Volume 19 Issue 33
Originally issued as A8



Global Journal of human-social science: A
Arts & Humanities - Psychology
Volume 19 Issue 8 Version 1.0 Year 2019
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-460X & Print ISSN: 0975-587X

Emerging World and Artificial Intelligence; Any Ethical Consideration?

By Akinola & Olanrewaju Victor
University of Ibadan

Abstract- The paper attempts a moral consideration on artificial intelligent. It acknowledged that the progression of artificial intelligence has constituted a lot of things in the 21st century; teaching, war, politics, automobile, telecommunication, economics, social and political system, in fact almost every sphere of mankind. However, this progression as pose some questions on the ethical issues leave many educators wondering how to address moral, ethical, and philosophical issues concerning this use of AI. Among these questions is whether the same ethical standard accrued to man should also be accrued or given to AI (Robot), does AI has any intrinsic value that demands any moral consideration? Beyond these, the study investigates different approaches to AI ethics and how to weigh them. One approach is to the question of "How will we have a tendency to initiate or propose AI systems which will perform ethically?" Another is, "How can we have an inclination to act ethically as programmers and system designers, to decrease the risks that make our systems and codes act unethically?" It is worth noting that philosophers continue to debate the question of whether it makes sense to say that a cybernetic system can be said to be ethical or unethical.

Keywords: *emerging world, artificial intelligence, human intelligence, ethics, morality.*

GJHSS-A Classification: *FOR Code: 220399*



Strictly as per the compliance and regulations of:



© 2019. Akinola & Olanrewaju Victor. This is a research/review paper, distributed under the terms of the Creative Commons Attribution-Noncommercial 3.0 Unported License http://creativecommons.org/licenses/by-nc/3.0/), permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Emerging World and Artificial Intelligence; Any Ethical Consideration?

Akinola [α] & Olanrewaju Victor [σ]

Abstract- The paper attempts a moral consideration on artificial intelligent. It acknowledged that the progression of artificial intelligence has constituted a lot of things in the 21st century; teaching, war, politics, automobile, telecommunication, economics, social and political system, in fact almost every sphere of mankind. However, this progression as pose some questions on the ethical issues leave many educators wondering how to address moral, ethical, and philosophical issues concerning this use of AI. Among these questions is whether the same ethical standard accrued to man should also be accrued or given to AI (Robot), does AI has any intrinsic value that demands any moral consideration? Beyond these, the study investigates different approaches to AI ethics and how to weigh them. One approach is to the question of "How will we have a tendency to initiate or propose AI systems which will perform ethically?" Another is, "How can we have an inclination to act ethically as programmers and system designers, to decrease the risks that make our systems and codes act unethically?" It is worth noting that philosophers continue to debate the question of whether it makes sense to say that a cybernetic system can be said to be ethical or unethical. Doing this, we employed different ethical theories to make moral judgments to basics ethical issues in AI. For the methodological purpose, the paper shall employ critico-expository approach to examine the subject matter, since man is a product of his experience.

Keywords: emerging world, artificial intelligence, human intelligence, ethics, morality.

I. Introduction

Innovations of artificial intelligence has covered the face of the earth as darkness covered the face of the earth in the beginning. This is evident because all spheres of humans lives is not void of AI-economic, social and political, medical, education, religion, even sexual replications. Hence, the discourse in Artificial intelligence (AI) is spreading quickly in the world in the recent time especially in the philosophical debates. Both government and private industries, even individuals are finding new and innovative ways to capture the opportunities AI offers in terms of reducing cost and increasing quality. The adoption of AI is putting the social lives on the cusp of a revolution, with the highly incentivized means that leads the way in every human endeavours. Much like email changed the way we do business every day, AI will soon become ubiquitous – an indispensable assistant to practically every professional. Those that do not adopt and embrace the change will get left behind in some manner. In addition to lowering costs, those that do embrace AI will ultimately find themselves freed up to concentrate on the two things there always seems to be too little time for: thinking and advising.

In lieu of the above, the impact of artificial intelligence on individuals' lives cannot be overemphasized seeing some of its effect in different areas of our daily lives (See Cai et al., 2014; Shi et al., 2016; Pan et al., 2017; Zheng et al., 2018), the problem of ethical decision-making, which has long been a grand challenge for AI,[1] has caught public attention. A major source of public anxiety about AI, which tends to be overreactions, is related to artificial general intelligence (AGI) research aiming to develop AI with capabilities matching and eventually exceeding those of humans.[2] A self-aware AGI with superhuman capabilities is perceived by many as a source of existential risk to humans. Although we are still decades away from AGI, existing autonomous systems (such as autonomous vehicles) already warrant the AI research community to take a serious look into incorporating ethical considerations into such systems.

The role of AI for the next generations were quoted to be pushing the human being towards decades of pain and any kind of repetitive job that has no emotional connection is finished.[3] Innovation at the cost of human being is not accepted by many people around the world and of course the advantages of AI also cannot be ignored but must be limited to the areas where it is necessary. The role of various governments across the globe to define the conditions and boundaries for any kind of automated activity in the near future to avoid the situation where the human jobs are replaced completely by involving the automated machines. The machines may be smarter, faster and stronger and may be intelligent but cannot be wise enough to take decisions as in the case of human beings. A human being is added with lots of emotions and feelings which a machine does not have. They may have ample knowledge and ability to work faster and efficiently using AI, but they do not have wisdom to understand various influential factors such as changes in environment, biological factors, emotions, feelings, etc. and therefore the decision-making process by an automated system differs with the mankind.

There are so many ambiguous, contradictions and compelling issues are stated in introduction by

Author α σ: Department of Philosophy, University of Ibadan, Ibadan, Nigeria. e-mail: akinolanvic@gmail.com

© 2019 Global Journals

various tech giants and business leaders on AI and some of the books and authors from different sections of society raised ethical and moral perspectives. For instance, two biggest technological titans of Silicon Valley are seen debating the potential of artificial intelligence (AI) at various platforms widely in recent times. The role of AI in designing various automated systems such as financial sectors, health industry, automobile industry, etc. were highlighted optimistically by Facebook founder, CEO, Mark Zuckerberg and was condemned fearfully by Elon Musk in an open debate. Supporting the statements of Elon Musk, the other business tycoon of Alibaba's Jack Ma stated that, AI may lead to world war III, but at the end humans will win according to CNBC News documentary. These concerns definitely have different set of answers from different viewpoints and guidelines from the legislations of different state and international governments. All these constitute moral issues in our age. Therefore, it is very clear that understanding and define the dimensions of problem statement is quite complex in nature and proposing a solution may not be suitable for all types of industrial units. To avoid equivocation and ambiguities, critical analysis on the idea of artificial intelligence would be examine in different purview and disciplines in what follows.

II. Idea of Artificial Intelligence (AI)

The term "artificial intelligence" (AI) has been mentioned for the first time in 1956 by John McCarthy during a conference where several scientists decided to meet to see if machines could be made intelligent. Since then, AI is usually defined as the capability of a computer program to perform tasks or reasoning processes that we usually associate to intelligence in a human being. Often it has to do with the ability to make a good decision even when there is uncertainty or vagueness, or too much information to handle.

In the recent time, the term AI encompasses the whole conceptualisation of a machine that is intelligent in terms of both operational and social consequences. An applicable definition used is one projected by Russell and Norvig: "Artificial Intelligence is the study of human intelligence and actions replicated unnaturally, such that the resultant bears to its design a reasonable level of rationality". [4] This definition can be further redefined by stipulating that the level of rationality may even supersede humans, for specific and well-defined tasks.

Even though the idea artificial intelligence has been described differently over a period and these descriptions are made based different discourse on the objects of study. Particularly, Artificial Intelligence was given by John McCarthy: Computer Science Department of Stanford University, who coined the term in 1956, defines it as "the science and engineering of making intelligent machines." [5] The field was founded on the claim that a central property of human beings, intelligence can be so precisely described that it can be simulated by a machine. [6]

Earlier AI textbooks define the concept i.e. artificial intelligence as "the study and create of intelligent agents". [7] An intelligent agent is a system that perceives its surroundings and takes actions which maximize its probabilities of success. [8] Artificial Intelligence is 'the capability of a device to perform functions that are normally associated with human intelligence, such as reasoning and optimization through experience.' [9] Artificial intelligence (AI) is the intelligence of machines and therefore the branch of engineering that aims to make it. [10] The ability of a machine to find out from expertise and perform tasks commonly attributed to human intelligence, for example, problem solving, reasoning, and understanding natural language. [11]

The later definitions thought of Artificial Intelligence as the Application of Non-Naturally Occurring Systems. E.g., AI, 'is simply the application of artificial or non-naturally occurring systems that use the knowledge-level to achieve goals. [12] An additional applicable definition that has been used for AI is 'attempting to make artificial systems that may perform better on tasks that humans presently do better'. [13]

The trend of delineating AI shifted bit by bit from mechanical devices to systems so as to concepts in machines. The later definition stated: 'Artificial intelligence is the study of ideas to bring into being machines that respond to stimulation consistent with traditional responses from humans, given the human capacity for contemplation, judgment and intention. Each such machine ought to have interaction in appraisal and choice of differing opinions among itself. Produced by human skill and labor, these machines should conduct themselves in agreement with life, spirit and sensitivity, though in reality, they are imitations'. [14] Or 'AI is the ability of Machine/Tools' : 'to conclude from experience and perform tasks normally attributed to human intelligence, as an example, downside resolution, reasoning, and understanding natural language.. [15]' Or 'Tools that exhibit human intelligence and behaviour together with self-learning robots, professional systems, voice recognition, natural and automation. [16]

It could be inferred from the above that AI is imbibed with wider spectrum of ideas, viewpoints, logical activities, techniques, working actions, etc. Due to the complex nature of dealing with things from different disciplines, people have plenty of viewpoints towards the credibility of AI and its applications. Some of the questions include: why people are depending more on mechanically developed products or why the society need human models or why business people want to replace human with machines, etc. Similarly,

© 2019 Global Journals

there are many doubts and concerns raised by various societies and organizations include: will have no heart or feelings or instant decision making or does not know the humanity, etc. Some argue that AI can be very much useful to deal with serious accidents, can identify people with ill health, in troubles at the time of absence of family members, etc. Therefore, according to Shahriari and Shahriari[17], AI is seen as the science and engineering of making intelligent machines, especially intelligent computer programs. [18] It attempts to understand intelligent entities and provides healthy solutions for the human kind, which are almost next to impossible to predict by a human as faster as an AI based system. Therefore, the intelligence of the machine can learn, reason, solve, percept, rationale, think and deliver natural language process. It means the machine is mimicking the human and therefore can have huge influence and impact on the human life and may change the complete life style of the human beings.[19] It means that machine can control everything in the absence of human and deliver the results. However, if any system failed in the whole process of delivering the end results means a lot of damage to the society. No matter whether artificial intelligence can suppress human beings, it is now an era of artificial intelligence. It is therefore necessary to seek the ethical and moral adjustment.

III. Ethical Issues on Artificial Intelligence

Generally speaking, issues are considered to be a moral issue based on their relevance on the wellbeing of the people in the society. For an issue to be moral, it must affect the wellbeing of people in society either by increasing or decreasing the harm or benefit that would accrue to them.[20] However, there is a debate over whether or not an issue is a moral issue when only the wellbeing of the agent is at stake.

Apart from the fact that a moral issue is essentially related to human actions and borders on their wellbeing, it is also a product of free choice. This suggests that for a human action to be subject to moral evaluation, it must have been an action carried out by the individual as a free agent. It must not be an action carried out under any form of compulsion.

On the other hand, different set of moral issues arises when we contemplate the possibility that some future AI systems might be candidates for having moral status. Our dealings with beings possessed of moral status are not exclusively a matter of instrumental rationality: we also have moral reasons to treat them in certain ways, and to refrain from treating them in certain other ways. Francis Kamm has proposed the following definition of ethical standing, which will serve for our purposes:

> X has ethical standing = since X counts morally in its own right, it's permissible/impermissible to do things to it for its own sake.[21]

A rock has no moral status: we may crush it, pulverize it, or subject it to any treatment we like without any concern for the rock itself. A human person, on the opposite hand, must be treated not only as a means but also as an end. Exactly what it means that to treat someone as associate degree finish are a few things concerning that completely different moral theories disagree; however, it definitely involves taking her legitimate interests into account—giving weight to her well-being—and it may also involve accepting strict moral side-constraints in our dealings with her, such as a prohibition against murdering her, stealing from her, or doing a range of different things to her or her property outside her consent. Moreover, it is because a human person counts in her own right, and for her sake, that it is impermissible to do to her these things. This can be expressed additional in short by spoken communication that somebody's person has ethical standing.

Questions about moral status are significant in some areas of practical ethics. For example, disputes about the moral permissibility of abortion often hinge on disagreements about the moral status of the embryo. Controversies about animal experimentation and the treatment of animals in the food industry involve questions about the moral status of different species of animal, and our obligations towards human beings with severe dementia, such as late-stage Alzheimer's patients, may also depend on questions of moral status.

Now, it is widely agreed that current AI systems have no moral status. We may change, copy, terminate, delete, or use computer programs as we please; at least as far as the programs themselves are concerned. The moral constraints to which we are subject in our dealings with contemporary AI systems are all grounded in our responsibilities to other beings, such as our fellow humans, not in any duties to the systems themselves.

It is wide in agreement that current AI systems haven't any ethical standing. We may change, copy, terminate, delete, or use computer programs as we please; at least as far as the programs themselves are concerned. The moral constraints to which we are subject in our dealings with contemporary AI systems are all grounded in our responsibilities to other beings, such as our fellow humans, not in any duties to the systems themselves.

While it's fairly agreed that contemporary AI systems lack ethical standard, the exact attributing ground for moral status is not clear. Two criteria area unit ordinarily projected as being significantly coupled to ethical standing, either separately or in combination: sentience and sapience (or personhood).

One common view is that many animals have qualia and therefore have some moral status, but that

© 2019 Global Journals

only human beings have sapience, which gives them a higher moral status than non-human animals. [22] This view, of course, must confront the existence of borderline cases such as, on the one hand, human infants or human beings with severe mental retardation—sometimes unfortunately referred to as "marginal humans"—which fail to satisfy the criteria for sapience; and, on the other hand, some non-human animals such as the great apes, which might possess at least some of the elements of sapience.

Some deny that alleged "marginal humans" have full ethical standing. Others propose further ways in which within which associate degree object might qualify as a bearer of ethical standing, such as by being a member of a kind that normally has sentience or know-how, or by standing in exceedingly appropriate regard to some being that severally has ethical standing.[23]

The above picture of moral status suggests that an AI system will have some moral status if it has the capacity for qualia, such as an ability to feel pain. A sentient AI system, even if it lacks language and other higher cognitive faculties, is not like a stuffed toy animal or a wind-up doll; it is more like a living animal. It is wrong to inflict pain on a mouse, unless there are sufficiently strong morally overriding reasons to do so. The same would hold for any sentient AI system. If in addition to sentience, an AI system also has sapience of a kind similar to that of a normal human adult, then it would have full moral status, equivalent to that of human beings.

IV. Artificial Intelligence and Ethical Status; A Deconstruction

As machines, especially these intelligent machines such as war drone, school robot, home robots and healthcare robots, increase in capability and ubiquity, they will inevitably affect human lives not only physically but also ethically. At the same time, human-robot interactions will grow significantly.[24]

Whether the robots are considered as moral agents have an affect the interactions.[25] To be seen as real moral agents, robots need to meet three criteria: autonomy, deliberateness, and responsibility. [26] Autonomy implies that machines are not under direct control of any other agent. Deliberateness means that machines "in an exceedingly means that's virtuously harmful or useful and also the actions square measure ostensibly deliberate and calculated". [27] Responsibility means the machines fulfill some social role that carries with it some assumed responsibilities.

In Torrance view, the idea of "having ethical status" can be separated into two associated aspects: ethical productivity, and ethical receptivity. [28] Ethical producers are those who do or do not do their duties, such as saints and murderers. Ethical recipients are those who stand to benefit from or are harmed by the ethical producers. In this regard, AI and other smart machines can be both ethical producer and ethical recipients.

In the very classic trolley cases, the one who controls the trolley is the ethical producer.[29] To continue to run on the current track and kill five workers or to turn to another track and kill a lone worker is a hard-ethical choice for humans. What choice would AI make? Who should be responsible for the AI's choice? The military robots that take charge in bomb disposal are ethical recipients. Is it moral that human decide the destiny of those robots? Human ethics and morality nowadays might not be seen as good by future civilizations.[30] One reason is that human cannot solve all the recognized moral issues. The other reason is that human cannot acknowledge all the moral issues.

"The ultimate goal of machine ethics is to create a machine that itself follows an ideal ethical principle or set of principles".[31] It is theoretically easy but practically hard to formulate ethical principles for AI systems. For instance, if we program robots to always perform no harm, we should first make sure that the robots understand what harm is. This result in another problem – what should be the ethical standards for harm? A global or universal level of ethics is required. To put such ethics into machines, it's necessary to scale back the knowledge asymmetries between AI programmers and moral standards manufacturers.

V. Conclusion

The paper has presented some ethical issues with the emerging world and Artificial Intelligence and robotics including reviewing ethical issues related to the development of AI technology and providing gradually more complex autonomous control. Ethical issues ought to be taken under consideration by designers of robotic and AI systems, and also the autonomous systems themselves should even be conscious of the moral implications of their actions. Although the gap between the unpleasant imaginary future visualized in movies and the emerging world may be considered large, there are reasons to be aware of possible technological risks to be able to act in a proactive way. Therefore, it is appreciable, as outlined in the paper, that many leading researchers and business people are now giving attention to defining rules and guidelines that will ensure future technology and morality and ethics of AI system. Finally, the paper will contribute to academic progression and wide debate on the morality of AI and to help train and caution programmers and technological innovators to build ethical AI and build AI ethically, as well as educate potential users of AI to conceive artificial general intelligence as means to an end and not an end in itself.

© 2019 Global Journals

References Références Referencias

[1] Wallach, W. and Allen, C. *Moral Machines: Teaching Robots Right from Wrong*. Oxford: Oxford University Press, 2008).

[2] Bryson, J.J. and Kime, P.P. Just an Artifact: Why Machines are Perceived as Moral Agents. (*International Journal of Artificial Intelligence*, 2011), pg. 1641–1646.

[3] CNBC, Jack Ma's Artificial Intelligence and Automation Warning, 2017. [Video]. https://youtu.be/cgAPG3Lh3g Q?t=70/., [Accessed on January 12, 2019].

[4] S. J. Russell and P. Norvig, *Artificial intelligence: A Modern Approach*(3rd edition, Prentice Hall, 2009)

[5] McCarthy, J., Ascribing Mental Qualities to Machines. In: *Philosophical perspectives in artificial intelligence*, ed. M. Ringle. (Atlantic Highlands, New Jersey: Humanities Press, 1955)

[6] ibids

[7] Poole, D., Mackworth, A., and Goebel, R., *Computational Intelligence: A Logical Approach*. (Oxford University Press, New York, 1998)

[8] ibid

[9] www.idrc.ca/en/ev-30734-201-1-DO_TOPIC.html

[10] www.google.net,en.wikipedia.org/wiki/Artificial_ intelligence

[11] ibid

[12] www.google.net,en.wikipedia.org/wiki/Artificial_ intelligence

[13] Rich E. & Kevin Knight, *Artificial Intelligence*, (Tata: McGraw, 2004), pg. 3.

[14] Minsky 1967, p. 2 quoted in Crevier J. *History of Artificial General Intelligence*, (Chester: Hopsin Press, 1993), pg. 109

[15] www.quantum3.co.za/CI%20Glossary.htm

[16] http:// www.unesco.org

[17] Shahriari, K. and Shahriari, M., Ethically Aligned Design: A Vision for Prioritizing Human Wellbeing with Artificial Intelligence and Autonomous Systems, (*Humanitarian Technology Conference (IHTC), IEEE Canada International*, 2017), pg. 197-201.

[18] Ibid, pg. 197

[19] Ibid

[20] Ekanola, A.B., *Professional Ethics*. (University of Ibadan: Distance Learning Centre, 2013), pg. 26.

[21] Kamm, Frances M., *Intricate Ethics: Rights, Responsibilities, and Permissible Harm.* Oxford Ethics Series. (New York: Oxford University Press, 2007), pg. 213.

[22] Nick, B., & Eliezer, Y., The Ethics of Artificial Intelligence, ed. by Keith F., and William R., *Cambridge Handbook of Artificial Intelligence.*(New York: Cambridge University Press, 2014), pg. 224-225.

[23] Cf. Warren, M.A., *Moral Status: Obligations to Persons and Other Living Things*. (New York: Oxford University Press, 1997)

[24] You, S., Ye, T., and Robert, L. Team Potency and Ethnic Diversity in Embodied Physical Action (*Robot-Supported Dyadic Teams. AIS*, 2017)

[25] Cf. Sullins, J. P. When is a Robot a Moral Agent, (*International Journal* of *Machine Ethics,* 2011), pg. 151-160?

[26] Ibid.

[27] Ibid. pg. 28.

[28] Torrance, S. Machine Ethics and The Idea of a More-Than-Human Moral World, (*International Journal* of *Machine Ethics,* 2011), pg. 115-123.

[29] Allen, C., Wallach, W., and Smith, I. Why Machine Ethics? (*IEEE Intelligent Systems*, 21(4), 2006), pg. 12-17.

[30] Nick, B., & Eliezer, Y., The Ethics of Artificial Intelligence, ed. by Keith F., and William R., *Cambridge Handbook of Artificial Intelligence.*(New York: Cambridge University Press, 2014), pg. 316.

[31]Anderson, M., and Anderson, S. L. 2007. Machine Ethics: Creating an Ethical Intelligent Agent, (*AIMagazine*, Vol. 28, issue 4), pg. 15.

© 2019 Global Journals