigmund Freud and Alfred Adler had a negative connotation in their theories of human man, but Frankl makes human being a positive one. That is the greatness of this therapy. So, logotherapy is a beautiful therapy to make a positive impact of human existence.

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Review Article
Rediscovering God through Science

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McHargue, Mike (2017). *Finding God in the Waves: How I Lost My Faith and Found It Again Through Science*. New York: Convergent. Pp. 224. ISBN: 978-1-47365-369-6

Mike McHargue is a public educator trusted by millions to use empathy and deep scientific insights to help them navigate some of the most difficult experiences of people. He's the host of "Ask Science Mike," co-founded the chart-topping show "The Liturgists Podcast," is the bestselling author of *You're a Miracle (and a Pain in the Ass)* (2020). He works as a science advisor and story consultant for film and television working with clients including Marvel Studios and Pete Holmes.

McHargue has been featured in *The Atlantic*, *The New York Times*, *The Washington Post*, *NPR* and numerous other publications. He is a well-known speaker. Mike lives in Los Angeles, CA, USA with his wife Jenny and daughters Madison and Macey.

Introducing the Book

Reading this incredible and inspiring book is one of the best things to happen to progressive Christianity and to anyone who is wondering how (or if) they can be a person of faith in an intellectual, modern world that seems like it's leaving mainstream Christianity behind (LeFever 2016).

The target audience for this book is probably not firmly committed Christians - in fact, McHargue pulls so few punches in describing his journey into atheism that this book trigger a collapse of faith in a typical evangelical reader. “The first half is raw and unflinching, and if you stopped reading there, it would be more effective than Dawkins' *The God Delusion* because it presents the same information with none of the arrogant condescension. If you had never been exposed to these arguments before, they could wreck you,” (LeFever 2016).

The second half, in which McHargue uses cosmology, neuroscience, and empirical data to try and put his broken faith back together again, is handled with honesty and transparency. His work on the podcasts "Ask Science Mike" and "The Liturgists" has already been profoundly influential on many and has prepared him to write this book.

This book does not support either “pompous, contempt-filled atheists” or “anti-intellectual, backwards-thinking Christians.” It contains “a fair-handed, even examination of both sides and then a possible middle path.” This book is a contribution to a liberal and progressive church trying to balance faith and intellect (LeFever 2016).

Faith and Science

How does science affect our faith? Truly it is a question facing millions today, as science reveals a Universe that's self-creating, as American culture departs from Christian social norms, and the idea of God begins to seem implausible at best or even barbaric at worst.

Mike McHargue understands the pain of gradual unfolding of faith. In *Finding God in the Waves*, he tells the story of how his Evangelical faith dissolved into atheism as he studied the Bible, a crisis that threatened his life, his friendships, and even his marriage. Years later, Mike was standing on the shores of the Pacific Ocean when a bewildering, seemingly mystical moment motivated him to take another look. But this time, it wasn't faith or scripture that led him back to God. It was truly inspired by science! (Inge 2018).

In *Finding God in the Waves*, "Science Mike" draws on his personal experience to tell the unbelieveable story of how the latest research in neuroscience, cosmology, and physics led him back to faith. Among other revelations, we learn what brain scans reveal about what happens when we pray; how fundamentalism affects the psyche; and how God is revealed not only in scripture, but in the night sky, in subatomic particles, and in us (Inge 2018).

For the faithful and sceptic alike, *Finding God in the Waves* is a "winsome, lucid, page-turning read about belonging, life's biggest questions, and the hope of knowing God in an age of science" (Inge 2018). It is focussed and objective.

The book is essentially a personal testimony, an account of the loss and rediscovery of faith. The title is rather deceptive, though, since what seems to have brought him back to faith was not science, but a mystical experience every bit as profound and mysterious as that of Saul on the Damascus road. His rediscovery was made through science, not by science. His account of this is fascinating. He then goes on to seek to make sense of that experience through science. There's a noble tradition of that: it's Anselm's *fides quaerens intellectum*, faith seeking understanding (Inge 2018).

McHargue's use of science is sensible, helpful, and at times, moving. For example, when he talks of what scientists refer to as the Initial Singularity, just before the Big Bang, in which everything which was to be was contained, he acknowledges: "I was there in that Singularity, as were all my ancestors and descendants. Every star that's been born, every star that has died, was there, too. So was every particle that makes up every atom in the universe. All was there, together, in the beginning" (McHargue 2017). He adds that when he thinks of the Singularity, he thinks of God. And of himself (Inge 2018).

The Bible and Science

Some of the difficulties that he still has is connected with the Bible. For example, the inerrancy rather than the divine inspiration of the scriptures, and an insistence that penal substitution is the only and exclusive proper way of understanding the atonement (Inge 2018

The Bible is a big part of why Mike lost his faith, which is actually a common phenomenon today. Referring to his early life, Mike describes the Bible this way: "I believed the Bible was inspired and inerrant, which is Baptist-ese for saying that God wrote the Bible, and, therefore, it is perfect. In this way of thinking, the Bible is accurate in whatever it talks about, including science and history."

This led him to read the Bible four times in one year and he began to question its inerrancy (Demme 2016). He "noticed that Genesis 1 says trees were made before the stars." This was a problem for Science Mike because, as he explains it, "Genesis says we were formed from dust, but cosmology tells us that you don't get dust—unless you have stars first. Without dust, you don't have the material to make trees or humans. There were no trees in our universe before there were stars" (McHargue 2017).

From his study of astronomy, physics, and other scientific details he knew that the order of Creation in Genesis and modern scientific understanding did not agree (Demme 2016). As Mike's capacity to accept biblical inerrancy lowered, so did his belief in God.

In the face of unscientific statements in the Bible, something had to give. Instead of holding on to what he knew about God while letting go of what he knew about the Bible, Mike had to let go of it all; for him they were one and the same (Demme 2016).

God Encounter

But God was waiting for him. Through a series of mystical encounters and uncompromising love from his family, Mike experienced God again. It's not that God was ever lost, but Mike's ability to acknowledge and receive God turned off for a period of time.

In our modern, scientific world, we tend to view our beliefs as a set of ideas, which means we often associate mastery of a subject with people who can best articulate the ideas behind their beliefs. (McHargue 2017). But when we scan the brains of believers, we find that their understanding of God is nonverbal, more like a feeling or experience than a set of ideas. This is why Christians are usually stumped if someone asks them, "What is God?" "Contrary to what some skeptics say, it's not because these people's belief system is unsophisticated or simplistic. Instead it's that their experiences with God aren't primarily associated with the language center of the brain" (McHargue 2017). According to him trying to describe God is a lot like trying to describe falling in love

At the same we are not absolutely certain! He acknowledges that he still has doubts. Faith without doubt to accompany it is not faith at all, but knowledge. We are not given knowledge in this world; for now we see through a glass darkly. Physicists have had to learn to embrace uncertainty, and so must people of faith (Inge 2018).

Concluding Remarks

As someone who wants to help people see the Bible as manageable and meaningful, Mike's journey has been fascinating and creative. It challenges both believers and non-believers to take religion seriously and science too.

This book has numerous positive dimensions. One of them is to acknowledge that there are very good on the other side too. He dispels the myth, for example, that fundamentalist Christians are mad or bad. He makes clear that the fundamentalist Baptists from whom he eventually felt it necessary to withdraw were good, godly, loving, and caring people. That has been my experience of fundamentalists with whom I have come into contact through my late wife, Denise, who grew up as one (Inge 2018).

For anyone struggling to reconcile faith and science, this is a beautiful half-memoir, half-science book that has already made a contribution to the public discourse on science and religion dialogue.

On this whole this is a thoughtful, honest, and wise book In this book. In this valuable book Mike exposes, in fact, his own vulnerability and authenticity as he shares his personal story. This book is also very readable. The science parts were accessible, easy to understand, and downright fascinating. As for the religion part Mike accepts the Bible, without requiring it to be a perfect text.

For anyone struggling to reconcile faith and science, this is a beautiful half-memoir, half-science book that has already made a contribution to the public discourse on science and religion dialogue. This book opens us to the uncertainties in both science and religion! We can hope for a similar refreshing treatment in his next book (McHargue, 2020).

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Artificial Intelligence
A Threat or a Boon to Humanity?

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Abstract: Machines are evolving and we humans are witnesses to this evolution. Our lives are changing rapidly during this age of Artificial Intelligence. From Google search to our money transactions Artificial intelligence plays an important role in our day to day life. Despite of learning and engaging with this new technology we can't help but worry - Is AI really coming for our jobs? If yes, which jobs and sectors will be affected by it and which won't? There are various controversies over the rise of Artificial Intelligence. This write-up will shed some light on various aspects of Artificial intelligence, it's advantages, disadvantages and help us decide if AI is really a threat or a boon to humanity. It's time we figure out our role as humans in this age of Machine evolution, or should we say, machine revolution?

Keywords: Artificial Intelligence (AI), Artificial General Intelligence (AGI), Technology development, Artificial Intelligence applications, Machine Learning.

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Introduction

It was today morning; I came across a news article on the internet saying "Amazon Opens A Supermarket With No Checkouts" (Golden 2020). Very intrigued I clicked on the link to read more. I found out that Amazon has opened a supermarket in Seattle with no checkout operators or self-service tills, all with the help of computer vision and machine learning. It uses hundreds of ceiling-mounted cameras and electronic sensors to identify each customer, tracks the items they select and adds them to customers' Amazon Go account. There's no need for any human interaction at all! This has left me wondering, how far are we in the age of AI? Moreover, what it's like being human in the age of AI?

This essay will take us through various aspects and applications of AI and how most people misinterpret it as something to be scared about. It explains how we can benefit from AI and use it for the development and betterment of humanity.

While some of us are still trying to figure out the difference between artificial intelligence and machine learning, AI is fast progressing. This breakthrough technology has already become accessible for any software developer; tech giants are currently competing to dominate the field of artificial intelligence. China has taken serious steps to become the leader in AI. Technology has come a long way. Previously humans had a lot of vanity as to being the most intelligent species on earth, thanks to Dietrich Prinz and Christopher Strachey who collaborated and proved us wrong in 1951 by writing the first working AI program to run on the Ferranti Mark 1 machine: a checkers-playing

program. Since then machines have been beating humans at complex tasks that seem tailored to the strengths of the human mind, including poker, the game of Go, and visual recognition.

Role of AI in the Industrial Workforce

There are high chances you must have read or heard somewhere "AI IS COMING FOR YOUR JOBS!" A lot of people think their jobs will be affected by AI but this isn't true. AI will take up mostly routine tasks and not jobs which need cognitive thinking. This simply means that humans will be left for higher-level jobs which will, in turn, boost their morale. This will be beneficial to us as humans get bored by daily routine tasks which hamper their productivity and job satisfaction. Handing down these jobs to AI will actually work in our favour. For many high-stakes decisions that still need logical reasoning, like doctors diagnosing patients and judges setting bail, experts often favour experience and intuition over data and statistics. This reluctance to adopt formal statistical methods makes sense. Thus, these kinds of jobs won't be completely automated, there will always be scope for humans in fields like these which need critical thinking. AI will also take over jobs which are risky and life-threatening. For example, in bomb defusing, mining etc. robots can save thousands of lives. Businesses will need to change their organizational structure to adapt to AI. Humans and AI together will make up the workforce for organizations and will work together for the benefit and profit of industries.

> Consciousness is almost impossible to achieve in AI with the technology we currently have. It's like we're still stone-age men when the idea of building consciousness in AI is taken into consideration

Is AI Really a Threat?

There was a recent debate on the topic "Is AI an existential threat or a great leap forward?" Needless to say, a lot of lousy science fiction movies have tricked us into thinking AI is a threat to human race. We are all familiar with such movies and have come across such poorly thought out scientific cinema which is solely based on earning good revenue. The truth is AGI is very beneficial to humans if built properly, undertaking AI safety measures which are yet being researched by scientists worldwide. It may also be that the media have made the AI safety debate seem more controversial than it really is. After all, fear sells, and articles using out-of-context quotes to proclaim imminent doom can generate more clicks than nuanced and balanced ones (Naudé and Dimitri, 2020).

Many AI researchers roll their eyes when they see this headline: "Stephen Hawking warns that the rise of robots may be disastrous for mankind" (Hawking, 2014). And many have lost count of how many similar articles they've seen. Typically, these articles are accompanied by an evil-looking robot carrying a weapon, and they suggest we should worry about robots rising up and killing us because they've become conscious or evil. On a lighter note, such articles are actually rather impressive, because they summarize the scenario that AI researchers don't worry about, the scenario that combines as many as three separate misconceptions: concern about consciousness, evil and robots. Consciousness is almost impossible to achieve in AI with the technology we currently have. It's like we're still stone-age men when the idea of building consciousness in AI is taken into consideration.

If the goals of humans and AI machines are aligned, we have nothing to fear. The concern about advanced AI isn't

malevolence but competence. A super-intelligent AI will be extremely good at accomplishing its goals, and if those goals aren't aligned with ours, we have a problem. You're probably not an evil ant-hater who steps on ants out of malice, but if you're in charge of a hydroelectric green energy project and there's an anthill in the region to be flooded, too bad for the ants. A key goal of AI safety research is to never place humanity in the position of those ants. The main purpose or goal should be communicated to them in order to synchronize the efforts of humans and AI together for the betterment of humanity. There is also no reason for us to be concerned about the intelligence of AI overpowering us since there are always people smarter than us in this world but rather than fearing them, we communicate our ideas and thoughts with them for our own intellect. Similarly, we should learn to communicate ideas with AI robots and encourage their contribution like any other human's for research and development wherever possible. It's about walking hand in hand rather than competing with one another.

The ultimate goal is to use AI to help the human mind, not replace it. The human brain is the most elegant computer in existence. We process millions of sensory inputs automatically and constantly, allowing us to learn and respond to our environment. Imagine the wonders we could do if we complement all of our amazing ideas with not just more data, but also more data processing capability (Venkatachalam 2017). We could rethink every single problem that exists today and work towards finding an optimum solution. Even with today's primitive forms of AI, there is enough technology out there to start doing exactly this. The magnitude of social impact possible when we couple AI with human skill and ingenuity is going to be unbelievable.

Impact of AI on Our Personal Lives

Sophia**,** a social humanoid robot developed by Hong Kong-based company Hanson Robotics was enough to fascinate millennials worldwide with her human-like gestures, facial expressions and speech during interactions. Ben Goertzel, the former chief scientist for the company that made Sophia, acknowledged that it is not ideal that some think of Sophia as having human-equivalent intelligence, Sophia's presentation conveys something unique to audiences: "If I show them a beautiful smiling robot face, then they get the feeling that 'AGI' (artificial general intelligence) may indeed be nearby and viable."

AI is going to be a boon to us in our personal lives too. Personal Assistant AIs will get to know us and our preferences better as they learn more and more about our daily routines. I can imagine the day I need not worry about preparing dinner. My AI will know what I like, what I have at my home and when I get back from work all my groceries will be waiting at my doorstep, ready for me to prepare that delicious meal I had been craving all day. If you prefer not to cook, it might even cook your desired meal for you and you don't even have to worry about your food being a little bit salty or your *Gajar ka halwa* (carrot pudding) being too sweet for your taste since your AI personal assistant will know exactly how many milligrams of salt you prefer or how sweet you like your *Gajar ka halwa*. AI is going to make a huge difference in our lives at a personal level. It's going to take a huge burden off your shoulders of the minimal tasks you have to do every day for survival, like doing your laundry or dishes or even cleaning your room. You can ask them to do daily chores for you and they won't even complain since they're not going to

get tired of it. You can peacefully go to bed not having to worry about a pile of clothes staring at you the next morning!

I believe that the focus of AI should not be just on cool home gadgets or on process optimization and automation. Instead, AI can be used to fundamentally rethink how we solve the world's problems. AI has the potential to greatly improve things like healthcare, education, poverty, security and various environmental issues. AI machines have done some very beneficial things already that humans would take a long time to do. If we leverage that to augment what humans do well, AI could positively impact society, business and culture along with the internet itself.

AI: Education

Researchers are also constantly looking at how AI can reshape and inform the modern classroom, for teachers and students alike. Personalized tutoring programs help students in everyday learning and analyze how students process information. Whenever students have doubt it's easier to provide additional, customized support with the help of AI. This software is especially helpful for students with learning disabilities, ensuring they receive an individualized approach that matches their needs. Other AI applications include services that automate common teacher tasks, such as marking tests or recording grades for future evaluation. It helps on a large scale in conducting online examinations for institutions worldwide.

AI: Businesses

AI has the potential to increase industrial growth. An amazing example of this is Walmart. While so many other legacy retailers are struggling, Walmart has posted growth figures for the last 11 consecutive quarters. Notably, this has been driven by a 63% year-on-year increase in online sales all with the help of Artificial Intelligence and predictive analytics. Walmart takes data instantaneously from its point-of-sale systems and incorporates this within its forecasts to assess which products are likely to sell

out and which have underperformed. Walmart has received much acclaim for its willingness to adapt to the digital age and its ability to link the online and offline worlds to compete with Amazon.

AI: Transportation

AI has stepped into many fields that indirectly affect our personal lives. One of such fields is transportation. Driverless trains and metro subway systems are being used at various levels throughout the world. While fully autonomous cars are still in the distance, Tesla recently announced that its Model S car is now semi-autonomous, and they released this feature to tens of thousands of already owned cars via a software update. With rising use of autonomous cars and autonomous vehicles in general which run on batteries rather than fuel has turned out to be really beneficial for the environment.

AI: Security

AI applications ranging from personal home alarms to international surveillance are being implemented everywhere around us. AI plays a massive role in keeping individuals and countries safe. Services like intelligent video surveillance analyze footage to identify and report unusual behaviour. AI also helps enforce cybersecurity by identifying abnormalities in online patterns. In digital world, AI helps keep data secure and helps us to communicate and take on our day to day online activities without the fear of compromising our personal information.

AI: Environment

Artificial Intelligence also finds application in a wide array of environmental sectors, including resource conservation, wildlife protection, energy management, clean energy, waste management, pollution control etc. Controlling industrial emissions and waste management is a challenge that can be dealt with the advanced learning machines and smart networks that could detect leaks, potential hazards and

diversions from industry standards and governmental rules. For example, IoT (Internet of Things) technology which interconnects various computing devices embedded in everyday objects, enabling them to send and receive data, was incorporated into several industrial ventures, from refrigerators to thermostats and even retail shops.

As scientists still struggle to predict climate changes and other potential environmental threats due to lack of algorithms for converting the collected useful data into required solutions, Microsoft's AI for Earth, a 50 million dollar initiative, was announced in 2017 with the sole purpose to find solutions to various challenges related to climatic change, agriculture, water and biodiversity.

Conclusion

To sum it all up, I would like to quote Rodney Brooks "Artificial intelligence is a tool, not a threat." AI is already here! True, the technology is still in its inception phase, but intelligent systems are fast learners and we can expect to see significant transformations in near future. Some sectors are at the start of their AI journey, others are veteran travellers. Both have a long way to go. We're going to unlock new possibilities at every level with the help of AI and might even find answers we've been searching for along the journey. AI is a boon to humanity given that all safety measures are undertaken and the ultimate goal is the betterment of mankind and life in general. The change in AI technology is going to be revolutionary. Being human in the age of AI is going to require us to retain the qualities that make us human, such as the ability to love, have compassion and to be creative as well as open our minds to various possibilities that AI brings. The age of AI is inevitable, are you prepared for the future?

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The Mechanical vs Bio-Spirit-*Homo-Technologicus*

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Abstract: Five years down the line, things would change a lot from what it is today. The road that we traverse daily won't even give a clue if you skip yourself from that place. The realm of change is out of the bounds and of our hands completely. The interesting factor is that most of these changes does not happen completely by the rudder of our brain. The sophisticated programs that erupted in our brains, flooded onto the technical systems, eventually protruded facts and interesting numbers which made us to fly towards more interesting historical decisions and events. One might ask, can you find a human in midst of these sophisticated turnouts? Well the answer might procure a period of seconds for us, but from a personal perspective, human intervention and the bio-spiritual living is livelier in this era, when the science demands it has reached its peak, as it has always.

Keywords: Artificial intelligence (AI), Brain studies, Rationality, Bio-spirit, *Homo technologicus*

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Introduction

This article provides a fringe of knowledge on the influence of AI realm and its implications on the *Homo technologicus.*

What if Artificial intelligence (AI) would baptize your child one day? That would be a highly exaggerated thought, right! But if the unending socialist slogans that were raised during the infancy of the industrialist era could not replace the room size machines from grabbing their jobs, then the day when robots anoint you might not be too exaggerating. But the fact of celibacy and humanity would be a great hurdle for the machine to overcome. Leave out the 'priest', just have a thought on the impact happening on earth 50 years from now. Every human is running at 100 miles per hour today. Each being has its targets to be achieved. Once its accomplished new targets are defined, and the cycle goes on. Thus from my perspective, deficiency in genuine relationships are one of the grave drawbacks of this ultra tech era.

Before further analyzing the tragic repercussions brought in by AI, let's see some of the new acquaintances that turned out to be the welfare and doom for mankind.

The Progress Leading to AI

In this section, we trace the movement from material things like wood and iron to AI and to the possible Superhumans.

From Wood to Iron

The *Homo sapiens* started his traversal of life in woods, which in turn made his life to circle the woods. As humans required more tools for an easier life, he initiated the phenomenon of inventions, both knowingly and unknowingly. At first everything was made of wood and the first 'wheel,' was a great invention. Although durable for a certain timeline, the wear and tear of the wooden wheel was always a standing problem.

Then came the molding, casting and shaping which brought forth the iron wheel. The introduction of iron into the daily life brought in a huge change in the living pattern of man.

From Static to Dynamic

The introduction of iron to daily needs was just the beginning. The cyclical motion of iron initiated a big impact, but when it went to the next stage, where the iron parts started to clamor with each other, it inscribed a new history. As Alvin Toffler says in his famous book, 'The third wave', the industrialist era changed the whole face of the earth. Even the word 'success' was properly defined and came into a primal existence in the dynamic era. Before that man's life was simple, doing the daily livelihood works, earn something for the drinks, if felt moody to sit idle the whole day and particularly no great aim. People were in peace and calm and no hurry-burry as that of today. They were contented with their life. But the mechanical era turned everything into a dynamic mood and even the word 'idle' seemed as a blasphemy.

Everyone wanted more, the industrial lives flocked with workers who came in at punctual times. The punctuality which was actually a new code of conduct for the common people eventually came into the pattern to achieve 'more'. The one who is most productive, creative and dynamic was esteemed as successful.

Manual to Automotive

Soon the capitalists realized the manual labour performing repeated work-sets could be replaced by automotive machines. The machines could work on limitlessly without tiring themselves and at the same time would never demand any wages for its labour like humans do. Even though the initial investment was quite high the profit factor, in the long run, stood outstanding. Thus long lines of machines got installed in the workspace, replacing thousands of individual workers. Obviously, strikes were called on against the loss of labour but it could not subdue the strength of the capitalist and machines.

Those who were prudent took up different jobs soon and continued the life pattern. Thus the machine king reigned on evolving itself year after year.

Automotive to AI

The long line of machines was indeed a strength for the industrialists, but every machine installed required a human to do the working, i.e. to control it accordingly. But within a few decades new inventions came up that attached 'brains' to the machines which again replaced a good number of labourers. This is the era that has started to work on its own. From washing machines, oven, fridge, television, sound mixers, computers, tablets to table fans, the AI has been driven into whatever things possible, with the caption, to make human life easier. Indeed the human life has become easier because there was a time when a house lady had to walk to stores to procure the stuff she needs, goods been transferred between countries took weeks, communication to be made between different poles on earth took days and even travelling to the nearest metropolitan city took hours, but now the AI has rewritten every concept. Thus, everything has become simpler in terms, but new challenges have risen. What is simpler today does not seem the same tomorrow.

So we are ever striving to make it smaller and cheaper. The competition between the countries is primarily to enhance themselves in artificial intelligence as far as possible because it is what drives everything today.

The IoT (Internet of things) is everywhere and it will be omnipresent in the near future.

Human to Superhuman

This is the future era. Extensive experiments are widely and secretly done in almost all countries, to enhance homo-sapiens. They say humans are vulnerable. Man can be easily manipulated, is highly vulnerable to diseases and has a very

short lifespan. But when it comes to the AI integrated human, the vulnerability can be brought down up to 13%. With further enrichment and experiments the error can be diminished too.

One of the latest news in the tech world is of the famous 'Reuters' media group. They have launched their news channel where the news is composed by an AI and at the same time, it is also presented by an AI-developed- character interface. The human intervention here is literally zero. This is not a minor development, because professional news composing and the news reading is not an easy task and normally it takes years for a normal human being to get to the professional level. But the advancement of AI helped it to grab this target too. Humans are relieved of the jobs, which we believed could be done 'only' by us.

The Rational Artificial Brain

The basic dictum by which philosophy distinguished man and animal is by 'man is a rational animal'. But today this rationality can be found in all tech devices. They purely use reason, maybe better than us, to take decisions whereas we humans are lot influenced by our emotions and second thoughts. But for the artificial brain there are no second thoughts, which makes it more rational. Thus what I noted at first, was not just an exaggeration, but their might come a day where the whole mankind will be controlled by the 'Artificial brain' for efficient living, which is almost evidently seen in today's society, like the pre-controlled room temperature, automatically parking cars, auto development of research documents, intruder detection and warning, the list goes on endlessly. Even in medical care there are robots capable of doing a complete surgery without having the smallest intervention of a doctor and at the same time the efficiency of the surgery would be higher than a surgery done by the human hand. But it is a great relief that a 'heart' capable of beating like a human heart hasn't been found yet. If it had been we would have replaced our biological hearts way before.

But 'stents' used as a replacement for damaged veins are being experimented and developed with high precision. The people undergoing heart problems find it real helpful with these inventions

to their rescue. In the sequence of Terminator movies, the greatest invention of mankind, i.e. advanced AI for warfare, rationally decides that the mankind which have been inhabiting the mother earth for centuries did not properly take care of the planet earth, rather being as the custodians they lived as the exploiters. And the AI realized if the current pattern continued, humans would simply put the earth to utter destruction. So it decided that the humans is the most tragic creation of all species and it must be exterminated. Thus, the AI comes into war with humans and the humans does their best not to live, but to survive. Eventually they retaliate but soon they realize, attack is the best defense. This is the basic outline of the story and for the past two decades 'Terminator series' is almost telling the same story in different perspectives. They are shouting out the danger of giving an artificial rational brain the freedom to act upon humans.

Humane Artificial Intelligence

The latest hit Malayalam movie *'Android Kunjappan Version 5.25'* speaks of a robot who takes care of the elderly. The film in its first half depicts the care and passion that a robot shows to its master, which is happening because it's coded so. And the film shouts out the human care that's negligibly seen in the present society and how people tend to leave out their parents for a "selfish" comfortable life. But at the end the very limited rational brain of robot reaches its limit and turns out to be a rogue robot and at the same time it makes the master addict to its robotic care.

We develop all mechanisms to give human a better life and the prior concern is always the immediate fruits. In most scenarios the distant effect of a particular project is not analyzed in humanizing ways and the results are not always pleasing. The robotic nursing is already in execution in China, Germany and some other countries. The reports state the results are positive but the ultimate purpose of the machinery is always under question. The machines have become part of our lives such that we humans tend to love more the machines than the beings

around us. This make us less human. We tend to close ourselves in our comfortable boxes and evacuating everything and everyone, who dares to create a pinch of disturbance to us.

The 'selfie' culture has been adopted by the society for a few years now. The name itself denotes that selfie gives more importance to the 'self'. Before the selfie era, people used to take most number of photos in groups, but now everyone focuses on their self. Likewise, a lot many changes have been adapted in the present decade. The virtual media has found its unresisting growth in this era, which has altered even the psychological structure of human thinking. People live in the virtual world today than the reality. People often believe that being approved in the media world is what they want and they try to improvise the virtual world as their reality.

Conclusion

The human brain is not just rational, I would say. It surely is a mix of rational, emotional and surely a ton of second thoughts, and that's what make us human. We tend to care not because of our rationality but because, the being of human means to care, according to Heidegger. But this care factor is rarely seen these days. As I have mentioned we all are in an accelerated mode trying to achieve more and more. The word 'enough' is not inscribed in our dictionary. During this limitless run what we leave back is actually our being. We forget who we are and especially the AI helps a lot to make this happen. There are places were only humans can step in, like relationships, and no AI or sophisticated AI could ever replace this.

Through this paper I was not just trying to relate the AI realm with the human realm but was trying for a floccinaucinihilipilification. I wouldn't say AI is completely to be banned from human life but it must be stopped or restricted at the pit stops that it is supposed to be stopped. The machines surely make our life easier and we can't live without it too. Even now I have used 'Grammarly', an artificial intelligence platform that corrects grammatic and linguistics errors, to complete my work. The growth factor is inevitable in this era, but it must go hand in hand with the natural cycle of our mother earth.

Humans are being of care, but when AI is allowed to apprehend above the human freedom, danger follows.

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Being Human in Scientific and Technological Era: Reaching to the Higher Level of Consciousness?

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Abstract: Today the human beings are facing the identity problem of self, others and the world as well. The scientific age has progressed rapidly and discovered and manufactured sophisticated machine and electronic gadgets which have made our life very easy. At the same time priorities over machine than human has confused human being at this juncture of life. The modern era has downed with artificial intelligence which seems to subdue human intelligence. It raises many questions for humanity concerning their survival, existence, domination, and identity. Human values seem to be in danger of being extinct or replaced by modern gadgets. This paper tries to synthesize humanity and artificial intelligence and tries to show that science and humanity are not contradicting to each other but together growing towards higher level of consciousness.

Keywords: Artificial Intelligence, Natural Intelligence, Easy Flipping, Framing Nature, Embedded Self, Humanity, Relationality, Rationality, Spirituality.

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Introduction

Human person is a unique being on this planet. He is endowed with wisdom, knowledge, intrinsic values of love, kindness, generosity, and service, feelings for and with others. All these values unite human species together as species having consciousness greater than other species in the world. Science has proved that matters in a different form can render excellent service to humanity. Artificial intelligence has played a vital role in this scientific age to achieve unimaginable dreams. Therefore, being human for the human person has become a great challenge today in this scientific and technological age.

The Body, Mind and Soul of Being Human

Being human in the modern era is understood more simply by the elaboration of the given phase 'Being human in Scientific Era'. It can be segregated in three parts, mainly 'Being human and human being' is the first, secondly – 'in scientific', and the third – 'era' that is the timeline. Let me raise a question – who is a human being? To respond to this question, I would say that human being is a biological being, a physical reality as an existing person on this planet. Therefore, it implies a human person has a *body*, *mind* and *soul*. So, a human being is combination of three existing realities – a body, which sustains the physical reality of being alive and does all the physical activities as a human person. The second part of the human being is the mind which is responsible for the rationality of human being, knowing faculty of our being. The third part is the soul; we also associate it with our experiencing faculty. The soul is implanted by God during the conception in mother's womb is the belief of the believers. The atheists don't believe in the existence of soul in human being.

What does being human imply? We imply it is a *human person*, *fully alive* with *rationality, relationality* and *spirituality*. Human rationality is that aspect of humanity through which a person can think, imagine, dream, give articulation to his thinking in language form, express this thinking through art and culture, dance, music etc. Relationality is all that a person can relate to oneself, to divine, others, environment and to the entire universe. Spirituality is that aspect of human person through which he experiences finitude in his being and tends towards infinity, beyond finitude. It is a way of life based on certain values. Being human means all the qualities and value system a person can have in his life which distinguishes the person from other being on this earth. A person who knows good and bad and has the freedom to choose good for all and for everyone could be considered as being human. The second part is 'in scientific or modern' which means material development where electronic equipment, machines are produced and machine intelligence or artificial intelligence is used for their operation.

This essay shows the challenge to be truly human and appreciate the development of science and artificial intelligence and tries to synthesize both towards higher level of consciousness.

The third part of the topic is "Era" means the timeline of existence. From the scientific point of view, we understand the beginning of the existence of the universe from the big bang theory. Therefore, our universe is 20 billion years old. Humanity is only 4 million years old in this timeline. "Era" indicates a particular time period of our existing where something has happened during that period. Therefore, it is the time period of the starting of artificial intelligence and scientific growth and its dominion over the human being. Artificial intelligence is the machine intelligence or the

intelligence demonstrated by the machine which is in contrast to the natural intelligence performed by human mind. Artificial intelligence (AI) has progressed so rapidly that it has emerged successfully in the area of knowledge representation, problem-solving, reasoning, learning, planning, natural language processing, motion and manipulation, perception and other areas as well. Its advancement can be seen to the depths of the sea to the height of the universe, even the unknown planets are no more hidden from the knowledge of the human being through the help of the Artificial Intelligence. The entire earth is positively and negatively affected by this intelligence. Life of human has become very comfortable, easy, effective, organized, compact and productive. The impact of artificial intelligence is so much in our lives today that it becomes very difficult to live without it. In any sector of life, be it personal, social, relational, official or governmental it has become the part of us without which the system seems to collapse or seems to shut down our life itself. Therefore, it is appropriate to put forward the views on "Being human in scientific Era".

Self-Understanding

How do I understand myself in the Modern Era? I, as a human being on this planet, have a unique identity. I am not a machine, nor a plant, neither an animal but a human being, having consciousness greater than other existing things and lives on the earth. Therefore human being is a unique being, valuable being and has inviolable dignity. We are aware of our knowing and willing. Freedom plays an important role in our life. Human experiences tell us that we belong to nature but at the same time we are radically different from it. Therefore, we come to this earth with a purpose, dreams, hopes, aspirations and full of life.

We experience contingency and finitude and live between birth and death. Human beings do not bring themselves into existence and they do not have the power to keep themselves into existence. Everywhere we notice beginning and end. In this world, nothing seems to be permanent. At the same time human being experiences in their depth a longing for and a movement towards transcendence. Therefore, our goal is not ourselves and our meaning is not within us. We seek to go beyond ourselves in freedom, knowing and in loving. In this journey of living and progress the artificial intelligence helps human being to understand the meaning of life better and who they are in a relationship with the matter, with the self, with others and with the universe.

Looking at the progress and the web of artificial intelligence that has spread over the earth and the universe, it often triggers us to think – 'will the artificial intelligence overcome human being'? I would reflect it this way that artificial intelligence is the creation of the human mind and human being is not the creation of artificial intelligence. The evolution theory of Charles Darwin highlights the progress of life from the matter to cells, plants, animals, Homo sapiens and ultimately this matter reaches the higher level of consciousness in human being. This human being tries to understand the functions of matter in form of machines, electronic gadgets, computers, sensors, detectors, other equipment used in different platform of life through commands, programming, algorithms, arithmetic calculation, binary numbers, flipping property of electron and sense of the matter and non-matter objects. They use it for the betterment of human life. Therefore the one who creates is always greater than the created one. Each individual human possesses a unique and inviolable dignity. The value of a human being doesn't depend on the possession of material goods. The value of the human person is not possession, not doing aspects but it is very much being aspects. What he/she

becomes in the process of doing and achieving in life is more significant in the real-life scenario. Human being also has a social dimension which is the intrinsic quality in them. This social dimension comes from very much being born as a human in a family with a mother and having the father which is the first felt realization of human society. Therefore, we can't imagine a human being getting replaced by artificial intelligence. If we look at the human being only as an object on this earth, they exist only for the work and neglect the very aspects of unique and inviolable dignity, their preciousness in the society, then we will be missing the track and this artificial intelligence will take over the human being. We find in the history that human beings were treated as an object in many parts of the world when slavery was very much prominent in society.

When we think about the social dimension of a human being, the concept of relationship plays a very significant role in life which distinguishes us from other being to some extent. We are social being so we need the relationship, communication, human touch, human solidarity, celebration, dance, sympathy, tolerance, understanding each other, collaboration, friendship and all that human experiences which touches our hearts and revives, energizes and gives hope to live life meaningfully. Artificial intelligence has enhanced our socializing process. Now the distance of the world is no more unreached, families and persons living in a different continent are no more apart from each other but very much known to each and every one. You can travel from one end of the world to the other end within a day. You can converse with the person living in a different country by looking at him through social media. Transportation, travelling, communication gadgets, networking webs etc. have made our socialization process very quick and rapid

and within the fraction of second, we can do everything. The whole world has become one home, in our Indian tradition it is understood as *vashudhev kutumbkam*. I quote from the book *Teilhard de Chardin and the Mystery of Christ* by Christopher F. Mooney (1968), "The peak of ourselves, the acme of our originality, is not our individuality but our person; and according to the evolutionary structure of the world, we can only find our person by uniting together." The sad reality is that we have failed to be a true human being in the process of socialization. The artificial intelligence which is helpful for us to become the extension of our being, part of ourselves. Machines, mobile, electronic gadgets have occupied my being than my family members and my neighbour next to my door. It seems to us that we are becoming less human by the use of artificial intelligence and neglecting our human values. We have harmed not only ourselves but to the birds, creatures, and eco-system by the overuse of modern gadgets. The waves generated by the use of electronic gadgets especially mobile have destroyed nominal life form. Our life seems to be very difficult without this AI but at the same time it has brought many inconveniences to human life and the environment.

There are positive and negative impacts of AI on the growing population especially the employment of the youth today. The quality and efficiency of work have rapidly increased. The adequate example for this is Huoshenshan hospital in China for the coronavirus patients were made ready within 10 days. At the emergency time, AI has really become a blessing and helpful for people. The whole wealth of India is accumulated by only a few people, which are also the cause of unemployment. India has sent the people to the moon (Chandrayan mission), launched many satellites, made the bullet train, trying to make a driverless car, these are all the advancement of AI but these have taken away the employment of the people. The jobs of hundreds of people are taken by one

JCB for the construction of the road and buildings which causes unemployment.

Challenges to Being Human in the Scientific Era

The challenges that are brought by the artificial intelligence could be in the area of reasoning, problem solving, knowledge presentation, social intelligence and general intelligence. Besides these, I would like to highlight some other challenges as digitalization, time of capturing reality, human existence and human relationship.

Today the entire world is digitalized. All the works are done by digital objects. Human seems to be digitalizing self through the use of all gadgets which is giving him the realization that artificial intelligence is the extension of self. By the manufacturing of robotic human and its works and all other developments of the machine, humans are confused about their potentiality and identity of being human. Advancement of artificial intelligence is surely a blessing for us at the same time science has reached to the age where human have made lots of destructive weapons. A powerful atomic bomb can destroy the entire earth within a fraction of time. If a person having this power goes out of his mind, then no one can stop him from using this destructive weapon. The time is in his hand to capture the entire world. Similarly with the people in the plane which can be hijacked with those responsible persons for destroying others. One of the leading scientists of our time Steven Hawking had rightly expressed his concerns about human existence saying that if the human being has to continue to exist then we need to send some into other planets. We also see the threat to the earth due to the rapid change of climate. We could probably guess after 50 years

the earth temperature will rise more than 80 degree Celsius and survival of life will be really question mark. Incurable and new deceases like cancer, skin decease, coronavirus, etc. threatening and taking away human lives raise questions about our existence. All these are the indirect effect of uncontrolled use of artificial intelligence. Human authentic relationship is in danger today. Artificial intelligence and electronic gadgets have become the centre of human relationship today. We walk side by side but the distance is too far that we don't even look at the person and talk to him instead we are busy talking to someone who is in another country or place. It might be right to say that a child who is born today is a digital child because the child is exposed to artificial intelligence as natural part of its growth.

The Humanity and Science Growing Towards Higher Consciousness

Some of the ways, we can reach a higher consciousness may be the following:

Easy flipping: One of the most important areas where scientists have contributed enormously for the advancement of artificial intelligence is reducing the size of matter in order to increase its property and store more information. Matter acts in its nucleus level and performs better work than ever before. The magnetic property of the flipping of the spin electron creates vast change in the property of matter itself which are used for the storing of data and information. Similarly, human beings have to flip easily. They have to reduce in size that is not physical but 'ego' in order to create more space in their being for others and for humanity. They need to act in nucleus level that is human heart so that whole humanity becomes their own and work not for oneself but for everyone. It is not in the

aspects of domination and lordship on the other but equality and dignity for humanity must be emphasized and practised.

Embedded nature: For the better functioning of material used in technology which we say artificial intelligence, material scientists are embedding two or more different materials into one and coming out with new material with completely different properties. This technology is taking the world forward much faster in this artificial intelligence. Here the social aspect of the human being comes to be exercised and learned from artificial intelligence. The human being needs to embed together, putting the mind and heart together and experience a new being, that is a new society which will function better for human and creation and grow to a higher level of consciousness. Materials don't say that I am aluminium, silicon, arsenic; we can't come together because we have different property. In the same way human being in spite of having a different ideology, different culture and tradition, practising different faith might come together to form a new human society where humanity should take priority than other things and ideas. This calls for the change of horizon and vision. As individual and social being you have dignity and worth as a human being.

Framing self: Everything, where the artificial intelligence is used, is framed beautifully from the outside. This framing is to protect the main functioning part from corrosion, outer reaction, and danger and to serve the purpose for which it is manufactured. This also serves the esthetic sense of beauty for those who purchase it. Today human being needs the frame for oneself. This frame for a human being can be divided into three levels. The first level is clothing, housing which is the basic need for the

human being. The second level of framing self is society, in which human being finds one-self as dignified, valued, precious and in relation with the fellow human being. The third level of framing self is the values the human being have in their heart. These values are love, forgiveness, kindness, care, compassion, justice, peace, mercy, harmony, equality, liberty, fraternity and all those values which promote life. The third level framing serves the purpose of second and the first level framing and together it serves the purpose for which we are created. This elevates oneself into the realm of experience which moulds human's heart, and in return, human begins to act for good of all.

Becoming the prism of life: Prism is a glass in which white light falls and disperses into its seven constitutive colors. The beauty is not seen in the single beam of white light but when it falls in prism and disperses then the beauty of spectrum is admirable. Artificial intelligence has used to understand the phenomenon of light, travelling of waves in different angles, propagation of messages through these waves in medium and vacuum and its speed in all mediums. The human being needs to become prism of life. The singularity of the human being is its humanity. The colour, caste, languages, food, belief, nationality are all the different colours of the same humanity. The beauty lies in its different colours of humanity. Diversity in being human opens the door of ever nonstop evolution than stagnant homogeneity of being human.

Being human in scientific age urges humanity to be sensitive to the lives on earth and the non-living materials as well.

Conclusion

Being human in scientific age urges humanity to be sensitive to the lives on earth and the non-living materials as well. The development of science and the birth of Artificial intelligence make us alert that the rhythm of nature should not be controlled and manipulated but it has to be respected and cooperated by a human being. Science has helped humanity to achieve unimaginable dreams, making robotic human, assisted humanity to expand their life through the medical facility, and provided test-tube baby. AI has helped scientists to achieve long-awaited theory that is the detection of the gravitational wave through LIGO. AI has even reached to the stage where a person can keep all his possessions, money, and bank account in a chip and insert it in his body and he can just scan it to get money from the bank. We need to strike balance somewhere between AI and being human and follow the principle which says – 'as far as AI helps us to be truly human we must use it and make it part of us but the moment it becomes a hindrance for us to be truly human one must become aware of it'. The artificial intelligence must serve the progress, promotion of human life and expansion of human life with all its beauty. Finally, humanity is growing to the higher level of consciousness along with material reality provided he/she sees everything the extension of self and gives due respect and care for the living and non-living reality

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The New Age of Digital Evolution: Call to Be Human and Be Responsible

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*Abstract***:** Evolution and innovation are two similar terms nowadays that can be understood as a synonym for transformation. Both are related to humankind as they move on history by bringing in the world a change that helps everyone to survive. In this age of information, the prominent concept of Artificial Intelligence has made many of the dreams of the past into reality at present. Indeed, the benefits of such innovations are not equitably shared in society as human beings are also undergoing an evolution in this digital age. In this digital age, therefore, true innovation is possible only if every person is an opportunity for transformation and every person becomes a responsibility of the other. In every possible manner, innovation should be understood today as a manner of interdependence in this digital era.

*Keywords***:** Artificial Intelligence, Sociality, Environment, Technology, Genetics, Digital Age

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Introduction

Although the field of Artificial Intelligence (*AI*) is making truly revolutionary breakthroughs, we have to put its progress in perspective with pros and cons. Moving forward from remote-controlled robots, our next goal is to design true automation, robots that have the ability to make their own decisions requiring only minimal human intervention. (Kaku, 2018) The profound shift in technology lifted civilization from the curse of ignorance and poverty and took us into the machine age. AI is concerned with building machines that can act and react appropriately, adapting their response to the demands of the situation. (Finlay, 1996) We, humans, have temporal consciousness in addition to spatial and social consciousness. However, we are constantly preparing for the future and even for beyond our own life spans. (Kaku, 2018) Now, it is high time to think of being human in this age.

Artificial Intelligence: Its Identity and Purpose

We can understand better the identity and purpose of AI enquiring its "Being for Others" and making a social critique of it.

Human Life: Being for the Other as the Purpose of AI

The duty of any human being as the social animal, as Aristotle says, is to be present in the need of the other. As they are part of a society, the relationships have always a role to play to bring together all of the members in your neighbourhood as well as in your families in order to identify and realize them as we see through a plane glass panel as your own brother or sister. Unlike all other life-forms on this planet, which must passively await their fate, we humans are masters of our own destiny. Fortunately, we are now creating the tools that will

defy the odds given to us by nature, so that we may don't become part of those life-forms destined for extinction. (Kaku, 2018) As products of a blind process of replication and selection, human beings as a whole – body and mind – differ only in degree of complexity from robots or machines. (Slingerland, 2008) The key to moving successfully through the world, according to Zhuangzi, a Chinese thinker, is simultaneously keeping both perspectives in mind, seeing the human in the light of the Heavenly and thus seeing through to its contingent nature, while at the same time acting in accordance with the constraints of being a human in the world of humans. (Slingerland, 2008)

Influence of AI in the Betterment of Agriculture

To be successful, AI innovations will need to overcome understandable human fears of being marginalized. AI will likely replace tasks rather than jobs in the near term, and will also create new kinds of jobs. But the new jobs that will emerge are harder to imagine in advance than the existing jobs that will likely be lost. Changes in employment usually happen gradually, often without a sharp transition, a trend likely to continue as AI slowly moves into the workplace. Many middle-aged workers have lost well-paying factory jobs and the socio-economic status in family and society that traditionally went with such jobs. *LinkedIn*, the popular social network for business people offers many advantages. *LinkedIn* makes it easy to find candidates who are not actively searching for work. (Tapscott, 2009) AI is combining information from global satellite imagery with the weather and agronomic data to help farmers improve crop yields, diagnose and treat crop disease and adapt to changing environments. This approach to

farming is known as precision agriculture and it can help increase farm productivity to feed more of the growing population.

Young people, and with them the entire world, are beginning to collaborate especially regarding environment through activists like Greta Thunberg. For the first time in history, young people have affordable, global, multimedia enabling them to research, collaborate and organize in order to bring about this needed change. Their hopes, determination, knowledge and facility with the Net are being applied to one of the greatest challenges which is to save the planet earth. (Tapscott, 2009)

AI and Its Educational Influence Today

Technology influences forms of learning. Computers, especially, Artificial Intelligence, facilitate a greater degree of collaborative learning through peer exchange and interaction among equals. Social networking sites provide an experiential space for actively taking on, rather than merely acting out, the trace of technology in the human self (Zylinska, 2013). The implications of digitization of print on literature, literary studies and research are only beginning to dawn upon scholars of literature. In the case of 'real-time' teaching, the instructor can use a projected image of a text. In a wired classroom, the instructor's system can control all other systems. The electronic classroom will textualize classroom discourse (Nayar, 2004). Virtual Learning Environments (VLEs) are essentially course delivery systems and generally include course materials, assessment facilities, conferencing and chat softwar. (Nayar, 2004). Internet databases such as *JSTOR* or *Project Muse* available on subscription enable students and researchers to access the full text of articles from major journals (Nayar, 2004).

Artificial Intelligence and Genetics

The gene by itself is inert, and can only express itself when located in a body. The human is seen as an expression of the gene, where the genetic code is the language that makes meaning in the form of human. Gene therapy is a medical intervention at the level of the cell and the molecule. It renders the body into increasingly smaller sections for analysis, but also for intervention and modification. Research rates have been high towards the advance in research, mainly in genetic engineering and immune suppressive therapy which has helped to improve survival chances greatly. Electrical and biochemical stimulations for neurological dysfunctions are also available. Gene therapy offers the potential of a one-time cure for inherited ailments and diseases. Nanomedicine is the application of nanotechnology to the treatment and prevention of disease. Genetic reprogramming enables the body to experience the world differently, especially when that body has been unable to do so previously due to corporeal problems or disease.

Being Human: Social Concern in the Present Age

The process of enhancing ourselves is not new but has been happening for all of human existence. Throughout history, we see examples of how humans have used artificial means to enhance our power and influence. In the future, we might live in the mental age, where our thoughts control the world around us. (Kaku, 2018) We do not normally associate machines with emotion. Indeed it is the ability to perform rationally, logically, without the baggage of emotional response that makes an intelligent machine powerful. Emotion is the mechanism by which we take account of shared human experience in our

decisions. The new sociality is based on contingency and immediacy, of shifting and altering loyalties. It is also based on information gathering, dispersal and appropriation of information.

Considering the relationships in the world today, mutual respect always has the prime concern. Respect for the person, therefore, means doing nothing contrary to personal either relative to the part of being the person already obtained or relative to the part which a person seeks to obtain (Rosmini, 1994). Sociality is based on social performances, communication and linkages. We present a self to the world, and the world responds to it. Although human beings can draw advantage for themselves both from the use of things and the use of persons, the use of things differs essentially and infinitely from the use of persons.

The notion of a good of a human being is not only a biological notion. Human welfare is associated with the satisfaction of needs and desires. In our society, training in skills and acquisition of knowledge are seen as components of the welfare of members of society. But choosing something by an individual must be aimed at the benefit of another person and that is the reason why we distinguish between self-regarding and other-regarding virtues (Smit, 2014).

A Social Critique on Artificial Intelligence

A social critique of AI is facilitated by exploring the virtual world first and then that of AI.

Virtual World: A Mirror which Makes You Self-Reliant

AI expert Rodney Brooks wrote, "My prediction is that by the year 2100 we will have very intelligent robots everywhere in our everyday lives. But we will not be apart from them – rather

we will be part robot and connected with the robots" (Kaku, 2018). Virtual reality need not be a prison. It can be the raft, the ladder and the transitional space. Virtual spaces may provide safety for us to expose what we are missing so that we can begin to accept ourselves as we are. We don't have to reject life on the screen, but we don't have to treat it as an alternative life either. We are all dreaming cyborg dreams, which means dreaming of a situation where man is in a machine. While children imagine morphing humans into metallic reptiles, our computer scientists dream themselves immortal (Turkle, 2002).

If a video game player has already merged with the computer, he is already a cyborg. It is an age where we feel fragmented and alone as individuals looking at the mirror would see themselves alone devoid of relations, even though we find many mythologies emerging to put the world back together again. The digital world is often disconnected or make us disconnected from many of the world's problems by virtue of its members' affluence and social standing. The blog or any form of New Media self-representation can be seen as an integral part of identity-making in the fragmented postmodern age. The digital young do need to develop coherent philosophies for responding to the very problems that the exhausted current system fails to address like racial hostility. The Digital Revolution or AI needs to offer solutions for eradicating poverty, ignorance and war in radical ways (Katz, 2002). Digital technologies free us from the constraints of space and place. As computers are able to perform more and more of the tasks currently performed by people, there will be less need for human-human contact. This shift from other people to reliance on machines may cause a

breakdown in social structures and social responsibility (Finlay, 1996).

Artificial Intelligence: A Wall Against the Other

In 1955, a select group of researchers met at Dartmouth and created the field of Artificial Intelligence. But they made a crucial mistake assuming that the human brain was a digital computer. The concept of AI as an area of science was more close to fiction. However, the idea of AI is no longer a fiction, but a reality that has become part of our daily lives (Poola, 2017). AI systems are still quite crude, and they are extraordinarily inept at many tasks that are accomplished with ease by a five-year-old human. Similarly, there is still only a mere understanding of how the body-brain serves even quite basic functions as memory, emotion and self-consciousness. (Slingerland, 2008) With AI, there has been the minimal occurrence of errors especially when typing since the computers can predict what we are going to write and make corrections.

People can get lost in virtual worlds. We must understand the dynamics of virtual experience both to foresee who might be in danger and to put these experiences to best use (Turkle, 2002). Reality is the result of our interface through the body's various senses of the physical world. In the digital age of AI this reality is 'mixed reality'. The body interfaces with the world in a different way today, and all reality is the mix of the virtual space of electronic communication and information. If the humans understand the right use of AI, a machine-oriented environment, and as language differentiates them from other animals, humans can become culture-creating and self-conscious creatures who evolve into moral beings knowing what is right and what is wrong. They should become rational

animals responsive to reasons considering the norms and values of society (Smit, 2014).

The electronic society is characterized by more adult-like children and more childlike adults; more career-oriented women and more family-oriented men. As we move forward in case of AI and technology, our society also spirals backwards. If AI is possible in machines then humans are reduced to little more than machines themselves. The middle and upper classes are moving towards the behaviours once associated with the illiterate lower classes. (Meyrowitz, 2002) To recognize the new paradigm of inter-being is not to deny the obvious truth that we perceive ourselves as separate, independent beings, but to understand that this separateness is an illusion. (Barash, 2018) The individual is not a destination. Every individual is a route to something more or something else. The new sociality is a series of proliferating paths rather than destinations. Humans are social animals and without considering the importance of relations in their life, they are easily drawn to loneliness. The use of mass media to relieve such loneliness is frequently found in modern society (Severin and Tankard, 2002).

Human Being as a Commodity Today

The rise of posthumanism as a philosophical paradigm, treating the human as co-evolving with the other species and refusing to treat the human body or consciousness as autonomous and sovereign has resulted in new views of the human itself. It shows how the human can always morph into something else, adapt to a device or a context. Posthumanism redefines the term ‘nature’. When cloning, genetic engineering, nanomedicine, chip-implants alter the

human body, the distinction between 'nature' and synthetic break down at the interface because the synthetic is incorporated into the natural body and all bodies, therefore, become cyborgs.

Computers, globalization and Information and Communication Technologies (ICTs) have transformed contemporary culture. It has been in the realm of consumer culture which also considers every human being also as a commodity (Nayar, 2004). Mass culture, therefore, apparently erases true authenticity, autonomy and subjectivity of a human being. Utilitarianism which is the greatest good for the greatest number is unable to solve the problem of how justly to distribute the total good (Kauffman, 2014). Besides making people incapable of thinking and doing, the market-culture is taking away the power of decision as well. In this free world, we are not actually free to decide for ourselves. We can no more decide what to wear, what to eat and what to drink. Gradually even the very ability to think and to decide for ourselves is drained out from us (Puthenpurackal, 2015).

A Theological Critique of AI

The church is always against any method or technological advancement which affects human dignity like Artificial Reproductive Technology (ART). It can include anything from choosing the gender of children to women delaying the birth of the first child until after they have established their careers (Nayar, 2004). Cloning involves the use of genetic information from a single cell to create an entirely new human being. Gene therapy is the use of genetic manipulation for the treatment of disease. The aspect which is important in this Age of Reason is that we miss spirituality at a fundamental level. We give our faith to science and rationality. Our adoration of technology from washing machines to thousands of apps becomes the

strongest case among the neo-atheists, overconfident in their science to think that any belief in any form of God, monotheistic or not, is stupid. (Kauffman, 2014)

Question of Human Dignity facing AI Today

The quality of human life can be enhanced while human bodies and consciousness can be augmented through technology. The amount of time and energy people spend communicating or trying to do so, is stupendous and perhaps literally immeasurable. With the revolution in computer-assisted communication: e-mail, cell phones, texting, Twitter, Youtube and growing interest in understanding how these new modalities impact our ancient predilections, there are also new threats to privacy along with these electronic assists. (Barash, 2018) Artificial Reproductive Technology (ART), cloning and prosthetics alter the physiological and other processes of the body, thereby making these processes the effect of the human-machine interface.

AI for the New Millenium

As we are witnessing in the present age the vulnerability of human existence as an individual being and social being in keeping human relations today, I think in the light of theological and scientific introspection some suggestions can be made regarding the betterment of relationships in this Information Age of gadgets and supercomputers.

- There should be the assistance of AI in every field where the basic needs of people are not met with like food and shelter.
- Successful scientific experiments with the help of AI should be also influencing the rural people in the villages today.

- The mentality towards human dignity should be enhanced not considering human beings merely as a commodity.
- AI should be a great help in enhancing human life in the world today.
- AI can be a great help in different fields especially in the lives of the differently-abled in every possible manner.

Conclusion

Human beings are moving through Stone Age towards the Information Age where the money is no more visible but is flowing as liquid cash. Being human in the world is possible if the people are aiming at some good through a united effort. Even though Artificial Intelligence can be considered a boon in the various areas of current human and social development, strict monitoring is required where the dignity of the human being maybe tarnished. Every person, including Christians, have the responsibility to make the necessary steps to consider the human being as a neighbour and not the commodity of personal gratification. Humans can claim to have created a better world, and the world can claim to have made growth, only insofar as it gives greater light and better form to the humans in the society. To contemporary humans, it seems to be a disturbing reminder. The basic identity of human beings is radically questioned in the present world and if the humans give way to machines, the world as a living universe will remain an illusion. Now it is in our hands to explore or to enhance the world around us through our own hands and not rely exclusively on a machine or platform.

Even though Artificial Intelligence can be considered a boon in the various areas of current human and social development, strict monitoring is required where the dignity of the human being is tarnished.

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Finding Meaning in This Time of Crisis: Contemporary Applications of Logotherapy

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Abstract: Covid-19 pandemic has confined humans to follow social distancing and stay at home. Confining ourselves at home has made us to be in solitude and by ourselves. The new generations are not attuned to be in solitude as it pierces their very existence of finding meaning. According to one survey the suicide and criminal rates were on the rise during this pandemic. What gives us meaning? Is it our wealth or our parents or our social media friends? Each life is precious. Suffering or solitude cannot take away our will for living and being cheerful. This write-up will enlighten our minds and hearts to find meaning and value our lives.

Keywords: Meaninglessness, Logotherapy, Happiness, Meaning, pleasure, power, determinants, suffering, encountering, experiencing, psychotherapy, depression, suicide, trauma, mental, co-relation.

Introduction

Meaninglessness is a frequent visitor to the therapist's consulting room. A sense of meaninglessness is by no means always bundled with searching for God or losing religious belief. It could manifest itself simply as a certain inner emptiness, a feeling that some vital ingredient has gone missing from our life. Particularly in these 'age of Gadgets' we find there is something lacking

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in our life. However, we have temporary companions in the form of electronic gadgets (smart phones, tabs, laptops etc.). These gadgets try to give us the interim happiness and companionship. But, they lack in the perpetual happiness which is possible only through us. To solve this mystery of meaninglessness Logotherapy comes into play. Logotherapy a concept developed by the famous 20th century neurologist and psychiatrist Victor Frankl etymologically means 'meaning therapy'. Before Victor Frankl, Sigmund Freud spoke about humans 'will to pleasure' and Alfred Adler culling from Nietzsche spoke about the 'will to Power'. Meaning plays an important role in each one life. Some find meaning in their profession and some find meaning in the miniscule work they do. Ultimately, it is the meaning or the goal in life that keeps us going. Suicides are in great number because of this loss of meaning. We feel that we do not belong to this world once we lose meaning in our lives. Logotherapy is based on the existential analysis of Soren Kierkegaard's 'will to meaning'. According to him meaning is not equal to knowledge but meaning is a lived experience and a quest to find one's values, beliefs and purpose in meaningless world. As a staunch Christian this meaning comes through the word of God.

Some Features of Logotherapy

Victor Frankl's Logotherapy was founded on the belief that the primary motivational force is to find meaning in life. Furthermore, life has meaning under all circumstances, even the most miserable ones. We all have freedom to find meaning in what we do and experience. According to him Human spirit is not spiritual but the will of human being. He emphasizes on the search for meaning which is not equal to God or supernatural being. However, there are barriers of affluence, Hedonism, materialism etc. Frankl observed all these during his stay at the Nazi concentration camp where he saw humans' pursuit of pleasure and acquiring and consuming material

goods. We humans discover meaning by creating work or doing a deed, by experiencing something or encountering something and by the attitude we take toward unavoidable suffering. We know everything can be taken from a man except one thing, and that thing is human freedom. Human freedom is the key we possess. So, we are the masters of our own life. If we are depressed in life we need to try to see the reality from the others perspective and balance the matter in an equivalence.

Frankl believed in three core properties on which his theory and therapy were based:

1. Each person has a healthy core.
2. One's primary focus is to enlighten others to their own internal resources and provide them tools to use their inner core.
3. Life offers purpose and meaning but does not promise fulfilment or happiness

Going a step further, Logotherapy proposes that meaning in life can be discovered in three distinct ways:

1. By creating a work or doing a deed.
2. By experiencing something or encountering someone.
3. By the attitude that we take toward unavoidable suffering.

Importance of Logotherapy

Logotherapy as will to meaning is the only psychotherapy because there is no psychotherapy other than theory of man. Though Freud and Adler spoke extensively about 'will to pleasure and power' respectively, yet they fail to affirm because they try to project human existence negatively. Therefore, existentialism plays an important

role here. It's existentialism not of machine model or rat model but of freedom. In his observations at the Nazi camp Frankl saw that humans can never be free from every condition- there are biological, sociological and psychological determinants. However, Humans are capable of resisting and braving even the worst conditions. For this to happen humans have to detach from situations, choose an attitude about him/her, determine his/her own determinants and shape his/her character. Finally, we are individually responsible for our own life.

Practicality

Frankl even used this therapy practically in a number of occasions. For example to relieve the stress of pilots it was told to the pilots just before the flight to know the purpose of the journey. A greater result was observed. Moreover, there was a highest enthusiasm seen during these things. According to Frankl, Depression has three dimensions- psychological, physiological and spiritual. Psychologically we feel depressed because feelings of depression root from undertaking tasks beyond our abilities. When we fail and get discouraged we feel depressed. For example, in the game of football when someone misses a goal he feels depressed and loses his confidence. Physiologically we feel something called "Vital Low" which diminishes our physical energy. Spiritually there is a tension between who he actually is in relation to what he should be. For example, in religious life very often we mask our life at some moment of time.

"A therapy for the sick, support for the sufferer, education for the confused, and philosophy for the frustrated … logotherapy has developed methods for working with clients who suffer from phobias in their sexual behavior, have incurable diseases, or lead empty and meaningless lives" (Faramarzi & Bavali, 2017). This shows the variety of contexts logotherapy can be applied to.

Logotherapy can be used by itself to treat a mental health disorder, as most early psychotherapy was used. It can also be used in a positive psychology context to help people with no discernible mental health disorders live a life with meaning, and in turn higher levels of well-being. Logotherapy can also be used in a group or family therapy setting to help people deal with a number of stressors. The versatility of logotherapy is clear when looking through its modern-day applications. Logotherapy has recently been used to help support students, whether it's in the context of giving elementary school students a sense of meaning and lowering their levels of depression , or in the context of giving first-year University students logotherapy-based support . Logotherapy has also been used to improve the quality of life of adolescents with terminal cancer. Logotherapy has further been advocated as a treatment for trauma

Criticism

Frankl was not without his critics. Some felt he used his time in the Nazi camps as a way to promote his brand of psychotherapy, and others felt his support came only from religious leaders in the United States (indeed, he did recruit ministers and pastoral psychologists to work with him).

In 1961, his ideas were challenged by psychologist Rollo May, known as the founder of the existential movement in the United States, who argued that logotherapy was equivalent to authoritarianism, with the therapist dictating solutions to the patient. In this way, it was felt that the therapist diminished the patient's responsibility in finding solutions to problems. It is not clear, however, whether this was a fundamental problem of logotherapy, or a failing of

Frankl as a therapist himself, as he was said to be arrogant in his manner of speaking to patients.

In this way, it may be that logotherapy argues that there are always clear solutions to problems and that the therapist has the task of finding these for the client. However, Frankl argued that logotherapy actually educates the patient to take responsibility. Regardless, it is clear that in the application of Frankl's theories, it is important to highlight that the patient must be a participant rather than a recipient in the process

In Everyday Life

How might you apply the principles of logotherapy to improve your everyday life?

- **Create something.** Just as Frankl suggested, creating something (e.g., art) gives you a sense of purpose, which can add meaning to your life.
- **Develop relationships.** The supportive nature of spending time with others will help you to develop more of a sense of meaning in your life.
- **Find purpose in pain.** If you are going through something bad, try to find a purpose in it. Even if this is a bit of mental trickery, it will help to see you through. For example, if a family member is going through medical treatments for a disease, view your purpose as being there to support that person.
- **Understand that life is not fair.** There is nobody keeping score, and you will not necessarily be dealt a fair deck. However, life can always have meaning, even in the worst of situations.
- **Freedom to find meaning.** Remember that you are always free to make meaning out of your life situation. Nobody can take that away from you.

- **Focus on others.** Try to focus outside of yourself to get through feeling stuck about a situation.
- **Accept the worst.** When you go out seeking the worse, it reduces the power that it has over you.

Survey Results

A systematic review of research evidence pertaining to logotherapy conducted in 2016 found correlations or effects pertaining to logotherapy in the following areas or for the following conditions:

- Correlation between presence of meaning in life, search for meaning in life, and life satisfaction, happiness
- Lower meaning in life among patients with mental disorders
- Search for meaning and presence of meaning as a resilience factor
- Correlation between meaning in life and suicidal thoughts in cancer patients
- Effectiveness of a logotherapy program for early adolescents with cancer
- Effectiveness of logotherapy on depression in children
- Effectiveness of logotherapy in reducing job burnout, empty nest syndrome
- Correlation with marital satisfaction

Conclusion

We know goals are unreachable. When we chase these unreachable goals we are sure to fail. Furthermore, we lose a sense of future and meaning and go into depression. Logotherapy – a positive psychotherapy comes into the

picture in this situation. Sigmund Freud and Alfred Adler had a negative connotation in their theories of human man, but Frankl makes human being a positive one. That is the greatness of this therapy. So, logotherapy is a beautiful therapy to make a positive impact of human existence.

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Review Article
Rediscovering God through Science

Gini George
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McHargue, Mike (2017). *Finding God in the Waves: How I Lost My Faith and Found It Again Through Science*. New York: Convergent. Pp. 224. ISBN: 978-1-47365-369-6

Mike McHargue is a public educator trusted by millions to use empathy and deep scientific insights to help them navigate some of the most difficult experiences of people. He's the host of "Ask Science Mike," co-founded the chart-topping show "The Liturgists Podcast," is the bestselling author of *You're a Miracle (and a Pain in the Ass)* (2020). He works as a science advisor and story consultant for film and television working with clients including Marvel Studios and Pete Holmes.

McHargue has been featured in *The Atlantic*, *The New York Times*, *The Washington Post*, *NPR* and numerous other publications. He is a well-known speaker. Mike lives in Los Angeles, CA, USA with his wife Jenny and daughters Madison and Macey.

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Introducing the Book

Reading this incredible and inspiring book is one of the best things to happen to progressive Christianity and to anyone who is wondering how (or if) they can be a person of faith in an intellectual, modern world that seems like it's leaving mainstream Christianity behind (LeFever 2016).

The target audience for this book is probably not firmly committed Christians - in fact, McHargue pulls so few punches in describing his journey into atheism that this book trigger a collapse of faith in a typical evangelical reader. “The first half is raw and unflinching, and if you stopped reading there, it would be more effective than Dawkins' *The God Delusion* because it presents the same information with none of the arrogant condescension. If you had never been exposed to these arguments before, they could wreck you,” (LeFever 2016).

The second half, in which McHargue uses cosmology, neuroscience, and empirical data to try and put his broken faith back together again, is handled with honesty and transparency. His work on the podcasts "Ask Science Mike" and "The Liturgists" has already been profoundly influential on many and has prepared him to write this book.

This book does not support either “pompous, contempt-filled atheists” or “anti-intellectual, backwards-thinking Christians.” It contains “a fair-handed, even examination of both sides and then a possible middle path.” This book is a contribution to a liberal and progressive church trying to balance faith and intellect (LeFever 2016).

Faith and Science

How does science affect our faith? Truly it is a question facing millions today, as science reveals a Universe that's self-creating, as American culture departs from Christian social norms, and the idea of God begins to seem implausible at best or even barbaric at worst.

Mike McHargue understands the pain of gradual unfolding of faith. In *Finding God in the Waves*, he tells the story of how his Evangelical faith dissolved into atheism as he studied the Bible, a crisis that threatened his life, his friendships, and even his marriage. Years later, Mike was standing on the shores of the Pacific Ocean when a bewildering, seemingly mystical moment motivated him to take another look. But this time, it wasn't faith or scripture that led him back to God. It was truly inspired by science! (Inge 2018).

In *Finding God in the Waves*, "Science Mike" draws on his personal experience to tell the unbelieveable story of how the latest research in neuroscience, cosmology, and physics led him back to faith. Among other revelations, we learn what brain scans reveal about what happens when we pray; how fundamentalism affects the psyche; and how God is revealed not only in scripture, but in the night sky, in subatomic particles, and in us (Inge 2018).

For the faithful and sceptic alike, *Finding God in the Waves* is a "winsome, lucid, page-turning read about belonging, life's biggest questions, and the hope of knowing God in an age of science" (Inge 2018). It is focussed and objective.

The book is essentially a personal testimony, an account of the loss and rediscovery of faith. The title is rather deceptive, though, since what seems to have brought him back to faith was not science, but a mystical experience every bit as profound and mysterious as that of Saul on the Damascus road. His rediscovery was made through science, not by science. His account of this is fascinating. He then goes on to seek to make sense of that experience through science. There's a noble tradition of that: it's Anselm's *fides quaerens intellectum*, faith seeking understanding (Inge 2018).

McHargue's use of science is sensible, helpful, and at times, moving. For example, when he talks of what scientists refer to as the Initial Singularity, just before the Big Bang, in which everything which was to be was contained, he acknowledges: "I was there in that Singularity, as were all my ancestors and descendants. Every star that's been born, every star that has died, was there, too. So was every particle that makes up every atom in the universe. All was there, together, in the beginning" (McHargue 2017). He adds that when he thinks of the Singularity, he thinks of God. And of himself (Inge 2018).

The Bible and Science

Some of the difficulties that he still has is connected with the Bible. For example, the inerrancy rather than the divine inspiration of the scriptures, and an insistence that penal substitution is the only and exclusive proper way of understanding the atonement (Inge 2018

The Bible is a big part of why Mike lost his faith, which is actually a common phenomenon today. Referring to his early life, Mike describes the Bible this way: "I believed the Bible was inspired and inerrant, which is Baptist-ese for saying that God wrote the Bible, and, therefore, it is perfect. In this way of thinking, the Bible is accurate in whatever it talks about, including science and history."

This led him to read the Bible four times in one year and he began to question its inerrancy (Demme 2016). He "noticed that Genesis 1 says trees were made before the stars." This was a problem for Science Mike because, as he explains it, "Genesis says we were formed from dust, but cosmology tells us that you don't get dust—unless you have stars first. Without dust, you don't have the material to make trees or humans. There were no trees in our universe before there were stars" (McHargue 2017).

From his study of astronomy, physics, and other scientific details he knew that the order of Creation in Genesis and modern scientific understanding did not agree (Demme 2016). As Mike's capacity to accept biblical inerrancy lowered, so did his belief in God.

In the face of unscientific statements in the Bible, something had to give. Instead of holding on to what he knew about God while letting go of what he knew about the Bible, Mike had to let go of it all; for him they were one and the same (Demme 2016).

God Encounter

But God was waiting for him. Through a series of mystical encounters and uncompromising love from his family, Mike experienced God again. It's not that God was ever lost, but Mike's ability to acknowledge and receive God turned off for a period of time.

In our modern, scientific world, we tend to view our beliefs as a set of ideas, which means we often associate mastery of a subject with people who can best articulate the ideas behind their beliefs. (McHargue 2017). But when we scan the brains of believers, we find that their understanding of God is nonverbal, more like a feeling or experience than a set of ideas. This is why Christians are usually stumped if someone asks them, "What is God?" "Contrary to what some skeptics say, it's not because these people's belief system is unsophisticated or simplistic. Instead it's that their experiences with God aren't primarily associated with the language center of the brain" (McHargue 2017). According to him trying to describe God is a lot like trying to describe falling in love

At the same we are not absolutely certain! He acknowledges that he still has doubts. Faith without doubt to accompany it is not faith at all, but knowledge. We are not given knowledge in this world; for now we see through a glass darkly. Physicists have had to learn to embrace uncertainty, and so must people of faith (Inge 2018).

Concluding Remarks

As someone who wants to help people see the Bible as manageable and meaningful, Mike's journey has been fascinating and creative. It challenges both believers and non-believers to take religion seriously and science too.

This book has numerous positive dimensions. One of them is to acknowledge that there are very good on the other side too. He dispels the myth, for example, that fundamentalist Christians are mad or bad. He makes clear that the fundamentalist Baptists from whom he eventually felt it necessary to withdraw were good, godly, loving, and caring people. That has been my experience of fundamentalists with whom I have come into contact through my late wife, Denise, who grew up as one (Inge 2018).

For anyone struggling to reconcile faith and science, this is a beautiful half-memoir, half-science book that has already made a contribution to the public discourse on science and religion dialogue.

On this whole this is a thoughtful, honest, and wise book In this book. In this valuable book Mike exposes, in fact, his own vulnerability and authenticity as he shares his personal story. This book is also very readable. The science parts were accessible, easy to understand, and downright fascinating. As for the religion part Mike accepts the Bible, without requiring it to be a perfect text.

For anyone struggling to reconcile faith and science, this is a beautiful half-memoir, half-science book that has already made a contribution to the public discourse on science and religion dialogue. This book opens us to the uncertainties in both science and religion! We can hope for a similar refreshing treatment in his next book (McHargue, 2020).

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