

Analysis of Pythagoreanism as Genesis of African Philosophy

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ABSTRACT

Education tenets of Pythagoreanism are pivoted on historicism, spiritualism, empiricism, aesthetics and discipline. Education based on these tenets fits the description of holistic and interdisciplinary education, which can provide direction for African philosophy of education. Holistic education, believed to have been originated through the works of Ron Miller and its ideal elaborated further in the journal Holistic Education Review (now, Encounter: Education for Meaning and Social Justice), is a philosophy that considers all human potentials in totality rather than an aggregate of constituent parts (Holistic Education Network, 2003; Khan, 2008; and Miller, 2000). As explained by Amada (nd), Holistic Education Network (2003) and Melissa (nd), it regards every human being as important and exploits intellectual, emotional, social, physical, artistic, creative and spiritual potentials. Although the origin of holistic education is attributed to Miller, the concept has been with educators for centuries. For example, Maria Montessori (1870-1952), Johann Heinrich Pestalozzi (1746-1827) and John Dewey (1859-1852) advocate for holistic education (Miller, 2000). These education tenets are posited to be deterministic in the sense that they can direct the course of education as a result of philosophizing about them.

Introduction

To formulate a philosophy of education that fits the continent of Africa is one of the challenges that stimulate thought. Political leaders and philosophers interested in Africa have suggested some models under which education could be administered in Africa but these models, somehow, lack the proper educational dimension pertaining to facts of history that may propel philosophers of education to embrace them with unflinching commitment. Sometimes the propounders of philosophic models lack ethical uprightness that can act as impetus to lure proponents. For example, many political leaders in Africa have been and continue to be accused of all ills including corruption manifested in tribalism, nepotism, economic and political marginalization of the populace, although what they say may influence the public more than what philosophers say. As reported by Onyango-Obbo (2015), members of the tribe from which an African

president comes do usually gain immensely in all spheres of development, whereas other tribes in the same nation are relegated to the periphery. In such a scenario where, ethical issues are neglected; it is difficult for intellectuals to adhere to what the leaders preach and it is likely to find that thoughts of African leaders do not have any impact after they have left power. Philosophers writing on African philosophy of education have not given attention to the historicity which is the guiding facts of history that provides the genesis of African education.

K'Odhiambo (2010) provides an argument that supports Egypt as the foundation of African philosophy of education and this paper is a further development. This paper analyses Pythagoreanism as a philosophical system that supports that foundation. Hermeneutics of Pythagoreanism as proposed in this paper is an attempt to formulate a coherent African philosophy of education which embraces interdisciplinary approach whereupon the synthesizing work of philosophy is given prominence. Hermeneutics refers to the theory of interpretation that philosophers borrow from theology (Flew, 1999). It connotes a message that requires further elaboration so as to be understood in a better and a more comprehensive way beyond what was initially envisaged by the originator of the message (Eliade, 1987 and Seebom, 2004). African philosophy of education needs to be defined within the context of African philosophy (K'Odhiambo, 2010). As noted by Oruka (1997), the existence of African philosophy and what it means became a philosophical discourse from 1945 as a result of a book, *Bantu Philosophy*, written by Placide Tempels, a Belgium priest in the former Belgium Congo (now, the Democratic Republic of Congo). The book affirms the existence of African philosophy. Akinpelu (1981) contends that what is distinctly African in African philosophy has been asked in different fora without a final answer. There is general agreement that African philosophy exists but the issue is the description of that philosophy (Makumba, 2007).

Makumba explains that cultural contribution to philosophy is what distinguishes philosophy as European, African, Indian, Chinese and so on but the methods of philosophizing are universal. This view is supported by Dani Wadada Nabudere, Ugandan academician, who coined the term *Afrikology*, referring to the philosophical study of African cultural values (Tando, 2012). Oruka (1997) explains that for philosophy to fit African context, that philosophy must contain African culture and its author must be interested in African issues. The authors of the philosophy can be Africans or non-Africans but the distinguishing feature is philosophy that attempts to offer solutions to problems in Africa. A notable example of a non-African on African philosophy is Caude Sumner (1919-2012), a French Canadian, whose contributions on Ethiopian philosophy are immense, comparable to what Plato and Aristotle did to Greece as noted by Oruka. African philosophy of education is tied to African culture. Knight (1998) says that the philosophy of education must take into account the political climate, the economic conditions, the needs of the labor market and the social strata of different populations. Nyasani (1996) supports the same view by stating that a philosopher is the conscience of cultural expressions because they cannot maintain an objective stance and discover ultimate truths without reflecting on the cultural realities.

Education is a cultural phenomenon and African philosophy of education can be defined as an integrated cultural thought of an interdisciplinary nature that examines educational issues from African perspectives in accordance with universal thinking to arrive at solutions that make education relevant to Africa (K'Odhiambo, 2010). As noted by K'Odhiambo, this definition maintains that education in Africa is to be analyzed from African cultural perspective and at the same time the universality of philosophy that acts as a synthesis to various disciplines should never be neglected. As defined by Akinpelu (1981), African philosophy of education is the application of principles of philosophy to solve problems of education in Africa. The outcome of the discourse is to remedy educational problems besetting Africa. The discourse is to embrace holism through incorporating African cultural values which are not retrogressive. As reported by Makumba (2005), "it must maintain both its Africanity and philosophicality". Africanity refers to distinct African cultural features whereas philosophicality is concerned with universal principles of philosophizing (Kanu, 2012). Africans have realized that educating people without opening enough employment opportunities creates malcontents and trouble-makers and, therefore, education has become a system of preparing people for unemployment that stifles economic growth and it is associated with higher levels of crime, violence and drug abuse (Barker, 1986 and Lazuta, 2014).

Education provided in Africa, as noted by Barker, alienates people from the land which is a vast resource and at the same time makes Western values, expectations, beliefs and habits to be deeply ingrained in the lives of African people, particularly the intellectuals and the privileged elites, that they cannot be easily removed. Nyamnjoh (2004) explains that the resultant effect of such education is Europhilia (love of European values) and xenophilia (love of foreign goods) since the African is not educated for the continent. It is education that causes brain drain, movement of qualified citizens to other countries for employment purposes (Teferra, 2004). Higgs (2003) says, "What is taken as education in Africa is a reflection of Europe in Africa". In formulating African philosophy from which African philosophy of education can be derived, philosophers and politicians propose, somehow, overlapping trends. Njoroge and Bennaars (1986) suggest a model of African philosophy of education that comprises four trends: ethnophilosophy, cultural philosophy, political philosophy and professional philosophy. Ethnophilosophy, as defined by Njoroge and Bennaars, is a method of studying communal beliefs and values of any African community. As explained by Emagalit (nd), the term was coined by a Beninese philosopher and politician, Paulin Hountondji (1942), to refer to the collective thought of a community or the whole of Africa as represented by anthropologists, sociologists, philosophers and ethnographers.

Cultural philosophy is an attempt to discover the meaning of "beingblack-in-the-world" and it is supported by the philosophy of Negritude, which is the philosophy of African authenticity (Njoroge and Bennaars, 1986). Political philosophy is philosophy spearheaded by African political leaders like Nyerere's Ujamaa, Nkrumah's Consciencism, Kenyatta's Harambeeism. Professional philosophy is similar to Western formal philosophy. Njoroge and Bennaars, while incorporating the four trends in

educational discourse, assert that education in Africa should incorporate in its discourse ethnophilosophy of education, phenomenology of African education, critique of African education and philosophical analysis of African education, whereby phenomenology, critique and analysis emphasize methodological approaches. Phenomenology, in this context, refers to description of educational experiences and critique and analysis refer to rigorous and systematic examination of issues on education in Africa (Campbell, nd; Njoroge and Bennaars, 1986 and Pachierie, 2008). Oruka (1998) postulates six trends for African philosophy from which Hapanyengwi-Chemhuru (2013) says philosophy of education could be explicated. They are ethnophilosophy, philosophic sagacity, nationalistic ideological philosophy, professional philosophy, hermeneutic philosophy and artistic or literary philosophy.

Oruka's trends are almost similar to that of Njoroge and Bennaars, except philosophic sagacity. Philosophic sagacity is defined as philosophical thought exhibited by people who did not have the benefit of school education (Oruka, 1998). Hermeneutic philosophy falls under phenomenology and artistic and literary philosophy is within the province of cultural philosophy, whereas nationalistic-ideological philosophy means political philosophy. All these trends leave out the historicity of African philosophy of education. The impact of political leaders in setting the trend for philosophy is noteworthy. Nyerere's ujamaa (a Kiswahili word for brotherhood or family-hood), which is a variant of African socialism that requires Africans to live as brothers and sisters, impacted greatly on Tanzanian education and currently provides a school of thought for further interrogation on African education. African socialism, an aftermath of pan Africanism, was coined in 1962 at a meeting in Dakar, Senegal, with the aim of developing the most appropriate philosophy for the continent of Africa which was devoid of communism and capitalism (Friedland and Rosberg, 1964 and Onuoha, 1965), although its implementation is debatable. Pan-Africanism originated with African elites in Europe and America in early twentieth century and was later promoted by African politicians like the first president of Ghana, Kwame Nkrumah, with the main theme of uniting all Africans for their overall development (Mburu, 2003).

Consciencism is a philosophy of Kwame Nkrumah and its aim is to get a synthesis of African, Islamic and Euro-Christian traditions for a philosophy of Africa, as noted by Mburu. These models are usually political and they may not adequately address educational issues in Africa, except ujamaa, which may require a separate deliberation. At the moment the support initiated by the African Union, the continent's umbrella body, in the development of education is commendable and may play a leading role in formulating African philosophy of education. As reported by Lom (2011), the African Union has launched Pan-African University to tackle scientific and technological development through five thematic areas that focus on higher university degrees. For the advancement and the training of high-level manpower in basic sciences, technology and renovation, the African Union identified Jomo Kenyatta University of Agriculture and Technology in Kenya as the host. The University is supported by the Japanese government and the first batch of students with masters' degrees graduated in November,

2014. The University of Ibadan in Nigeria houses life and earth sciences and it is supported by Indian government. Issues of governance, humanities and social sciences are dealt with by the University of Yaoundé II in Cameroon and support is given by the Swedish government.

Water and energy sciences (climate change) are handled by the University of Tlemcen in Algeria and supported by German government. The thematic area dealing with space science is to be housed in southern Africa, where the university and the country are yet to be decided. The focus of Pan-African University is to make education relevant to Africa and it is too early to evaluate the relevance but the concept does not incorporate holistic historicity with philosophical underpinnings that evolve with time because the studies are for higher education degrees. The target of Pythagoreanism is education, and politics is treated as a part of education, meaning education controls politics but not vice versa (Minar, 1942). Education and philosophy are taken to be synonymous, as advocated by John Dewey and noted by Akinpelu (1981). If education is controlled by philosophy or if philosophy is controlled by education, we posit, mistakes can hardly occur and this is supported by Plato when he recommends thorough knowledge in philosophy for leaders (Vann, 2013). Philosophy of education is both synthetic and holistic.

Education tenets of Pythagoreanism

Education tenets of Pythagoreanism are pivoted on historicism, spiritualism, empiricism, aesthetics and discipline. Education based on these tenets fits the description of holistic and interdisciplinary education, which can provide direction for African philosophy of education. Holistic education, believed to have been originated through the works of Ron Miller and its ideal elaborated further in the journal *Holistic Education Review* (now, *Encounter: Education for Meaning and Social Justice*), is a philosophy that considers all human potentials in totality rather than an aggregate of constituent parts (Holistic Education Network, 2003; Khan, 2008; and Miller, 2000). As explained by Amada (nd), Holistic Education Network (2003) and Melissa (nd), it regards every human being as important and exploits intellectual, emotional, social, physical, artistic, creative and spiritual potentials. Although the origin of holistic education is attributed to Miller, the concept has been with educators for centuries. For example, Maria Montessori (1870-1952), Johann Heinrich Pestalozzi (1746-1827) and John Dewey (1859-1952) advocate for holistic education (Miller, 2000). These education tenets are posited to be deterministic in the sense that they can direct the course of education as a result of philosophizing about them.

Through the application of hermeneutics as a methodology, more meanings and insights can be discerned in Pythagoreanism in relation to education as a discipline. Determinism is taken as a patterned course of action through which other things can get accommodated easily. It slightly differs from determinism versus free will as usually used in philosophic discourses (Flew, 1999). In this definition, it is an existing pattern or framework that can be built upon. As explained by Oruka (1997), when you go to China

and you ask people why they do what they do in the way they do them, they will tell you that that is the pattern left behind for them by Confucius, the philosopher. The same thing occurs when you ask the same question in Great Britain whereby you are referred to the ideals of reformers like Gabriel Moore, John Stuart Mill and John Locke. Pythagoreanism has educational ideals which are deterministic and cut across continents.

Historicism

Historicism explains facts of human progress as opposed to myths and fictions and what is explained can be used to predict the future (Nielsen, 1999, p. 386 and Flew, 1999, p. 148). Human progress requires a sound historical base and Nielsen notes that no human progress is a historical. Pythagoreanism is situated in a historical context that illuminates both the present and the future. Georg Wilhelm Hegel (1770-1831) was a German philosopher and historian. He proposed a theory of history that may be described as relevant to Pythagoreanism. His theory of history, as explained by Burrell (1991); Ochieng'-Odhiambo (1997) and Stanford Encyclopedia of Philosophy (2014) is projected towards the future and it is rather teleological, whereby history is not just the records of past events but the events themselves actually determine the future. Through reasoning about historical events, the future can be envisaged (Ochieng'-Odhiambo, 1997). Hegel's philosophy of history proposes hermeneutics to historical problems that focuses on individuals (Stanford Encyclopedia of History, 2012), but we posit it can be individuals and wholes of historical events.

From history, Pythagoras is a Greek scholar of international repute. Plato's and Aristotle's ideas are viewed as derived from Pythagoras (Kingsley, 1997 and Riedwig, 2005). Plato was a student of Socrates and Aristotle was a student of Plato. Ancient philosophy begins with Socrates who focuses on ethical issues (Mautner, 2005, pp. 579-581). Socrates learned for 15 years at the Temple of Waset, the world's first recorded university, built at Thebes in the Nile Valley in 1391 BC during the reign of pharaoh Amenhotep III and hence his philosophy is rooted in the continent of Africa (Nantambu, 2001). Plato's and Aristotle's ideas have their origins from the Nile Valley and also from Socratic philosophy.

Osabutey-Aguedze (1990) says that Plato learnt at the Temple of Waset for 11 years and Aristotle about 12 years. Both Plato and Aristotle ideas form an integral part of any education system in the world. Vann (2013) notes that Plato advocates for education for both gender, nursery education and play as a teaching methodology to be used at lower levels whereas thinking and abstraction to be applied at higher levels. Vann further explains that Plato strongly recommends that education should be the responsibility of the state, whereby it is to be carefully planned and overseen by a minister who should be the most important minister in the government. Plato advises that people who lead states are to be properly tutored in philosophy so as not to mess in directing the activities of the states. Bundy (2005) explains that Aristotle's contribution to human knowledge is immense. He contributes to logic, mathematics, metaphysics, botany, biology, politics, agriculture and dance. He is regarded as the father of science because of his works in

sense perception, which is fundamental in scientific investigation (McRae, 2014 and Osborn, 2007). Bundy (2005) explains further that Aristotle provides fundamental ideas in psychology that emphasize the study of the mind, senses, dreams, imagination and prophecy, which all have their roots in Pythagoreanism. Burket (1972) notes that Empedocles (c. 492-432 BCE), a prominent pre-Socratic philosopher, describes Pythagoras as “a man who knew remarkable things” and who “possessed the greatest wealth of intelligence”.

Osabutey-Aguedze (1990) explains that Pythagoras underwent rigorous university education spanning 22 years at the Temple of Waset. The education was supposed to last 40 years and some authorities such as Cark (2011) indicate that Pythagoras probably stayed there for 23 years. From history, it is Pythagoras who coined the term “philosophy” from two Greek words: philo (love of) and sophia (wisdom), hence a philosopher is a lover of wisdom (Gottschalk, 1980). History studies the past with a view to understanding the present and predicting the future. When the past is studied in isolation, without reflecting on both the present and the future, the whole endeavor is rendered meaningless (McParland, 2010). History situates the origin of philosophy of education in the Nile Valley and some of the most important philosophers in the scene are Pythagoreans. Historical facts evolve with time (Bowler, 2009). Changes that occur through historical times are analogous to a theory proposed by Heraclitus (lived around 500 BCE) that everything alters or changes and no one can step twice into the same river because it does not remain the same (Popkin and Stroll, 1973). When ideas evolve, they change and it may be difficult to recognize the original idea. Ochieng’-Odhiambo (1997) reports that Greeks were not comfortable with philosophic ideas and this is why they persecuted philosophers like Socrates who came with revolutionary ideas from the Nile Valley (Egypt), nevertheless, they later embraced philosophy and claimed to be its originators.

Spiritualism

Spiritualism can be defined as a system of thought in philosophy that affirms the existence of immaterial reality imperceptible to the senses and this includes God, the immortality of the soul or the immateriality of the intellect and will (Encyclopedia Britannica, 1979, p. 479). Pythagoreans believed in spiritualistic Orphic mysteries. Orphism is believed to be the first world religion and most of the world’s religious beliefs probably have common traces to it (Orphism, Pythagoras and the Rise of the Immortal Soul, 2002). Africa as a whole is spiritualistic and according to Mbiti (1969), Africans are notoriously religious and religion permeates into all the departments of life, whereby education is not excluded. In the words of Chancellor Williams (1961), “Africans are highly spiritual” and a truly higher civilization can develop from such foundation. A holistic education has spiritualism as one of its components (Amada, (nd); Holistic Education Network (2003) and Melissa (nd) and African education cannot be divorced from spiritual matters. Looking at African religions and other religions, the interreligious tenets of Supreme Being and humanism can direct the education.

Spiritualism in education is not to be approached from any sect or any established world religion but from the philosophic standpoint of religious experience and this emphasizes that philosophy of religion is to provide the guiding principles. One of the ideals of religion is soteriology, which is transiting from unsatisfactory life to a better one or the doctrine of salvation (Hick, 2003 and Smart, 2005). Hick explains that the present human existence is considered wrong or distorted and it alienates mankind from God and it is the duty of religion to remove this unsatisfactoriness so as to enable human being reach the Ultimate Being. In Africa, religious customs and taboos guide the behavior of individuals in the same way the Ten Commandments in the Bible do (Kibicho and Kasiera, 1987). Apart from the ideal to reach the Ultimate, religion satisfies human curiosity. Kibicho and Waruta (1990) say that metaphysical issues such as the origin of the universe, the purpose of life and human destiny are answered by religion.

In Africa, God is believed to be the creator of the universe and the answer to everything. Religion soothes the mind in case of problems, although this was criticized by Sigmund Freud and Karl Marx as an escape from reality (Kibicho and Waruta, 1990). Religion offers a base of operation to serve humankind. For example, the Orphic mystery provided Pythagoreans with a base to express their ideals. Pythagorean theory of metempsychosis, transmigration of the soul is a doctrine inherent in African religions. Pythagoreans believed that after death the human soul could move to another human, animal or plant. This was demonstrated by Pythagoras himself when he cautioned someone who was beating a dog not to do so since the dog had a soul of his friend which could be detected through the sound emanating from the dog (Boa, 1990). Africans believe in souls transmigrating just as Pythagoreans (Mbiti, 1969).

Empiricism

Empiricism is defined by Mautner (2005) as the view that all knowledge is derived from experience or science. Empiricism is supported by philosophers such as John Locke, David Hume and John Stuart Mill, as noted by Mautner. All our knowledge is reducible to sensory experience (Patrick, 2001). Hume maintains that our knowledge begins with the senses and Descartes as a rationalist maintains that our knowledge starts with the mind (Thompson, 2010). Pythagoreanism's contribution to science is important in the field of knowledge (Guthrie, 1987 and History of Science, 2011).

Pythagoreans supported the heliocentric view of the universe and the development of alchemy as a precursor of chemistry (Burkett, 1972 and Joost-Gaugier, 2007). Chemistry as a discipline originated from alchemy, the magico-science, which was important for the mummification of bodies by the people of Al Khem (ancient Egypt) (Cockren, nd and Ochieng' 2003). The number theory of Pythagoreans influenced later scientists and philosophers, as noted by O'meara (1989). These scientific ideas are vital for the development of African philosophy of education when their historicity and evolution are considered.

Aesthetics

Aesthetics is the branch of philosophy that examines the nature of art and beauty (Merriam-Webster, nd). Ozumba (nd) affirms that in Africa aesthetics refers to is the way of appreciating nature, creating aesthetic objects and connecting mankind with God and spirits. Aesthetics studies what is pleasing to our senses and imagination, including creative and performing arts (Mautner, 2005). Pythagoreanism is an aesthetics philosophy (Joost-Gaugier 2007 and Heninger, 1974). As explained by Sacred Texts (nd), Pythagoreans have deep insights of philosophy of music and philosophy of colour. Both philosophies were learnt in Egypt (Sacred Texts, nd and World Super Scientists, nd). Music and colours are therapeutic; they relieve tension in the same way other aesthetics like performing arts, athletics and games do. Works of arts such as sculpture, including natural and human-made sceneries are aesthetic. Wildlife, mountains, vegetations provide human beings with a sigh of relief when perceived and this is why tourists take their time to travel and view them. Sacred Texts (nd) explain that Pythagoreans discovered the harmony in music scales and laid the foundation of the study of music. Music and poetry always go together and both are usually accompanied by articles of sculpture, demonstrating that arts constitute Pythagorean philosophy (Heninger, 1974).

Pharaonic civilization, i.e. civilization influenced by Egyptian kings (pharaohs), incorporated aesthetics in its philosophy as far back as 8000 BCE (Complete Gods and Goddesses of Ancient Egypt, 2003; Dunn, 2011, and Strouhal, 1992). In Africa aesthetics is portrayed in games, athletics, drama, sculpture, architecture, music, dance wildlife, geographical sceneries like Mount Kilimanjaro, just to mention a few. Although it is difficult to have homogenous aesthetics in Africa because of very many cultures and the impact of globalization, African aesthetics should shape the education in Africa and the trend in which talented African artists move out of the continent and join European and Asian countries whereby they change their identities and nationalities needs to be slowed down (Capstick, 2008 and Daily Nation 2013).

Discipline

Etymologically, the term discipline is derived from Latin, *disciplina*, meaning 'instruction' from the root word *discere* 'to learn,' and from which *discipulus* 'disciple, pupil' also derive. Discipline, therefore, means a systematic instruction given to a disciple (Howard, 2007). Pythagoreans led a disciplined life in their activities, including eating habits (Bridgwater and Kurtz, 1963). They stressed silence and vegetarianism and study to purify the soul. Education is requiring discipline and in every institution of learning learners are expected to show discipline in order to achieve educational goals. In ancient Egypt, discipline of the learners was thorough although some of the techniques may be considered outdated (Hill, 2010). Discipline evolves and its evolution can be discussed in relation to African philosophy of education. Philosophy requires ritualistic discipline like that of Immanuel Kant whose movements from one place to another were so exactly timed that they enabled people to correctly adjust their watches (Albert, Denise & Peterfrend, 1984 and Russell, 1961).

Hermeneutics of Pythagoreanism for African philosophy of education

What are the salient issues in Africa that philosophy of education can address in a historical and holistic way, which other countries do not suffer from and on which Pythagoreanism can lay a foundation? African philosophy of education is to address corruption in governments, poverty, hunger, diseases, ethnicity, technological advancement, shelter, unity, marginalization of the populace, equitable distribution of resources, indigenous knowledge systems, adherence to the Supreme Being, free and compulsory education, conflict resolution, displacement of populations, human and environment, which are endless and are all intertwined with culture and history (Irobi, 2005). Ajayi and Buhari (2014) say that methods of resolution of conflicts in Africa that espouse traditional methodologies are far more efficient and effective than modern litigation settlements of issues in law courts. In conserving and using the environment in a sustainable manner, African traditional methods have proved more effective than modern education methods in making people ecologically literate (Adam, 2008 and Purcell, 2007). The issues to be addressed by African philosophy of education require a vantage point of history. Egypt provides this vantage point. The ancient practices in the Nile Valley as portrayed by Pythagoreanism lay the foundation for African philosophy of education. From the base different aspects of education can be discerned, developed and implemented. One aspect of philosophy of education is history.

Education is situated in a historical context. The history determines the flow of information from the beginning to the present. For education to be meaningful, it is this history that philosophers philosophize about and build upon, while focusing on the future. From archaeological evidence, Africa is the cradle of human race and it therefore implies that human civilization originated from the cradle (Barbara Dozier's Blog, 2010). It is this cradle that historians of philosophy and other disciplines can base their discourses thus authenticating the synthesizing work of philosophy. History affirms the acceptance of Pythagoreanism in both Europe and Africa and formal education, as being practiced today in Africa, was mainly introduced from Europe. The modern school system of education in Africa is mainly an aftermath of European colonization of the continent of Africa. Pythagoras' education that influenced his followers was got in Africa and the same education is accepted in Europe. For example, Pythagoras theorem is universally accepted. When formal education was introduced in Africa, the African cultural environment was not considered yet what was introduced was not alien to Africa. The education had evolved through different periods and since it was implanted in Africa without a trace to its historicity, it was bound to disorient the continent.

Evolution of education historically can be compared to food which changes continuously from the time of eating up to the time of defecating. When one is not aware of the genesis of the smelly stool defecated, it may be difficult to convince them that they are the originators of the end product. Education that originated from the Nile Valley spread to all parts of the continent and this is attested by riddles, proverbs, rock paintings, weaving, pottery, leather work found all over the continent (Curtin, Frierman, Thompson and Vansina, 1978). The genesis of artistic education is Nile valley and this is where

Pythagoreans learnt music, which forms an important component of their philosophy. The teaching of music needs to be traced from Egypt. Spiritualism as a tenet espoused by Pythagoreans is not alien to Africa. A belief in Pythagoreanism that the soul of a good person is rewarded after death is similar to that one held by Africans.

A person who does good things in Africa prepares better life for their offspring. A murderer spoils good life for their descendants and this belief controls individuals to have good behavior. This spiritual aspect needs to be stressed in African philosophy of education. When learners are properly tutored in spiritualism, they will be individuals who respect human rights when they are in the society after schooling. When African leaders are being accused of corruption and other social evils, it means the spiritual aspect of their education was not properly founded. It may be construed that they lack spiritual discipline, whereby they do not care about the outcome of their behavior even after their departure from this world. African philosophy of education is to philosophize on the implications of failure by learners to adhere to spiritual matters.

Religions such as Christianity emphasize spiritual discipline but there is no link with culturally integrated African spirituality. In some instances, anything African may be termed satanic. To stem corruption and bad governance by African leaders, African oath taking practices need to be incorporated when taking oath of allegiance. It has been realized that some African leaders take traditional oaths of office even if they have taken the official one and even go further and consult traditional soothsayers on important national issues (Ndiribe, 2009). When African leaders are sworn into the offices while carrying the Bible or the Koran, it is very difficult to ascertain whether they believe what they say and at the same time committed to the words uttered.

This is because they usually end up mistreating the subjects and practice all sorts of corruption. It is the role of African philosophy of education to instill in the learners the virtues of good leadership which is based on spiritualism. Empiricism is an aspect of Pythagoreanism which is an integral part of African philosophy of education. Sense experience that results to scientific knowledge is an attribute of any culture. One may lack the necessary tools and the language to put across the knowledge but this does not mean lack of empirical knowledge. Pythagoreans had strict rules on their diet and the same applies to Africans. What is eaten has scientific implications to the body and to combat lifestyle diseases require change of school curricula, not only for health practitioners but for all levels of education (Puoana, Tsolekile, Sanders and Parker (2008).

Many diseases can be caused by what people eat and it is not uncommon for doctors to refer Africans who suffer lifestyle diseases such as hypertension and diabetes to eat traditional African dishes. Africans may wish to eat processed food relegating their traditional food without understanding the implications just due to lack of philosophy of education which is relevant to African issues. Food science needs to be part of African philosophy of education because food is the fuel that provides energy for philosophizing. Pythagoreans had a strict code of diet that was rooted in Egypt and when life style diseases crop up in Africa it is hermeneutically interpreted as lack of philosophy of

education that relevant to Africa. Science covers all aspects of education. Technological advancement is an important ingredient of African philosophy of education. The learner should be able to propose scientific innovations or inventions to make after learning what other people have done and this requires support from the education system. There are several instances in Africa where learners' creativity is not encouraged yet this is the most important aim of education. Learners are able to assemble planes, vehicles and other machines and equipment but they do not get support and their ideas are just abandoned. Some learners are creative and can make ammunitions like guns but they end up frustrated for their ingenuity. Why must the continent continue importing machinery from other countries? This is because of lack of African philosophy of education which can resolve issues in Africa.

African philosophy of education has the full responsibility of sensitizing African leaders to promote technological education by supporting innovators and inventors. When any system of education is proposed in Africa it is likely to find that a lot of support is sought from outside Africa and the philosophy of these supports has never been subjected to rigorous scrutiny by African philosophers of education so as to incorporate holistic historicity of education. Anything of aesthetic value in Africa such natural and human-made sceneries and objects is a component of philosophy of education. All of them need to be incorporated in education with their historical basis and relevance to African philosophy of education. A question that Africans need to ponder about: What is the rationale of talented sportsmen and sportswomen from Africa changing their identity and citizenship? Talent is something that may not be easily quantified in monetary terms and definitely this applies to things of aesthetic nature. When Africa is not concerned about its aesthetic resources then philosophy of education is probably missing in the continent. Philosophy education makes individuals patriotic and to guard jealously any resource, just in the same way Britons guard strongly what was bequeathed to them by their forerunners of philosophy like Gabriel More, John Locke and John Stuart Mill.

Aesthetic ideals should never be compromised because they are historical and holistic. Discipline is required in almost any human endeavor. An organized group can be described as disciplined. Such a group has a pattern of living like the natural movements of celestial bodies that move in definite patterns. For example, human beings are aware of the apparent movement of the sun and they can plan their activities to be in sync with it. Hence philosophy of education requires a deterministic movement and evolution of events in a historical manner which is holistic and interdisciplinary. In the same way Pythagoreans were disciplined in their daily activities like eating so is the same applicable to African philosophy of education. If leaders are morally disciplined then they cannot be accused of evils and their ideals can attract the attention of their subjects and hence they become philosophers worth emulating.

Conclusion

African philosophy of education is posited to the chief instrument that can solve all problems in Africa because there is no other thing that can change the society rather than education. For African philosophy of education to be meaningful and relevant to the continent that philosophy needs to embrace historicism, spiritualism, empiricism, aesthetics and discipline with Egypt as a historical vantage that philosophically intertwines all heritages of education. Any philosophical discourse on education is regarded as genuine when the genesis of that discourse is the starting point. Knowledge diverges and evolves from a point. Studies are to trace reasons for divergence and evolution of knowledge. For example, how knowledge that originated from the Nile Valley evolved in different forms whereby it was accepted and sometimes not accepted in other parts of the world can be researched by philosophers of history. This requires thorough grounding in methodological approaches like hermeneutics that can unravel salient features of knowledge relevant to African philosophy of education.

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