



The rapid evolution of artificial intelligence and its implications on the individual and the society within the technoscientific age

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Abstract

Rapid technological and scientific advancement has been considered a mixed blessing in the society of individuals. Beyond its positive outcomes, its negative impacts on humanity are a call for concern. The revolution in science and technology has led to the emergence of trans-humanist ideologies, which include the revolutionary force of artificial intelligence to replace human intelligence in almost all domains of human endeavor. Increase desire of individuals to get more acquainted with the utility of artificial intelligence is gradually resulting to the artificialization of the society of individuals. Faced with this scenario, this study seeks to unveil the imminent effects of artificial intelligence technology on individuals and society within the new age context. Using an analytico-critical approach, the study reveals that rapid and eventual innovation in artificial intelligence technology has and will generate long-lasting effects on the society of individuals. Some of the effects emanating from this technology include individual laziness (due to too much dependency), normative dimensions (through the denigration of human values), and socio-political dimensions (through its role in society and its governing policies and structures). This paper argues for the necessity of offering new orientations to techno-scientific operationality that has led to the emergence of artificial intelligence while avoiding the risk of its abuse. As the actual world continues to glorify the power and utility of artificial intelligence, it is crucial for policymakers and society as a whole to carefully consider its implications and ensure that it is used in a responsible and ethical manner. This is to ensure a balance between techno-scientific progress and human progress.

Keywords: Artificial intelligence, individual, society, techno-scientific operationality, human values

Introduction

The rapid development of artificial intelligence and the societal risks associated with it have raised a growing need for its regulation. The substitution of human natural intelligence for this technology has caused a lot of societal ills. Risks associated with the advancement of artificial intelligence include the domination of human consciousness by techno-sovereign super-intelligence, reduced human job opportunities, social manipulations through social media platforms, and degradation of human values. Philip Boucher pointed out that “there are also several longer-term challenges.. Other key challenges include the public acceptability of the technology, its alignment with social values, and concerns about some military applications (P. Boucher: 2020, p. iv) ^[23]. With these, our societies had been transformed into what Jacques Ellul and Raymond Aron termed “the technological society” (J. Ellul: 1980, p. 1) ^[24] and “industrial society,” respectively. Individuals in these societies are gradually transforming into technical species due to this “individualized technology” (G. Simondon, 1958, p. xx) ^[10]. The artificialization of the society of individuals confirms the erelong supposed autonomy of technology, which eventually resulted in the formation of the techno-sphere, or technical universe, and systems (J. Ellul: 1980) ^[24]. Pioneers and promoters of artificial intelligence—Ada Lovelace, Charles Babbage, Warren McCulloch, Walter Pitts, John von Neumann, Norbert Wiener, Herbert Simon, and Irving Jack Good—only foresaw the positive impacts of artificial intelligence and the necessity to glorify it. Yet, many thinkers and researchers have equally identified the risks associated to this rapid development of artificial intelligence. These thinkers

include Robert Merton, Max Planck, Colin Garvey, Joseph Weizenbaum, Terry Winograd, Bert Dreyfus, and Lucy Suchman, just to name a few. They have argued against eventual techno-scientific optimism, which should not be trusted (C. Harry: 2021).

This paper seeks to examine the effects of artificial intelligence on individuals and society, thereby suggesting the necessity of regulating techno-scientific operationality that has led to the artificialization of human societies. Artificial intelligence constitutes one of the major topical issues discoursed within our actual world context. Controversial views have and are presently developing in regards to this technological and scientific innovation. The question that guides this reflection goes thus: what are the imminent consequences of the revolutionary and evolutionary force of artificial intelligence on the society of individuals? In addition, will the rapid development and advancement of techno-scientific operationality that have brought to light techno-sovereign super-intelligence not result in the artificialization of human society? In order to respond to the above interrogations, an analytico-critical approach is adopted. This approach seeks to reveal that rapid and eventual innovation in science and technology has and will generate long-lasting effects on the society of individuals if left unchecked.

Conceptual Clarification

1. What is Artificial Intelligence?

Insofar as the concept of artificial intelligence is concerned, there are diverse conceptions of its meaning. It will be necessary to first of all clarify the sub-words that constitute this term, like artificial and intelligence, before properly

defining the term artificial intelligence. What is artificial is that which is made or produced by human beings beyond their natural origin. It is, in fact, an intentional cause that lacks naturalness. It should be noted that this word is mostly used in the negative sense. It traces its origins to the Latin word “artificialis” or artificium, which is often attributed to the works of art. The word intelligence could be understood as the ability to learn, acquire, and understand in a logical way. From the latin word “intelligere”, which means “to understand,” Better still, it is an action of mentally apprehending something. The term artificial intelligence is defined as machine intelligence or intelligence demonstrated by machines, in contrast to the natural intelligence displayed by humans. It is often used to describe machines that imitate human cognitive functions such as learning, understanding, reasoning or problem-solving. Nils J. Nilsson has provided a useful conception of this term when he opines: “Artificial intelligence is that activity devoted to making machines intelligent, and intelligence is that quality that enables an entity to function appropriately and with foresight in its environment” (N. J. Nilsson: 2010, p.10). In addition, it is broadly considered as the theory and development of computer systems that perform task that normally demands human intelligence or the simulation of human intelligence process in view of designing intelligent agents (D. CycleBack: 2018, p.9).

Artificial intelligence is one of the newest fields in science and engineering that rapidly developed after World War II. Good ideas of great scientist like Galileo, Newton, and Einstein inspired the emergence and development of this field. The term “Artificial Intelligence” was coined by the computer scientist John McCarthy in 1955 who in 1956 [4] organized the Research Project on Artificial Intelligence (J. R. Stuart & P. Norvig: 1995, p.16) [18]. He is widely recognized as the origin for this discipline. Due to rapid advancement in this discipline, its history seems a restarting one in every epoch whose end can only be with the end of humanity.

2. Individual and Society

The term individual is being derived from the Latin word individuum which means a single distinct entity or person. The concept of the individual encompassing aspects such as personality, self-identity, beliefs, and values. According to the Blackwell Dictionary of western philosophy, an individual is a single human being distinguished from other things or group (N. Bunnin and J. Yu: 2004, p.339) [19]. John Rawls conceives an individual as an ultimate, separate and distinct unit or entity (J. Rawls: 2009, p.69) [20]. The word “individual” holds an important place in the history of ideas. There exist diverse conceptions of this word following from the historical context and from the common point of view. An individual is being perceived by many as one person. This justifies the reasons why most recent meaning of the word individual is peculiar to, a single person or thing. By exploring the political, legal and theological meaning in conformity to its historical context, individual beyond being perceived as a single distinct entity (Max Stirner), could equally be considered as a social creation (Aristotle: 1999, p.6) [1].

The word society traces its origin from the Latin word Socius which simply signifies companion, association or fellowship. George Simmel considered the society as the sum total of individual interactions for mutual advantage (H.

Kurt: 1950, p.30). Society is made up of group of people with different, living pattern, race, religion and diverse political backgrounds. It is a group of individuals who share a common defined territory and a culture. Philosophers since the ancient times like Aristotle have ponder on the natural conception of society/community and the fact that “man is a social and political animal” (Aristotle: 1999, p.1) [1]. The conception of Man as a social animal entails its interdependent with others. The society in this case could be considered as the body of the living organism whose part cannot function in isolation. Yet, it should be noted that, with the coming of modern social contractalist like Jean Jacques Rousseau, John Locke and others, the society was therefore defined as the contract between individuals. This conception of the society opposes to the naturalist view of the society.

The Impacts of Artificial Intelligence on Individual and the Society

Rapid advancement in Artificial intelligence technology with its optimistic potentialities to transform the world had consequently resulted to numerous mutations in the society of individual. This discovery had brought a lot of diverse effects on individuals and society within the actual context. Yet, it should be noted that these effects are negative and positive hence qualifying the advancement in artificial intelligence a mixed blessing (E. Morin: 2009.) [12] Despite the positive wind of change that accompanies this technology, its imminent effects to humans and the society are alarming. This raises the spirit of consciousness and reflection of philosophers, intellectuals, scholars, and religious bodies to rethink the individual and social conditions in an age of rapid advancement in artificial intelligence.

1. Artificial Intelligence and the Degradation of Individual

Scientific research, revolution and innovations had prompted the emergence and development of artificial intelligence to compete with human natural intellectual capabilities. This continuous advancement had far reaching consequences on individuals within the digital context. The creation of diverse technical objects like robots and machines, to substitute human activities had caused many intellectuals worldwide to reflect on the wellbeing of human of the future. The discovery of this claimed super-sovereign technic is rapidly denigrating individual autonomy and values. Individual autonomy refers to the capacity to be one’s own self, living in conformity to reason and not rather the product of manipulation. Human beings are not digital computer but rather biologically determined being (J. Habermas: 2003, p.31) [14]. With robotic uprising for instance, “individuals are enslaved” (R. P Calvo: 2018, p.2) [7]. In other word, these technologies had contributed to the alienation of individuals that will be detached from the outcomes of their own proper works. The use and dependent on artificial intelligence as contended by Janna Anderson, Lee Rainie and Alex Luch singer “reduces individuals’ control over their lives” (A. Janna & al., 2018, p.11). Individual attachment and Application of autonomous systems technics had suppressed human natural potentials. In this case, instead of individuals to control their lives, performing certain tasks, it is the reverse given that autonomous technological systems control in many

dimensions individual lives and task. This is the reasons why it could be argued that man faced with this scenario, is not more perceive as a rational and conscious being recognized within the confines of classical anthropology but rather as a technical being as contended by the new anthropologists. Cameroon techno-philosopher estimates that these advancement in contemporary technology had altered and alienate the human ontological status (A.L Tsala Mbani: 2007) [2]. Individuals had been controlled from exterior and not from interior. This is evidence to justify the fact that contemporary individuals had been artificialized. Due to this dependency on technology of artificial intelligence, individuals had loosed their autonomy.

This age of accelerating technological mutations is a threat to human autonomy. In reality, “machines could not possess human intelligence” (M. Morioka: 2023, p.1) [17] given that machine is programmed in a conditional manner. Human and machines do not react to the same situations in the same way. In real sense, individuals are supposed to be acting in accordance with their proper goals and values. Individual/technical objects relations consequently “can contribute to loneliness and the lack of meaningful relationships” (R. P. Calvo & R. Ryan: 2018, p.4) [7] between individuals, thus leading to numerical individualism. Secondly, the use and dependent on artificial intelligence had contributed to the loss of human dignity. This implies that technological changes had affected the human ontological status. Philosophers had evaluated these effects in view of giving new orientations that will preserve human dignity faced with this wind of change that is blowing across the globe. Philosophy as the vast project of humanity can help us to question ourselves and our relation to technology. In this digital context, we need to think about who we are, and how technology affected who we think we are by nature.

With this, a different image had been attributed to individuals. It should be noted that “the human being is generally considered to be a sacred creature among the other organisms that live on earth. This special status may be justified from the religious perspective, or simply from the metaphysical conception of the human race...the human ontological personality is quite a serious issue when it comes to the ideological appraisal of the human being” (E. Ankia Gha, P. Takov & N. Shang). This justifies the special status accorded to humans as compare to other beings of nature. But technological advancement had downgraded and withheld this special ontological status of individuals. To this effect it is obvious that we can agree to the perspective of Jurgen Habermas that science and technology is being perceived as an ideological instrument. After looking at certain brief effects of artificial intelligence technology on individuals, now let us take a look at its societal effects.

2. Artificial Intelligence and the Artificialization of the Human Societies

Artificial intelligence technologies had artificialized the human societies. As they become a central force in actual society, we can notice that, this field of studies is shifting from simply building systems that are intelligent to building intelligent systems that are human-aware and trustworthy that is more than human capabilities. Application of these technological building systems had transformed our contemporary societies to what Norbert Elias and Anthony Elliot termed as the “society of individuals.” These systems

destroyed the social bond which had caused social philosophers to address these ills. Jürgen Habermas affirms thus “As long as philosophers still had faith that they were able to assure themselves about their ability to discuss the whole of nature and history, they had authority over the supposedly established frameworks into which the human life of individuals and communities had to fit” (J. Habermas: 2003, pp.1-2) [14]. Philosophers are well placed to ponder on the various uprising societal issues so as to find lasting solutions. According to Hans Jonas, these issues are arising as a result of the fact that “modern technology...keeps growing in an accelerating pace” (H. Jonas: 1984, p.ix) [15]. Humans are social and political animals like Aristotle erelong noted created with socialized mentalities. But artificial intelligence is highly atomized given that machines will not have natural and social feelings of association.

Unregulated artificial intelligence technology will produce various social, economic and political harms. Faced with the present situation and a few short decades to come our societies are and will be transforming to machine-based societies. Social decisions, work and policies, will be determine by machines. Imminent societal effects related to this will be unemployment due to supposed machines aids. Questions regarding the future conditions of work arose in top discussions on Artificial intelligence advancement. By this, we mean the effect of Artificial intelligence on the supply and demand for human labour. One of the main issues discussed around the globe is the fact that “AI has drawn the interest of experts from a wide range of disciplines...economists are concerned about impacts on productivity and unemployment, psychologists and neuroscientists are investigating possible consequences on cognition and behaviour; lawyers are concerned about changes in the judicial system; and sociologists, about social transformations” (C. Diogo: 2020, p.1) which seems a threat to human labour.

Advancement in artificial intelligence have and will enable artificial agents to do tasks cheaply and thereby replace human agents who earn income by doing those tasks. This will led to low standards of living. These machine-based societies will withheld socialism and promote capitalism. This is because the poor class will not be able to afford automated machines. In this case, only the bourgeois will afford and hence dominate the social and economic sectors. Robotic machines for example will be used for theft and other inhuman malpractices like sex, war and scamming. From the media plan, information will be misrepresented due to manipulation in various platforms. This will result to what Edgar Morin termed the uncertainty of the future (E. Morin: 2009, p.7.) [12] But despites the social and collective ills of this technology, its advancement is also promising to the individual and social progress. Let us take at a look of the promising effects of artificial intelligence to social progress.

3. Artificial Intelligence: Basis of Individual and Social Progress

Artificial Intelligence has emerged as a transformative technology in recent decades across the diverse sectors of human life. Advancement in this technology is promising to the individuals and societies within the new age context. Numerous positive outcomes of artificial intelligence development could be seen in the healthcare, education and economic domain. Artificial intelligence holds great

promise in improving on human efficiency, decision-making, and outcomes that will contribute to social progress. This will be tackled briefly from the medical, educational, political and economic domains. From the medical plan, artificial intelligence could “Improved Diagnosis and Treatment: AI technologies can analyze vast amounts of medical data, including patient records, medical images, and research papers, to assist in accurate and early diagnosis of diseases. Based on an individual’s specific medical background, AI algorithms have the capability to suggest personalized treatment plans (M. Tejan, T. Das & P. Singh: 2024). This will help improve on individual health conditions that might contribute to long life expectancies. There is a common saying that health is life. Human intelligence on its own could not determine certain medical issues.

This technology plays a vital role in China during the outbreak of Corona Virus. These machines participated in construction of hospitals and treatment of affected patients. It should be noted here that one of the major defining features of the effective management of COVID-19 strategies includes physical distancing, lockdowns, and quarantining to block transmission of this life-threatening virus. Before the outbreak of COVID-19, “China was recognized for its exceptional capacity in robotics, autonomous systems, and AI, with particular strengths in facial recognition technologies” (B. Chen, S. Marvin & W. Aiden: 2020)^[5]. The development of these technologies was to monitor and manage citizens. Building on these systems, the state, cities, and corporate partners readily applied artificial intelligence and robotic systems to meet the demand of COVID-19 life threatening virus. Artificial intelligence building systems could help Improved Diagnosis and Treatment, enhance Patient Care, predict analysis and Prevention strategies ensure drug discovery and development and implement robotic surgery and assisting procedures.

From the economic plan, we should note here that, for many decades, the dominant way to measure prosperity and social progress has been to focus on Gross Domestic Product (GDP). But in recent years, due to advancement in technologies of artificial intelligence, the formal had been withheld. In addition, it equally had an influence in jobs opportunities due to the fact that Automation systems have the potential to perform repetitive tasks such as manufacturing and customer services. This could lead to reduction in human labour. It also assisted in changing Skill requirements necessary for high productivity and good rendering of services. This will be an open way for job opportunities especially with workers with creativity potentials and certain skilled services.

From the educational plan, advancement in artificial intelligence system had contributed to the transformation of the educational sector by impacting teaching methods and learning strategies. It has promoted individual learning systems that will help improve students' learning outcomes. E-learning is one of the greatest achievements of these rapid growing technologies. This system plays an important role in unforeseen and dangerous circumstances. The example is the 2019 outbreak of Corona Virus where conventional learning was avoided due to social distance policy.

After pondering on the mixed individual and social challenges brought about by rapid advancement in the field of artificial intelligence, it shall be of prime importance to

propose new orientations to this technology that keeps growing in an accelerating pace.

Rethinking Human Societies In An Age Of Artificial Intelligence

Nevertheless, it is important to pose a philosophical discussion and orientation on the risks of artificial intelligence in human societies. From the previous analysis, it could be noticed that even though artificial intelligence development can be beneficial to individual and the society, it also brings life threatening unexpected situations that might lead to what Francis Fukuyama termed the end of history and the last man.

1. Philosophical/Legal Orientations on the risks of Artificial Intelligence

Philosophers have to express concerns regarding the long-term future effects of the new age technologies. This paper consistently argues that there should be some regulatory oversight both from the national and international level to lay down certain normative and legal principles that will guide the advancement of artificial intelligence in conformity with human progress. These humanitarian principles will ensure the safe and fair application of artificial intelligence claimed building systems of sovereign super-intelligence. These principles should constitute part and parcel of our penal code and constitution. From the national level, state men should lay down certain rules and regulations that will guide the operation and functioning of scientific optimistic activities. The bounds of technoscientific advancement should be clearly defined. While from the international plan, governing bodies should take charge of world regulatory principles that will oversee every techno-scientific operation for the purpose of safeguarding the world citizens. It is evidence that they do exist these world governing bodies yet their decisions are theoretical than practical. In this light, the world bodies should intensify the application of these normative and judiciary principles tilted towards enhancing certain inhuman technoscientific activities and discoveries.

Advancement in technology had open way for nations to compare their strengths. Bertrand Russell argued that due to the negative prevailing consequences of technology and science on the human society, there is necessity to define strict majors that will help regulate (B. Russell: 1956 ^[4], p.96) these challenges. The author of *The Impacts of Science on Society* opines that “I call a society "scientific" in the degree to which scientific knowledge, and technique based upon that knowledge, affects its daily life, its economics, and its political organization.. Science in its early stages had few social effects...but in recent times it has been transforming ordinary life (B. Russell: 1956 ^[4], p.96). He questions on the stability of the scientific society. In his perspective, present scientific societies can only be stable under certain condition which is the putting in place of “a single government of the whole world, possessing a monopoly of armed force and therefore able to enforce peace” (Ibid., p.113). Legal organizations and systems are to be established to prevent artificial intelligence bias, safeguard human control over the operation artificial intelligent systems. The rule of law is the right step to address bias or restore human presence in purely automated systems so as to avoid the risks of a rapidly technological innovation.

Developers of seemingly inhuman technologies should fully respect the human rights and civil liberties of all individuals. The relation between humans and technical objects should be guided by judicial authority. This is to avoid the risk of transforming human beings to what Edgar Morin termed as Machine-being (E. Morin: 1992, p.154.)^[13] There is need to question and propose solution to actual challenges of science and technology which triggers the society of individuals. There is need for collective consciousness to fight this life threatening scientific and technological advancement so as to rehumanize our lives. This will preserve us from the dangers of what Tsala Mbani termed de-ontologization so as to restore human dignity and societal harmony. This inhuman aspect of technology to him is qualified as le terrorisme ontologique (A.L Tsala Mbani: 2007)^[2]. Hence the artificial intelligence technology are symptoms of post-humanity that if left unregulated it will lead to the reconstruction and falsification of human nature. Rational and legal steps must be adopted to combat this technoscientific catastrophic.

2. Ethical Orientations to the Social Challenges of Artificial Intelligence

As earlier mentioned, artificial intelligence technologies had artificialized the human societies. By so doing, it had affected individuals' daily life, social wellbeing and values that guide the inter-individual relation within the social context. These values are considered as judgmental principles that define the individual ways of living in terms of desirable or undesirable and good or bad actions that characterize the society of individuals. Hans Jonas warns us of the persistent normative challenges caused by technological advancement. He sets new criteria for a contemporary ethical reflection that will guide technological advancement and the far-reaching future effects of human actions. The questions posed by Hans Jonas goes thus; "what are the foundations of an ethic (that) would match the new style of action? And what are the chances that its injunctions will prevail in the practical affairs of men?" (H. Jonas: op.cit., p.25). These questions are both related to regulatory principles and application. It is time for humanity to apply the views of Jonas faced with the threats of technological advancement notably that witnessed in the field of artificial intelligence. Technology ethics of responsibility is that fundamental principles that can be used to govern technological social risk. They are in fact applying to resolve moral issues arising from the development and application of technological discoveries of multiple forms. Let us take a look at the example of robotic wives newly fabricated and transgender activities.

Robots had been created to replace human beings in their entire life endeavour. These super claimed intelligent robots are performing certain key human activities which are supposed to be naturally determine like sex. Robots with "sexual functionality like human being" (Y. Jelili Amuda & I. B. Tijani: 2012)^[25] had been created. Natural or divine law entails that sex is to be perform by two human beings; a female and a male. These actions are unethically wright. Ambitions of science had always been to create a perfect artificial lover that seems more romantic than human being. This account for the reasons we can now notice an increase number of robot prostitutes, concubines and marriages with robots. Having sex with nonhumans violates the natural law. It should be noted that, all these are the signs of end time.

Hence, emphasis should be placed on the legal and ethical orientations of artificial intelligence development that will enhance individual and social wellbeing within the digital context.

Contemporary thinkers like Edgar Morin, has drawn attention to the potential dangers of unchecked scientific and technological advancements. He argues that the relentless pursuit of knowledge and progress can have unintended consequences, leading to ethical dilemmas and existential threats. To this effect, he contends that one greatest reform of the 21st Century is ethical and moral reforms (E. Morin: 2009, p.5.)^[12] Morin perspective is a warning to humanity against the notorious faith in scientific rationality and technological solutions, pointing out that they can lead to environmental destruction, social inequalities, and the loss of human values and culture. In a world increasingly dominated by scientific and technological advancements, Morin's insights serve as a timely reminder of the need for critical reflection and ethical considerations in shaping our collective future. It should be noted that it is from the basis of critical discussions of ethicists that the possibility of an effective artificial intelligence law can emerge to regulate its manifestations.

The technology of artificial intelligence functions according to human defined purposes. The necessity for ethical principles to shaped these activities is justified base on the fact that it functions according to human defined purposes and humans had diverse desires and purposes which justify their egoistic nature. We are living within the context of neoliberal economy where money and wealth is more valuable than human relations. This accounts for excess glorification of this technology which had been seen as a reliable solution to societal choices of individuals without imperative considerations. With this, emphasis needs to be place on the ethical foundation of scientific and technological research as well as its utility.

Conclusion

From the above analysis, we can notice that development in the field of artificial intelligence is mixed blessings to individuals and the society. Artificial intelligence technology is rapidly transforming the world thereby causing great number of mutations in the society of individual. Artificial intelligence has had a profound impact on society in various ways. On one hand, it has revolutionized industries and made tasks more efficient by automating processes and increasing productivity. Other positive outcome of artificial intelligence development could be seen in the healthcare and educational sectors. However, there are concerns about its potential negative effects, as it may lead to job displacement and widen the gap between skilled and unskilled workers. Additionally, there are ethical considerations surrounding this recent alarming technology such as privacy and security issues especially in social medias platform, degradation of human values and hence the artificialization of the human societies. I have succinctly argued that there should be some regulatory oversight both from the national and international level to lay down certain normative and legal principles that will guide the advancement of artificial intelligence in conformity with human progress. These principles will ensure the safe and fair application of artificial intelligence building systems of sovereign super-intelligence. As the actual world continue to glorify the power and utility of

artificial intelligence, it is crucial for policymakers and society as a whole to carefully consider its implications and ensure that it is used in a responsible and ethical manner. This is to ensure a balance between techno-scientific progress and social progress.

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