An African Humanist Assessment of Technology and Moral Concerns

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Abstract

This paper assesses technology and moral concerns from an African humanist standpoint. It conceptualizes the notion of technology and value to establish how technology raises a humanist concern. We articulate that a humanist preview examines technological innovation from the backdrop of artefacts, skills, processes, as well as the social system of use. Then, we argue that a moral concern arises in technology when its design and use affect humanity positively or negatively, and that technology serves a utilitarian cause when it improves (a) human well-being and (b) community good. The paper also contends that traditional Yoruba worldview is pertinent in dealing with negative concerns that technology may occasion, as we suggest an adoption of the virtues of *omoluwabi* (well-behaved person) and collective spirit (*emi isokan*) in the use of technology, if technological goals are to have meaning in Africa.

Keywords: Humanism, Moral Concerns, Omoluwabi, Technology, Emi Isokan

Introduction

The roles of moral value in technology have generated lively debate. While some theorists have argued that technology is value neutral; others contend that everything human does is laden with value. To suggest that technology is value neutral means that technology "…has no preference as between the various possible uses to which it can be put" (Feenberg, 2006: 9). That is, technology does not determine the ends to which it can be put. Accordingly, this suggests that value is therefore created only when technology is used. Today, this contention raises the moral question as to whether technology does not have intention, which may be said to be fatal to human well-being and community good. We shall show how a moral issue arises in technology. Then, we shall defend the thesis that the use and design of technology can serve Africa better if the virtues of *omoluwabi* (well-behaved person) and *emi isokan* (collective spirit) are invigorated.

The central argument in technology is that it affects humans positively or negatively. Technologies such as nuclear weapon, industrial chemical, automobile, etc. have occasioned the appraisal of their intention as well as effects on humanity. This concern raises the issue whether technology that produces negative effects does not have bad intention underlying it. In the main, we explore the roles of moral concerns in technology, especially on how it affects human well-being and the community good.

To deal with this issue, this paper dissects the term 'technology' and 'value' in the first segment. The second section discusses the moral concerns in technology. The work ends with an assessment of African humanist virtues of a well-behaved person and collective spirit in addressing technological pros and cons in Africa.

Understanding Technology and Value

We are concerned, here with the notions of 'technology' and 'value.' There are diverse meanings of these terms; hence this section explores the possible use they can be put. The meanings of technology would be assessed first, followed by that of value.

First and foremost, the term 'technology' refers to artefacts which are products of human invention. Today, gadgets such as computers, information and communication equipment, cell phones, robot, etc. occur to one's mind when people refer to technology. Accordingly, Stephen J. Kline (2003: 210) notes that, "Perhaps the commonest usage of 'technology' is to denote manufactured articles - things made by humans that do not occur naturally on earth, for example: refrigerators, eyeglasses, atom bombs…"

Despite this fact, the idea of technology is not restricted to artefacts. Indeed, non-physical elements are inclusive in its meanings. In this regard, Clive Beck (1989: 144) notes that, "…technologies are not only 'gadgets' or 'machines' or R & D but should be understood as being a part of the culture and social know-how of a society." Therefore, technology is construed beyond the confines of artefacts.

In recent times, technology has been used to denote 'methodology' or 'know-how'. So, when scholars use the term today, it involves information, processes and procedures for achieving certain tasks. Apparently, technology is needed, which includes the skills for getting things done. The presupposition, here, is that there are certain underlying goals that designers of technologies aim at, which may be for good or bad end. This implies that notwithstanding the conception of technology as artefacts, its meaning also includes "knowledge, technique, know-how, or methodology in the usual sense of these words" (Kline, ibid, 211). For this reason, Martin Heidegger (2003: 252) stresses that, "The manufacture and utilization of equipment, tools, and machines, the manufactured and used things themselves, and the needs and ends that they serve, all belong to what technology is." As the foregoing suggests, one's ability to apply tools forms a crucial part of what technology is. In other words, technology entails practical knowledge for the designing and mastering of tools. However, tools as well as knowledge may be wrongly used. So, Heidegger's (ibid, 253) rightly opines that, "Everything depends on our manipulating technology in the proper manner as a means." Remarkably, technology conceived as instrument as well as practical knowledge, skills, etc. fits into corpus of a technical narrative. As Heidegger (ibid, 252) notes this: "Technology itself is a contrivance--in Latin, an *instrumentum*." In addition, Andrew Feenberg (ibid, 1) says:

> Many young people have a tendency to perceive technology in terms of its artefacts: computers, cars, televisions, toasters, pesticides, flu shots, solar cells, genetically engineered tomatoes, and so on. Often they do not see technology in terms of the knowledge and processes that create these artefacts…

There are other contentions on what technology is. Indeed, it has been described as a social system of use. This dimension sees technology as a practical-oriented activity of all cultures, especially regarding the ways each culture deals with existential problems. On this issue, Jacques Ellul (1964: xxv) suggests that, technique is the "totality of methods rationally arrived at and having absolute efficiency (for a given stage of development) in every field of human activity." He adds: "Technology is not an isolated fact in society (as the term technology would lead us to believe) but is related to every factor in the life of modern man; it affects social facts as well as all others. Thus technique itself is a sociological phenomenon…" (Ellul, 2003: 183).

There are evidences that show that technology plays diverse roles in cultural life of different peoples, especially regarding how they respond to their needs in their daily commerce. Subsequently, it appears that varied socio-cultural circumstances would define the social processes and implements that underlie a people's technology. As Jorge Nef (1989: 4) explains this: "…behind any piece of 'hardware' there is a complex set of 'soft' social practices (or social technologies), which make up the less visible--yet crucially important--human infrastructure upon which such hard technologies rest."

Thus, Nef posits that "technological system involves much more than know-how about tools. It encompasses as well the social structures and operations through which the tools are utilized as well as the value assumptions pertaining to these activities (Nef, ibid, 4). Thus, Herbert Marcuse's (1998: 41) holds that technology is a social process in which artefacts are but a partial factor.

The foregoing conceptions of technology can be configured so as to deeply examine the roles of moral values in technology. Against this backdrop, one ought to consider the tasks of moral values regarding technology as know-how, for example. Suppose technology is reduced to artefacts, justice would hardly been done to issues surrounding moral value as it relates to which technological knowledge ought to be allowed or reprimanded if such affects the well-being of humanity. Again, if social processes are ignored in one's conception of technology, the tendency to measure technological development through an objective scale may arise. Consequently, most advanced technical societies would likely dictate the pace; thereby hindering the residue technological strengths of other less advanced cultures. The point is that cultural adaptation to a given technology requires a serious appraisal since technology as a system of use enables a people to give meaning to certain technology, especially how it helps in confronting their existential problems. As the foregoing suggests, a robust conception of technology is invaluable for our purpose.

Let us now state clearly how technology is to be understood. Carl Mitcham, for instance, outlines that technology can be seen as objects, knowledge, activities and volition. De Vries (2006: 19) refers to Carl Mitcham's classification of technology when he writes: "In his book, *Thinking Through Technology*, Carl Mitcham identified four different ways of conceptualising technology, namely as objects, knowledge, activities, and volition." In a similar vein, Nef states that technology can be viewed via:

a). a *context* of problems and circumstances which the technology addresses, b). *culture* which gives meaning--purpose, feelings, cognitions and evaluations-- to such technological system, c). *structures* of groups and individuals with resources (tools), linked by networks of communications and charged with dealing with the problems affecting the system, d). a set of processes (procedures, practices and technique) where groups and individuals attempt to solve problems, and e) *effects* or consequences of these upon the system (Nef, ibid, 4).

Having mirrored the meanings of technology, one should ask, are artefacts necessarily good or bad? Is it right/good to invent technologies that are environmentally destructive? Whose interest should technology serve? Should technology pursue the interests of domestic or foreign people, individual or community? While these questions are germane in technology, they raise moral issues, especially when technology affects humans. Let us explore the notion of value so as to establish a link between technology and the humanist concerns.

There are vast literatures on the notion of 'value'. This implies that several perspectives on value are available. We cannot give an encyclopaedic account of the term here, so a sketch will be attempted. First, value may be conceived as the *worth* of an artefact, to use a technological instance. Today, if one asserts that a gun has a worth, further question that is likely to be raised includes: is it worthy because of the function it performs or due to the material it was made, which itself may be said to be worthwhile? This necessitates an explanation of value itself. But, how is value to be construed?

Philosophically, the term 'value' can be linked to 'axiology.' In axiological parlance, human conduct, nature and technical artefacts are subjects of value. Indeed, there are different criteria for valuation. For instance, values placed on human conduct are ethically evaluated, whereas those placed on nature, works of arts and artefacts are aesthetically derived. Moreover, the notion of value is also employed in economic and cultural valuations; however, we shall dwell on ethical values in this paper.

Let us begin by asking: What is ethics? When does an ethical issue arise? And, how is ethical appraisal (value) made? There are spectrums of views to these questions. For Loius J. Pojman and James Fieser (2012: 2), "Ethics is that branch of philosophy that deals with how we ought to live, with the idea of the good, and with concepts such as "right" and "wrong." That is, ethics deals with the study of human conduct. Robert A. Hinde (2003: 3) suggests that, "'Morality' concerns the distinction between good and evil, and 'morals' are usually taken to refer to rules about what people ought to do and what they ought not to do." While ethics deals with human conducts, there is contending issue regarding what makes a conduct '*right*'.

Apparently, moral standards and judgments vary. In Western societies, for example, there are several ethical theories that serve as guides on what one ought to do, whereas the issue as to what makes an action morally valuable (right/wrong) is yet to be finalized. In this regard, Francis Snare (1992: 5-6) writes:

> Ideally, normative ethics would provide us with some general formula, or formulas, for picking out the acts which are right. A possible schema for a normative ethics might be 'All acts with property F are right', where different philosophers might variously substitute for 'F' 'maximizing social happiness', 'avoiding suffering', or 'being commanded by God'.

Thus, in ethical valuation, there are normative and meta-ethical assessments of human conduct. Normative ethics has two moral standards namely, consequential and deontological paradigms. The former suggests that actions are wrong due to the implications they have. For example, a normative ethicist is likely not to find anything necessarily wrong or evil about the use of atomic bomb in a war, unless it brings about consequences that he/she considers morally wrong. That is, "a consequentialist theory evaluates things exclusively in terms of consequences" (Hooker, 2010: 444). These consequences may bring benefits to an individual (egoism), to others (altruism), or a majority (utilitarianism). The latter deontological value rests on the intrinsic nature of an act, rather than its effects. That is, an action is good in itself irrespective of whether it has negative or positive results. Herein, the intention is accorded high moral worth. Divine Command Theory and Kantianism are good examples of deontological theories in Western philosophy. For instance, Kant (2002: 57) states that:

Nothing can possibly be conceived in the world, or even out of it, which can be called good without qualification, except a *good will*. Intelligence, wit, judgment, and other talents of the mind, however they may be named, courage, resolution, perseverance, as qualities of temperament, are undoubtedly good and desirable in many respects; but these gifts of nature may also become extremely bad and mischievous if the will which is to make use of them, and which, therefore, constitutes what is called character, is not good. It is the same with the *gifts of fortune*. Power, riches, honour, even health, and the general well-being and contentment with one's condition which is called *happiness*, inspire pride, and often presumption, if there is not a goodwill to correct the influence of these on the mind, and with this also to rectify the whole principle of acting, and adapt it to its end. The sight of being who is not adorned with as single feature of a pure and goodwill, enjoying unbroken prosperity, can never give pleasure to an impartial rational spectator. Thus, a goodwill appears to constitute the indispensable condition even of being worthy of happiness.

One fundamental point in Western moral concern that can be seen is that it provides several criteria for evaluating actions that could hinder human well-being. As it can be seen from consequentialist valuation, the utility of an action is considered as to how it affects individual, others and majority. Emphasis is placed on the utilitarian ends of a given action. Although several conflicting theories are upheld by different people depending on how best they think social problems can be well resolved, they are not divided on the fact that the well-being of humans are fundamental. On the deontological side of the issue, emphasis is placed on the intention, rather than the effect a given action could have on society. Rather than judging the rightness of an action on its effect, certain duties and virtues are believed to be 'good' if the well-being of humanity will be realized. More real today, is the fact that society is faced with moral questions that scholars are still seeking answers to, which technological ones are fatal.

Today, the desire to confront the world's problem through reliance on African philosophy has received great attention. When one turns to African cultures, moral valuation wears both consequential cum deontological garbs. The former is communitarian, whereas the latter rests on virtues, which are basically humanistic, collectivist and utilitarian. In the second section, we shall assess the African humanist preview of technology, but before this, let us surmise on what value means.

Values can be grouped as follows: (a) instrumental and intrinsic values, and (b) subjective and objective values. It does not follow that it cannot be grouped otherwise. Intrinsic value is known as 'end-value.' That is, it is a value that is pursued for its own sake. Kant, for instance, has emphasized that humanity is an end in itself. This means that, human well-being and dignity is preferred if human interest conflicts with those of non-human species. As a matter of fact, a conception of humanity is not limited to a group or continent. Accordingly, the protection of human well-being as well as the common good ought to be a greater concern in ethical valuation, so Kant argues. On the other hand, we have instrumental value, which entails 'means-value', 'utility value', and 'functional value'. In other words, the instrumental value is teleological. That is, its existence largely depends on what it can fulfil. For instance, societies purchase or produce guns, bullets or bombs, possibly for conquest, security or for safety, hence such weapons are merely instrumental. To suppose that bombs are derived for its own sake is to advance a superficial thesis. So, "objects, activities, and states of affair have instrumental value insofar as they are a means to some other ends. They have intrinsic value if they are ends in themselves" (O'Neil, 2001: 164). Here, there is a need to point out that unlike humans who have intrinsic value; technology (artefact, skill or process) has only utility value because its existence is due to human needs and it is a product of human invention. Suffice it to note here that when something has an intrinsic value, it has value in its own right regardless of the use to which such a thing is put, whereas instrumental value is based on its function or use.

Still on intrinsic value, J. Baird Callicott (1989: 162) submits: "Let something be said to possess intrinsic value, on the one hand, if its *value is objective* and *independent of all* valuing consciousness (emphasis added)…" This second contention requires the distinction between subjective and objective valuations. Fundamentally, when individual places value on the use of one technology, rather than another, such an individual contends that the value is either inherent in the object (objective value) or imposed by the valuer (subjective value). If the object actually has the value placed on it, then such valuation is objective. For instance, if it is argued that automobiles emit chemicals that are dangerous to human life. And upon investigation, it turns out that it is the case that it does, such assessment is not subjective, but objective because the judgement does not arise from the evolver's desire. In other words, there are facts to corroborate such evaluation. While subjectivists believe that our desire is crucial in ethical valuation, the objectivists defend a non-sentimental basis for moral assessment. For emphasis, "Subjectivists believe that human desires, or more generally, psychological states, constitute the source of value. Objectivists believe that values reside in the world outside us" (Ibo Van De Poel, ibid, 976). Given the controversial nature of subjectivism and objectivism, Ibo Van De Poel (ibid, 976) explains that:

Subjectivism does justice to the connection between values and human desires and interests. It runs, however, the risk of confusing value with preference. Not everything that is desired or preferred by a people is valuable. Objectivism does justice to the fact that statements about value are not statements about preferences but rather about how the world is or ought to be from a normative point of view. Objectivists often hold that intrinsic value is value intrinsic to the valuable object. Since value that is intrinsic to an object cannot depend on the relational properties of that object, desires or interests can never be the, or even a, source of value.

It is now possible to establish a link between values and preference so that the connection between value and technology can sharply be made. Of course, one can say that values involve preference, but preference may not necessitate values. Let us briefly stress this dichotomy a bit. For instance, if there is a need to develop a strong security base, which requires procurement of war amenities, and there is also a need to increase technology for food production simultaneously; one may decide to choose the latter because of its consequence for life preservation or quality of life. Others, who contend that the latter will be futile if security is undermined are likely to argue for the former. Since these are not mutually exclusive events, both could be pursued unless we add that economic resources for acquiring both are scarce. Then, how does the issue of value arise here? To our mind, an issue of value occurs: If 'A' suggests that war equipment should be purchased, rather than food technology's equipment. In this scenario, 'A' is taken to have altered a value statement, if 'A' indicates why specific decision is good/bad to be pursued by establishing the potential/real consequences of doing so. Additionally, 'A' indicates a preference for choosing either and such preference arises from a critical identification of the most pressing needs of the community. A value statement, then, is not a mere prescriptive or descriptive account of one's preference. Rather, A's value preference arises from the analysis of the probable consequences of either decision. Thus preferences for procuring war equipment, as it stands, does not necessary translate into value judgement unless it promotes the welfare of a given people or the entire human communities following from its effects. Consequently, value is much more than one's preference since one may desire something that is worthless.

Though non-exhaustive, the foregoing gives an idea of technology and value, which has imports for our deliberation on moral concerns in technology. Let us now proceed to the next segment.

Technology and Moral Concerns

This segment begins with the poser: When does a moral issue arise in technology? Our primary goal here is to show the roles of moral concerns in technology prior to our articulation of a humanist basis for the design and use of technology in Africa.

The relationship between morality and technology is not controversial. So, the question as to when a moral concern arises in technology is one which one ought to examine vis-à-vis the intentions for designing technology as well as its effects on human well-being. There are contending views today as to whether moral concerns should be extended to nonhuman species. While we think that there are utilitarian grounds for such claims, we would not explore such contention here. How the view that technology has provided help as well as hindered human well-being in Africa is central to our discussion. .

As we have noted above, technology is motive-driven. In this respect, its essence precedes its existence. That is, prior to technological innovation, makers/users of technology have intentions for its creation, acquisition, or use, that is, on what is served. Thus, technology as *artefacts*, *skills*, *processes* and *social system of use* ought to be designed such that its underlying purposes do not hinder the well-being of people living near or far. Some arguments are mounted that technology, say for instance, nuclear research or weapons, does not mainly have destructive intentions. Probably, technology's design is aimed at some good, while application leads to a disastrous end. Similarly, the use of technology provokes moral evaluation when it hinders the common good. But what constitutes 'the common good' differs from one society to another. Then, one needs to ask: wen does a moral concern arise in technology?

Attending to a similar question, Emmett Barcalow (1994:4) stresses that, "Moral issues arise most fundamentally when the choices people face will affect the well-being of others by either increasing or decreasing it, causing either harm or benefit." Customarily then, the concepts of harm, well-being, choice, and benefits are evaluative terms used when people's intentions and actions are morally examined. Generally, one may suggest that moral concerns arise in technology when the intentions behind the *designs* as well as *use* of technical artefacts, skills and processes have the inclination to bring, or probably bring, about harm or benefit, which affects human well-being and their common good. In this contention, one may add the interests of all natural species as inclusive. That is to say, if technologies serve as potential or real threat/benefits to earth's communities in such a way that both humans and non-human species would be affected or are affected positively or negatively, then a moral concern in technology arises. Here, one seeks for the rightness, appropriateness, benefit or otherwise of such technologies. And thus, ethical theories provide room to weighing the probable effects of using and designing inappropriate technology.

Now, the deepening of moral concerns has led to the hope that one can confront the ills of technology by questioning its aims and consequences. While technology has been a blessing to the world, it is fundamental to note that Africa has not developed sustainable mechanism to deal with the effects of technology. In particular, the technological processes, skills, artefacts and their adaptation in Africa have raised a number of questions, which require urgent attention. War equipment; for instance, get into the hands of people who have used them to the detriment of the continent. Boko Haram is a good instance of groups who have not only used technological artefacts to mar the growth of Africa; local chemicals are produced in an environmentally destructive ways, whose negative impacts cannot be underrated. In a similar vein, Africa has lost the focus of how technological innovation can help address social menace posed by technological use, especially by fraudulent people. More realistic is the view that importation of obsolete technological skills and equipment has negatively affected the residual technological capacity of the continent as well as resulted in the acquisition of technology that is alien and irrelevant for the present needs of the continent. These challenges as well as others are bedevilling the continent.

While technology itself appears to control humans immediately it is invented, it is not the case that humans are not in charge anymore. Societies, cultures or, perhaps, humans give meanings to it. So, moral theory seems to question the underlying motive for any technology. Apparently, moral ideals ought to guide human practices. This exploration shows that value provides a ground for weighing the prevailing social practices. Thus, what constitutes public policies and governmental decisions regarding technology ought not to negate societal moral expectations. Accordingly, Arun Abraham and James Mullin (1989: 157) posit that "…we consider that which is ethical (or moral) as pertaining to what one believes ought to be, as being distinct from the empirical dimension of what one knows to be." They add: "This is an important distinction because perceptions of "what ought to be" as being a desirable condition, are akin to a value judgment which may be projected" (Abraham and Mullin, ibid, 157).

Consequently, an ethical valuation improves as well as guides people's decisions. That is, it would enable one to develop a user-friendly technological processes and skills in the design of artefacts such as automobiles, medical equipment, agricultural tools, etc. To adopt our earlier example, the decision to invest in agricultural technologies so as to produce foods for human well-being may appear more valuable (worthy/useful) when compared to the desire to procure war artefacts if wars can be avoided or considering that war does threaten human well-being. That is to say, the development of virtues such as temperance, patience and love are sacrosanct or useful for social existence. Ethical values, then, provide yardsticks for measuring the cost-benefits of such decision. More interestingly, here, is our belief that a life preservative thesis may serve as a good criterion in relation to ethical decision on technological innovation, adaptation and application in all aspects of life. As Ivan J. Williams and Sharon Wood-Dauphinee (1989: 65) remark: "Quality-of-life has included the study of the levels of economic, political, social and psychological well-being resulting from varying governmental and economic systems, as well as policies and public programmes related to health."

Moreover, it is quite interesting to note that environmental degradation has opened a new chapter in moral concerns. Today, relating to the use of technological artefacts and skills, the numbers of challenges are evident. Pollution, earthquake, resource depletion, aesthetic degradation of nature and ozone depletion are examples of challenges that emerge through the use of technology such as DDT, automobiles, atomic bombs, among others. So, the claim that technologies do not raise issues of moral assessment is questionable, given that technologies aid as well as threaten life if designed/used negatively. To substantiate this, Beck (ibid, 148) suggests that, "We must keep asking: does this or that technology, on balance, increase or decrease the quality of our lives and at what expense in both capital and non-capital terms?"

Today, the use and inventions of technology has brought about tremendous changes and challenges to our world. While technology is a product of all cultures, it has aided global technological transfer. So, questions pertaining to technological exploitation arising from *excessive* reliance on foreign technical aid are critical concerns. For instance, one may ask: Is it morally good to export hazardous technology into Third World countries? Or, should countries invest in nuclear research that is likely to cause ozone depletion?

The foregoing implies that technologists are to exercise care in designs, uses and processes of technology. Herein, virtue theory is sacrosanct. Apparently, values serve as guidebooks to confronting earth care challenges, which probably can result from the designs and use of technologies. Granted that "artefacts are objects that have been made by people for a particular purpose" (Franssen, 2009: 923), we contend that the view that "technology is value-neutral" fails because it assumes wrongly that there can be no bad intents underlying technological designs. It assumes, wrongly, we think, that all humans are virtuous. The question: "Why is bomb produced by terrorists?" makes its anti-thesis clearer. It follows that there are certain elusive intentions that are basic to technology that may not necessarily be good, which then suggests that virtue theory is crucial in reducing human cause of technological challenges. It is then possible to imagine bad intent as basic to certain technologies. Let us now turn to the possibilities of moral choice in technological appraisal.

Four fundamental outcomes are discernible when one considers how value emerges in technology. First, the intention for designing a technology may be good and the application of it may turn out bad. Second, the intention may be bad and the application may turn out good. Third, the intention may be bad and the application comes out bad. Fourth, the intention may be good and the application turns good. Seeking appropriate technology therefore, it could be claimed that only the last (fourth) seems good because it arises from an evaluation of the possible effects that a technology has. In certain conditions, the future effects of a given technology may be undetermined. So Sven Ove Hansson (2004: 16-17) points out that, "The values that we entertain and express depend not only on how we conceive the alternatives and on the criteria that we apply, but also on the method of elicitation--the procedure by which we are induced to develop and express values." While there are several approaches to guiding the use and design of technology; this paper defends an African humanist basis for technology. This takes us to the final segment of this paper.

An African Humanist Assessment of Technology

While it may be too early to draw firm conclusion that humanism played significant roles in technology, let us show the connection between moral concerns and humanism. This would be expected to result in an appreciation of humanism as a theoretical guide.

Let us start by contemplating on the notion of humanism as well as African humanism. Then, we can explore the two shades of African humanist moral guidelines: communitarian or collective spirit (*emi isokan*) and the well-behaved person (*omoluwabi*) theory. And next, we will end with a reflection on the Yoruba humanist view of technology that can be used to confront African technological needs/problems in the 21st century.

The term 'humanism' has been used in various senses. According to H.J. Pietersen (2005: 54), humanism refers "to humankind's desire and increased ability to rely on its resources, to master (discover, analyse and codify) the forces of the nature and turn it to its own advantage (the domains of science and technology) and, secondly, its association with the moral sphere of human existence, in answer to the perennial individuals and as communities." While the first definition of humanism above identifies as well as emphasizes the point that humans--here and there - have certain desire as well as ability to understand nature in a bid to extracting its fruits for the good of human society, the second emphasis is that humanism focuses on how this advantage that is derived through the use of natural endowments benefits humanity. In this sense, one could define it as a philosophy that seeks to address the challenges of humans as it concerns how people tills and uses natural resources. In this respect, then, Godwin Azenabor (2010: 112) says that, "Humanism is a philosophy in which man, his nature and problems are the central focus." The foregoing are crucial elements of humanism that is central to our use of the term here. However, there are other ways the term has been used, which are significant as well:

> First, there is an *ethical sense* of the word. Here, Humanism means the belief that human beings should be accorded compassion and respect. Second, there is the *sociological sense*, meaning that social structures are best viewed as the product of human agents. Third, there is a *historical sense*, denoting periods such as the Renaissance, in which man became the centre of scholarly attention…Fourth, the word can also suggests the sovereignty of the human as opposed to the divine or supernatural… (Azenabor, 2010: 113).

All the foregoing definitions of humanism, except the last conception, are in connection to our usage of the term. In all these conceptions, the belief is that humans, rich or poor, white or black, etc. are entitled to enjoy the resources of nature (in their regions/land) in a way that they are freed from any encroachment from others.

The emphasis of humanists therefore rest on the belief that every individual has intrinsic right to be accorded respect and dignity. As P.H. Coetzee and A.P.J. Roux (1998 744) clearly articulate "All theories of human rights regard the fact of being human – humanness - as their starting point. Human rights theories then proceed to ascribe value to or determine the worth of the fact of being human." How one's value system can enhance the well-being of humans is therefore debated today. Our contention is that humanism, especially when considered from the Yoruba worldview (the Yoruba are one of the largest ethno-linguistic groups in Africa South of the Sahara, they constitute 21 percent of the population of Nigeria), is suitable for tackling contemporary technological concerns. This humanism is referred to as 'African Humanism.'

While it is a truism that every region/culture has its peculiar mode of existence that is peculiar to its needs and experience, African humanism, to be sure, is probably the best antidote to African needs because it takes cognisance of African human needs, experience and sociological conditions. But we must ask: What is African humanism? To Azenabor (2010: 115), "It is an adaptation of humanism to the concrete situation of the African. It attempts to identify values and life practices indigenous to African peoples, which distinguish them from others." Kwame Gyekye (2007: 158) describes African humanism as "…a philosophy that sees human needs, and dignity as of fundamental importance and concern." Although the foregoing views are not wrong, however they fail to adequately account for cultural synthesis that is a peculiar trait of contemporary cultures. Thus, a broader definition may be warranted. It is in this regard that we define African humanism as the application of African philosophical worldviews to African people who desire to confront the needs of African citizens, or, perhaps, it is the synthesis of African and non-African ideas in the attempt to confronting the existential problems facing Africa, thereby taking into consideration the *technical know-how*, *resources*, *challenges*, *cultural values* and needs of Africa. Apparently, Azenabor (2010: 115-116) notes that African humanism:

> Is anchored on the idea that African scholarship should demonstrate a concern for human interests in Africa, be committed to problem solving, in order to achieve Africa's hopes and aspirations. It is aimed at creating a sense of authenticity and dedicated not to [*only*] abstract thinking and conceptual analysis but to finding purpose and meaning in the African life and experience (emphasis added, not in the original quotation).

In finding meaning to African existential problems, Richard H. Bell (2002: 39) posits that: African humanism "is rooted in traditional values of mutual respect for one's fellow kinsman and a sense of position and place in the larger order of things: one's social order…"

This is the communitarian paradigm of African humanism. The central focus of the community concept is on the 'common good.' The Yoruba, for instance, believe that each individual is not an isolated entity. In other words, the community interest supersedes that of the individual or group. The Yoruba communitarian theory therefore sees an individual as a member of a community where he/she develops the bond, sympathy, virtue, spirit, etc. for the growth of the self. It seems crucial to note that; first, the individual relies on the community to develop the appropriate traits for his/her social development and, second, the individual relies on the community to understand 'the common good.' The point is that if the self is not socially and morally developed, probably there can be no 'good value' that such a being can give. As a result, the Yoruba opine that humans require the community for a fulfilling individuality, which entails that it is from the society that individual learns certain virtues.

The first goal of the community is therefore that of proper social integration. Thus, emphasis of Yoruba education is placed on social solidarity, good family upbringing, community responsibility, moral obligation not to harm others, mutual trust, social harmony, honesty, truth, benevolence, etc. All these are virtues that are necessary for promoting human well-being. Hence, Ademola K. Fayemi (2009: 171) states that:

> …the absence of proper culture, moral probity, and integrity devalues the personhood of a person to the level of just ordinary things—*eniyan lasan, lasan* or animal—*eranko.* Thus, such a being or an individual loses the personhood of being a member of the society, which being human being demands. In other words, such a person would not be deemed fit, for confidence, trust or responsibility; and would not pass the gamut of being qualified as *omoluwabi* in a Yoruba cultural context.

It is only those who have developed community's accepted virtues that can contribute to the well-being of others. For instance, Fayemi (2009: 172) points out that in Yoruba worldview, human being without good character is no less than *eranko* (an animal). Thus, John Ayotunde and Isola Bewaji (2004: 399) establish that:

> In Yoruba language, ethical behaviour and morally approved conduct is called, variously, *iwarere, iwapele, iwairele, iwa tutu, oniwaomoluwabi*. A morally upright person, a person who exhibits such virtues as honesty, respect (for himself, the elders, and for others, in general), decency, benevolence, etc., is *oniwarere, onirele, oniwatutu, oniwapele, Omoluwabi*. Such persons are highly valued and respected in Yoruba society, and are rewarded by society in various ways for their goodness.

Thus, the reason why conflicts arise in Africa, according to Yoruba humanism, is simply because the synthesis of world's cultures is continually eroding the sociological as well as moral humanism in African culture. This implies, then, that the desire for 'common good' as well as the 'virtue of *Omoluwabi'* is continually broken down. As D.A. Masolo (2004: 491) rightly captures this: "…the factors that determine personhood are believed to be acquired partly from the individual's socio-ontological beginnings, but its defining levels are only attained through an individual's learning to apply those capacities in ways considered socially appropriate."

While it is somewhat correct that technological age has fused nations into a global cultural matrix, the contending issues now is that technology has not been seriously put to use in Africa, hence it has not been an advantage to a greater extent. The point, then, is that rationality, if it is to be taken seriously, entails the ability to make an informed choice that enhances the interest of oneself as well as others.

Now the question is: How does technology raise a humanist concern? Our response is that technology raises a humanist concern when it has both sociological and ethical implications (inclusive here are issues relating to political, economic, cultural, environmental concerns, etc.). As we have noted earlier, the well-being and dignity of African people should be relevant if we are to produce/use technology locally as well as in the import of foreign technologies. In this case, Africa should focus on various issues relating to the cost-benefits, needs, available resources, adaptability of such technology to Africa's situation, and education when making or deciding on what technology to produce and acquire. In doing this, the humanist tendencies should be the standard of measurement. In this respect, technology serves a utilitarian cause because it is aimed at (a) human well-being and (b) community good.

The fundamental point is that African people can hardly confront the challenges posed by technology use and designs if the motive behind its acquisition or promotion does not have a humanist coverage. This can be expressed variously. First, African governments must not only agitate for development of technological education as well as laboratory education here and there, they must be committed to promoting sociological environment that would enable such efforts to thrive.

How would this be done? Our contention is that the designers and users of technological tools must be morally upright for them to be able to use it to the continent's advantage. This, without doubt, is apposite regarding technological processes as well as knowledge. We thus contend that the traditional Yoruba worldview of *Omoluwabi* (the well-behaved person) and collective spirit (*emi isokan*) is pertinent in dealing with some likely negative problems that may arise from technological use and application.

On a final note, there is no gainsaying the fact that technology has enormous negative effects on our environment, especially those that arise from dumping old-fashioned and environmental unfriendly technologies, etc. in Africa. Those nations that see Africa as a dumping ground of obsolete technologies, which are harmful to the continent, fail to understand that the world is a community of inter-related species, and that Africans' well-being contributes to global utility.

What is lacking in those who design or use technology wrongly is not an ethical theory, but a lack of commitment to the humanist cause. We therefore suggest an adoption of the virtues of *omoluwabi* (well-behaved person) and *emi isokan* (collective spirit) in use and design of technology if technological goals are to be beneficial to Africa.

Conclusion

We have assessed technology from an African humanist preview. We stress that the utility of technology in Africa should be weighed through a broader contemplation of the technological innovation. This, we argue, requires an understanding of technology as artefact, knowledge, process and socio-phenomenon. While it is granted that technology has globalized the world, we established that an African value-system should not be eroded in technological design as well as application.

In conclusion, we contend that moral valuation is imperative in technological assessment, because it gives technology a direction. Relying on African humanism, we maintain that the intentions underlying technology as well as its consequences ought to promote human well-being and African common good, if it is to achieve the desired developmental goals. We believe that the twin-concepts of Yoruba humanism – Omoluabi (well-behaved person) and *emi isokan* (collective spirit) have the intellectual and practical imports of instilling the moral demands of making human well-being and community good the chief tenets of technology.

References

Abraham, A. and Mullin, J. (1989). "Beyond the Protocol: Ethics and Research for Development." in Jorge Nef, JokeleeVanderkop and Henry Wiseman (eds.), *Ethics and Technology: Ethical Choices in the Age of Pervasive Technology*. Toronto: Wall & Tompson.

Ayotunde, J. and Bewaji, I. (2004). "Ethics and Morality in Yoruba Culture," in Kwasi Wiredu (ed.). *A Companion to African Philosophy*, Oxford: Blackwell Publishing Ltd.

Azenabor, G. (2010). *Modern African Philosophical Theories*. Lagos: Byolah Publishers.

Barcalow, E. (1994). *Moral Philosophy: Theory and Issues*. California: Wadsworth Publishing Company.

Beck, C. (1989). "Technology and Education: An Ethical Perspective." in Jorge Nef, JokeleeVanderkop and Henry Wiseman (eds.). *Ethics and Technology: Ethical Choices in the Age of Pervasive Technology*, Toronto: Wall & Tompson.

Bell, R.H. (2002). *Understanding African Philosophy: A Cross-Cultural Approach to Classical and Contemporary Issues*. New York: Routledge.

Callicott, J.B. (1989). "Intrinsic Value, Quantum Theory, and Environmental Ethics," in *Defence of the Land Ethic: Essays in Environmental Philosophy*. Albany: State University of New York Press.

Coetzee, P.H. and Roux, A.P.J. (1998). *The African Philosophy Reader: A Text with Reading*, 2nd ed. London: Routledge.

De Vries, M.J (2005), *Teaching about Technology: An Introduction to the Philosophy of Technology for Non-Philosophers*. New York: Springer.

De Vries, M.J. (2006). "Technological Knowledge and Artefacts: An Analytical View," in John R. Dakers (ed.). *Defining Technological Literacy: Towards an Epistemological Framework*. New York: Palgrave Macmillan.

Ellul, J. (1964). *The Technological Society*. New York: Vintage Books.

Ellul, J. (2003). "On the Aims of a Philosophy of Technology." in Robert C. Schaff and Val Dusek. *Philosophy of Technology, The Technological Condition: An Anthology*. Berlin: Blackwell Publishing Ltd.

Fayemi, A.K. (2009). "Human Personality and the Yoruba Worldview: An Ethico-Sociological Interpretation." *The Journal of Pan African Studies*, Vol. 2 (9).

Feenberg, A. (2006). "What is Philosophy of Technology." in *Defining Technological Literacy: Towards an Epistemological Framework*. John R. Dakers (ed.). New York: Palgrave Macmillan.

Franssen, M. (2009). "Artefacts and Normativity." in Anthonie Meijers (ed.). *Philosophy of Technology and Engineering Sciences*. Vol. 9. Amsterdam: Elsevier.

Hansson, S.O. (2004). *The Structure of Values and Norms*. Cambridge: Cambridge University Press.

Heidegger, M. (2003)."The Question Concerning Technology." in Robert C. Schaff and Val Dusek.*Philosophy of Technology, The Technological Condition: An Anthology*. Berlin: Blackwell Publishing Ltd.

Hooker, B. (2010). "Consequentialism." in JohnSkorapski (ed.). *The Routledge Companion to Ethics*. 1st ed. New York: Routledge.

Ibo Van De Poel (2009). "Value in Engineering Design." in Anthonie Meijers (ed.). *Philosophy of Technology and Engineering Sciences*. Vol. 9. Amsterdam: Elsevier.

Kant, I. (2002). "From the Fundamental Principles of the Metaphysics of Morals." in Daniel Bonevac. *Today's Moral Issues: Classic and Contemporary Perspectives.* 4th ed., Boston: McGraw-Hill Companies, Inc.

Kline, S.J. (2003). "What is Technology," in Robert C. Schaff and Val Dusek. *Philosophy of Technology, The Technological Condition: An Anthology*. Berlin: Blackwell Publishing Ltd.

Gyekye, K. (2007). *Tradition and Modernity: Philosophical Reflections on the African Experience*. Oxford: Oxford University Press.

Marcuse, H. (1998). "Some Social Implications of Modern Technology." in Douglas Kellner (ed.). *Collected Papers of Herbert Marcuse: Technology, War and Fascism,* Vol. 1. London: Routledge.

Masolo, D.A. (2004). "Western and African Communitarianism." in Kwasi Wiredu (ed.). *A Companion to African Philosophy*. Oxford: Blackwell Publishing Ltd.

Nef, J. (1989). "Technology is about People: Some Basic Perspectives." In Jorge Nef, Jokelee Vanderkop and Henry Wiseman (eds.). *Ethics and Technology: Ethical Choices in the Age of Pervasive Technology*. Toronto: Wall & Tompson.

O'Neill, J. (2001). "Meta-ethics." in Dale Jamieson (ed.). *A Companion to Environmental Philosophy*. London: Blackwell Publishers Ltd.

Pietersen, H.J. (2005). "Western Humanism, African Humanism and Work Organizations."*SA Journal of Industrial Psychology*. Vol. 32 (3).

Pojman, L.P. and Fieser, J. (2012). *Ethics: Discovering Right and Wrong*. 7th ed. Korea: Wadsworth CenGage Learning.

Williams, I.J. and Wood-Dauphinee, S. (1989). "Assessing Quality of Life: Measures and Utility." in Frederick Mosteller and Jennifer Falotico-Taylor (eds.). *Quality of Life and Technology Assessment*. Washington, D.C: National Academy Press.