

Critical Ethical Roles for Science and Technology Usage

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Abstract

The progression in science and technology has increased human survival on earth. Man has witnessed a great and extraordinary progress in technology, which our lives depend on it for its survival. These developments come in many dimensions as we have in medicine, bio-technology, security, education, information and communication, economy, artificial intelligence, etc. Charles Hartshone argued that “Science and technology fantastically increase the number of those whom that best is available. Secondly, since science and technology allows a great number of people at least a marginal existence [1].” In addition, as Charles quoted Ortega y Gasset, Science and technology makes kingly luxuries commonplaces for large numbers of people [2].” In all these developmental success, Ethics has critical intervention to act like Plato’s rational parts of the soul which Plato compared to as element of a Charioteer to the two horses controlled by the Charioteer. One part of science and technology is good which I have stated above while the other horse is bad (the appetitive element). While all can enjoy and see the development and success of science and technology – the good horse which is easily driven according to the directions of the Charioteer, the bad horse tends to obey the voice of sensual passion. So this paper among all, argues that science and technology usage must not be totally right. Its usage must be controlled by Ethics by not destroying those that make use of (science and technology) it, even as it has positive usage. I shall discuss the nature of science and technology using the arguments of Walter Rodney on science and technology and nature of ethics. The theoretical framework used shall be that of Platos’ on the need to control the bad part (horse) of science and technology.

Keywords: Science and technology, ethics, critical intervention.

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INTRODUCTION

The progression in science and technology has increased human survival on earth. Man has witnessed a great and extraordinary progress in technology, which our lives depend on it for its survival. These developments come in many dimensions as we have in medicine, bio-technology, security, education, information and communication, economy, artificial intelligence, etc. Charles Hartshone argued that “Science and technology fantastically increase the number of those whom that best is available. Secondly, since science and technology allows a great number of people at least a marginal existence [3].” In addition, as Charles quoted Ortega y Gasset, Science and technology makes kingly luxuries commonplaces for large numbers of people [4].” Furthermore, “advancement on technology have made new kinds of human interactions possible [5].” While all can enjoy and see the development and success of science and technology – the good horse which is easily driven according to the directions of the Charioteer, the bad horse tends to obey the voice of

sensual passion. So this paper among all, argues that science and technology usage must not be totally right. s usage must be controlled by Ethics by not destroying those that make use of (science and technology) it, even as it has positive usage. I shall discuss the nature of science and technology using the arguments of Walter Rodney on science and technology and nature of ethics. The theoretical framework used shall be that of Platos’ on the need to control the bad part (horse) of science and technology.

Nature of Science and Technology

The word ‘science’ generally means any “systematized”, “organized” or “classified” body of knowledge which has been critically tested and is beyond reasonable doubt [6].” Moreover, science is seen by *Oxford Advanced Lerner’s Dictionary of Current English* “as knowledge about the structure and behavior of the natural and physical world, based on facts that you can prove, for example by experiments [7].” The two definitions simply show that ‘science’ means knowledge.

Science works on experiments or observations which have approved methods. One important thing to note is that both definitions expiate on Science as Arts or Social science with the procedures on the structure and behavior of the natural and physical world, based on critical test or proven facts. I also employ the arguments of Walter Rodney that “science is the capacity for dealing with the environment dependent on the extent to which human understand the laws of nature while technology is the extent to which human put that understanding into practice by devising tools and the manner in which work is organized [8]”.

In fact, what happened at Morocco – Marrakesh where there was earthquake for example in 2023 affect the whole world as a global community because a lot nationalities are involved, so International Community are coming to their aid.

Usefulness of Science and Technology

I have indicated several Importance and usefulness of science and technology. I would like to lay emphasis on the new vaccines and technology enjoyed during the COVID -19 pandemic. Several vaccines were developed to control the corona virus. Different scientific discoveries were shared in the scientific community. The whole wide world could see the usefulness and importance of technologies that were used to convey the medicine, death and resistance to covid-19 in some party of the world. That everyone can listen in every part of the world as we deliver this Conference.

Ethics: A Critical Intervention to Science and Technology

Ethics has to do with means of any code or set of principles which guide and regulate behavior. I could explain also that Ethics is the branch of Philosophy that deal with the righteous or wrongness of human actions, with moral obligation, principles of morality and their justification. Ethics is about how we ought and should live, as well as about the rational principles and arguments which should guide our moral choices of what is good or bad, right or wrong. Ethics is about responsibility, duty, obligation, moral of behaviour. From moral choices of what is good or bad, moral issues arise when the choices people face will affect the well-being of others by either increase or decrease the choices or causing harm or benefit.

So fundamentally, while science and technology provides purposeful change, I use critically the intervention of Plato’s rational part discussion in Phaedrus as the theoretical and justify the critical roles of Ethics in science and technology.

Plato’s Intervention as Theoretical and Justification the critical roles

In his book *Tineaus*, Plato created the rational part, the spirited part and the appetitive part of the soul [9]. While in the *Phaedrus*, Plato compare the rational

part (element) to a Charioteer, the spirited and the appetitive elements to two horses [10]. The one horse is good (the spirited) element, which is the naturally of reason and loves honour with temperance and modesty; the other horse is bad (the appetitive element, which is a friend to all riot and insolence. While the good horse is easily driven according to the directions of the Charioteer, the bad horse is unruly and tends to obey the voice of sensual passion, so that it must be restraint by the Whip. Therefore, the rational element rules just to as Charioteer.

In so like manner, science and technology has one good part of the horse and the other part of bad horse. Just as COVID -19 vaccines were good horse to humanity, so also the release of nuclear weapon or machine guns or biological weapon done by technology are the bad horse that is unruly and needing tendering to obey.

We can expand this tendering to communication means using the final report of European Union Election Observation Mission 2023 on General elections between 25th February and 18th March, 2023. I quote from the reports thus; “the misuse of social media to coordinate targeted messages on opponents was evident. Harmful content, allegedly produced by political camps. Some influential members of leading parties also disseminated unverified or even false information targeting opponents

A large amount of false content related to both the presidential and state level elections appeared online particularly in relation to and around both polling days [11]”.

These misuse of social media and false content which are evident on opponents do not encourage the degree of privacy and security for the individual and the country at large. They cause disaffection to different groups on the country. Some groups are accused; and prejudices and biases are created. To add salt to injury the regulators bodies such as - The Advertising Regulatory Council of Nigeria (ARCON) 2022, Data Protection Bill 2022 – are to curb the misuse could not effectively do much at all. But in the other way one positive report is that over 122.5m Nigeria are Internet User while social media users were 31.6m [12].

CONCLUSION

In all the examples given of science and technology usage must be restraint by the whip of Ethics. Pope Francis added to the argument that “the use and application of the knowledge of science and technology might not be totally right but it remains always valid the principle that not everything that is technically possible or feasible is thereafter ethically acceptable [13]”.

While I eulogise the good horse of science and technology the control of the bad horse is needed by the

rational part which is the Charioteer for the negative usage to be controlled by making moral choices not to cause harm to its users. Above all, I also acknowledge the purposeful and perpetual changes of science and technology to every generations while the values of science and technology would advance life.

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