Taboo and Secular Education: The Engagement towards Environmental Conservation in Africa ¹Ochieng' Ahava and ²Rispah N. Wepukhulu

7.1 Abstract

The paper presupposes that the secular conception inherent in Western science as part of the general colonial baggage to Africa, has presented a clash of worldviews for Africa; Western versus African, and in essence a form of civilizational clash. The resultant encounter has not largely integrated, but instead, through a secular lens, partly ignored African ways, and partly displaced the African structures. One particular area where this ignorance gained currency was in the colonial, and post-colonial educational policies in general, and the environmental conservation policies in particular. While attributing the environmental woes in Africa to this ignorance and displacement of traditional structures, this study upholds the potential role of traditional African educational strategy for children in its employment of taboos towards environmental conservation. The paper examines the renewed interest on traditional African taboos from a general conceptual framework of hypothetical consonance and its relevance in the treatment of the relationship between religion and Western science today. This approach discourages the dogmatism from both the theologian, and the Western scientist hence has the potential for a more fruitful interaction. The expected result from the engagement should be a unique educational phenomenon which is functional in the African context; "a Western scientific education laced with the superstition of the traditional African life."

7.2 Introduction

Related problems in the modern society such us the growing gap between the rich and the poor and environmental quality decline can be attributed to the secularity inherent and accompanying Western scientism. These problems have become obvious and more acute for Africa in particular where they are often compounded. The Western science and its resultant western civilization as fronted by colonialism did set aside the structures of the traditional African society, while at the same time not providing structures to westernize the African completely.¹ John Mbiti probably had this in mind when he noted that colonialism merely uprooted Africans from their cultures, but did not transplant them.² Prior to colonialism, African culture had ensured a state of relative environmental equilibrium that assured survival in the cosmos.³ This cosmic state of equilibrium was sustained with the African traditional understanding of cosmic harmony.

The African world before colonialism often envisaged all things within and from without the physical world as spiritually connected.⁴ This was the essence of African science. This is of course when we consider that science is more than mere data that can be arranged into intelligible system. This study submits in this respect that science includes all knowledge whether physical or metaphysical. Science therefore is inseparable from culture, architecture, art, sculpture and even religion.⁵Every culture therefore has its own science which is part of its symbolic expression. It is in this way that this paper maintains that African science is an entity on its own right, and that African science as shaped by the African view of the cosmos has been part of the traditional mechanism of ensuring sustainable environment and life for the African people, and the general state of balance in the world. The African science as envisaged in the social system

¹ Ali A. Mazrui, *The Africans: A Tripple Heritage*,(London: BBC Publication, 1986).

²John S. Mbiti, African Religions and Philosophy, (Nairobi: Heinemann, 1969).

³Ali A. Mazrui, *The Africans: A Tripple Heritage*, (London: BBC Publication, 1986).

⁴ JNK Mugambi, "The African Heritage - Change and Continuity" in *The S. M. Otieno Case: Death and Burial in Modern Kenya*, Nairobi: Nairobi University Press, 1989.169-170.

⁵Maurizio Laccarino, Science and Culture European Molecular Biology Organization (EMBO) Reports, 2003 March 4(3) 220-2 <u>www.ncbi.nlm.nih.gov</u>/pmc aacesed on 20-06-2016.

had strong social prohibitions relating to all areas of human activity. The system mainly employed taboos for restraints.⁶

Recently, there has been growing global interest in the traditional Africa practices all which can be categorized under the general rubric of African Religion and culture.⁷ The interest has become urgent with the realization that, even though the foundation of human survival, wild species and habitat have continued to face huge risk of disappearing in Africa and the world in general.⁸ The lose is attributed to rapid population growth, inadequate local support for conservational policies, limited strategies for survival among local communities, and limited government policies to fund law enforcement operations.⁹ Yet, traditional Africa seemed to have had a way of mitigating these aspects as the renewed interest on traditional African practices may indicate. This renewed interest reflect a new found general approach of consonance in the treatment of the relationship between African and western science. This approach is supported in this study as conducive for a more fruitful engagement between the secular oriented western and sacred (religious) oriented African science. This approach has the potential to arbitrate between the secular scientific, and religious traditional African approaches, by discouraging religiously, and secularly dogmatic approaches from both the African traditional theologian and Western scientist respectively.¹⁰

Specifically, this paper submits that traditional African forms of social and spiritual prohibitions (taboos) could work in cooperation with modern western scientific methods to ensure respect and sustainability to both biotic and non-biotic environments. It is noted in this respect that, formal secular schooling in contemporary Africa is the first agency that stimulates young people to develop loyalties that go beyond the family.¹¹ The same loyalties link the young people with the wider social order. Specifically therefore, formal secular schools could provide the avenue where certain taboos are selected and incorporated in the school curriculum for the pupils often still in their formative stages of growth. This rationale has a general dual potential of enhancing traditional African spiritual connection with nature, while at the same time preparing the basis for future engagement with secular scientific knowledge as the students mature up.¹²

Margaret Mead and colleagues writing in the 20s and 30s on human growth and development have cautioned against drawing simple lines from child raring to adult behavior outcomes as the foregoing discourse suggests.¹³ Studies however are beginning to show that not everybody in the world thinks in the same way. In fact studies indicate that culture is a powerful force in determining how people process and interpret various pieces of information whether social or otherwise.¹⁴ It is in this later sense that this study envisages that the use of taboos as incorporated in formal secular school programs has a promising potential in transforming later life values to enhance sustainable resource use and conservation. This could contribute significantly to the realization of the desire for ecological and social sustainability of the environment.

In a nutshell, the main argument of this engagement is that, the unveiling of nature out of the spiritual traits, and the eventual emphasis of material aspect alone in addressing environmental issues as the approach of western science, has proved not to be a panacea for the environmental woes, and that the use of traditional African spiritual aspects such as taboos could contribute significantly to augment the secular scientific

⁶⁶See Joseph Osei, "The Value of African Taboos for Biodiversity and sustainable Development." *Journal for Sustainable Development in Africa*, vol.8issue 3, 2006. 42-61.

⁷Joseph Osei, "The Value of African...

⁸Joseph Osei, "The Value of African...

⁹Joseph Osei, "The Value of African...

¹⁰Ted Peters (ed.), Science and Theology: The New Consonance, (Oxford: Westview Press, 1978), 11-27

¹¹Fredrick Elkin and Gerald Handel, *Child and Society: The Process of Socialization*, (New York; Random House, 1960), 133-134.

¹²Kofi O. Agyakwa, "The Educational Wisdom of our Fathers," (Ghana: Cape Coast University Press, 1978). ¹³Richard Lansdown, *Child Development*, (London: Heinemann 1984).

¹⁴Erica Goode, "How Culture Moulds Habits of Thought," in New York Times, 8th August 2000.

approaches. This engagement would present the long overdue shift towards the incorporation of ethical values as opposed to the sole reliance on technical concerns as is the contemporary case with its secularbased scientism. Once more the dual character of reality of matter and spirit will have been re-established to help restore sustainable environmental conditions.

7.3 Of Science in General

Science is derived from Latin root 'scientia' which means knowledge.¹⁵ It is therefore possible to conclude generally that all knowledge is science. This may explain why science has been defined by others as part of all that knowledge that has been accumulated by society and passed down to succeeding generations.¹⁶ In the West it is passed down mainly through written records.¹⁷ In Africa it is mainly passed on in oral forms.¹⁸ Caution is advised to note that science is neither laboratory nor is it experiments; these are mere methodologies of science.¹⁹Throughout history science as a term has evolved in the West to mean deductive objective knowledge which can be manipulated, measured, and be proved empirically.²⁰Still it must be understood that science is more than mere data that can be arranged into intelligible system as it includes all knowledge whether physical or metaphysical.²¹ More often, the questions which concern scientists of a particular culture; the choice of the questions, method of framing the questions, method of thought of the questions, all are determined by particular preoccupation of people, and the way through which the universe presents itself to their understanding (their worldview). Some phenomena are regular while others are not. Western science often has the tendency to select as its subject matter those that are regular and then find out that it can predict their behavior. This however does not provide a basis to conclude that irregular and irrational phenomena often common in African science are trivial. To the contrary, both Western and African science demonstrate their validity through their utility and functional ability in various situations.²²

7.4 Western Science, Modernization and the Desacrilisation of Nature

Since time immemorial human beings have sought to understand the essence of the environment and themselves. One common explanation of the essence is the duality of soul and body; spiritual and organic forms. Ali Mazrui reflects this position of duality when he notes that in the beginning there was God and nature is the autobiography of God.²³ The perplexity of human nature continues to engage scholars in real terms, and even the advances in Western science have not changed this dualistic character of human

²³Mazrui, The Africans...

¹⁵See Maurizio Laccarino, Science and Culture European Molecular Biology Organization (EMBO) Reports, 2003 March 4(3) 220-2 <u>www.ncbi.nlm.nih.gov</u>/pmc accessed on 20-06-2016.

¹⁶See Maurizio Laccarino, Science and Culture European Molecular Biology Organization (EMBO) Reports, 2003 March 4(3) 220-2 <u>www.ncbi.nlm.nih.gov</u>/pmc accessed on 20-06-2016.

¹⁷See Maurizio Laccarino, Science and Culture European Molecular Biology Organization (EMBO) Reports, 2003 March 4(3) 220-2 <u>www.ncbi.nlm.nih.gov</u>/pmc accessed on 20-06-2016.

¹⁸See Maurizio Laccarino, Science and Culture European Molecular Biology Organization (EMBO) Reports, 2003 March 4(3) 220-2 <u>www.ncbi.nlm.nih.gov</u>/pmc accessed on 20-06-2016.

¹⁹See Maurizio Laccarino, Science and Culture European Molecular Biology Organization (EMBO) Reports, 2003 March 4(3) 220-2 <u>www.ncbi.nlm.nih.gov</u>/pmc accessed on 20-06-2016.

²⁰See Maurizio Laccarino, Science and Culture European Molecular Biology Organization (EMBO) Reports, 2003 March 4(3) 220-2 <u>www.ncbi.nlm.nih.gov</u>/pmc accessed on 20-06-2016.

²¹See Maurizio Laccarino, Science and Culture European Molecular Biology Organization (EMBO) Reports, 2003 March 4(3) 220-2 <u>www.ncbi.nlm.nih.gov</u>/pmc accessed on 20-06-2016.

²² See Maurizio Laccarino, Science and Culture European Molecular Biology Organization (EMBO) Reports, 2003 March 4(3) 220-2 <u>www.ncbi.nlm.nih.gov</u>/pmc accessed on 20-06-2016.

nature.²⁴John Habgood on Western science, and whose ideas on western science are largely reproduced in this section, has observed that, like many things in the Western civilization, western science began with Greeks, yet ironically the Greek thought in the in the Aristotelian form became one of the greatest enemies of western science.²⁵ The Greeks "believed" in reason, they "believed" that the world made sense, and they also "believed" that rational thought could discover secrets of the world.²⁶ This three-fold "belief" today constitutes the fundamental belief system of Western science.

How, and why, Western science as it is known today began in the 16th and 17th Century is very complicated. This took place in a form of revolution in which the relations between religion and the emerging Western science hitherto peaceful could henceforth be described as unsettlement, fear, controversy and one of precaution.²⁷ To some extent, this deteriorating relationship is to be attributed to the ideas and assumptions accompanying Western science which were often double edged as the Greek ideas before them. It is noted for example in this respect that Western science depended on mathematical models, yet too much mathematics derailed its development.

With renaissance in Europe, people's interest in nature was reawakened. There was a general stirring of the intellect and readiness to break away from traditions. One of earliest philosopher of Western science, Francis Bacon²⁸ (1561 – 1622 AD) pointed out that science could only advance through accumulating facts in large quantities. Hence facts rather than authority had the last word in science. Bacon however was naïve on the amount of facts. He was to be disapproved latter by Copernicus²⁹ who used the available facts to advance a hypothesis about the earth revolving around the sun. Prior to this hypothesis Ptolemy³⁰ had stuck to the common sense view that the sun revolved around the earth. Copernicus therefore merely saw the old facts in a new way. In view of the simplicity of his mathematical vision, a readiness to try a bold hypothesis, and the persistence in working a mathematical implication until it fitted facts, Copernicus has been considered the founder of modern Western science.³¹ Copernicus' hypothesis was published as a book in 1543 AD with preface by Osiander.³² The preface considered the book to be a mere mathematical device aimed at simplifying calculations about the sun going round the earth. Partly due to the disarming nature of the preface, and partly because Copernicus was already a dying man, the publication of his hypothesis did not cause as much stir among theologians as was expected.

Real crisis came in about 1610 AD with the newly invented telescope and a book on sunspots by Galileo.³³ Galileo insisted that Copernicus' theory was true in some absolute sense. This dealt a severe blow to Aristotelian conception of the universe. Henceforth Western science would be concerned with reality. While before only philosophy and theology were avenues for knowing the truth, from that moment onwards, Western science too could show the real structure of things. Western science in essence had invaded the church's own domain of thought and conflict was inevitable. Meanwhile Western science was engaged in reducing everything about the world to measurable aspects only. Aristotelian system had the problem relating to the amount of facts needed before generalization, while Bacon was wrong in thinking that facts by themselves was all that Western science needed. Galileo was to bridge the two deficiencies by demonstrating that the vital thing in Western science was to select and study the relevant facts in controlled experiments. Such relevant facts involved aspects that could be weighed and measured. English philosopher

²⁴J.S.Habgood, *Religion and Society*, (London: Mills and Boon, 1964),14-22.

²⁵Habgood, *Religion and Science*...

²⁶Habgood, Religion and Science...

²⁷Habgood, Religion and Science...

²⁸Habgood, *Religion and Science*...

²⁹Habgood, *Religion and Science*...

³⁰Habgood, *Religion and Science*...

³¹Habgood, *Religion and Science*...P24-26.

³²Jawaharlal Nehru, Glimpse of World History, (Oxford: Oxford University Press, 1934), 521.

³³Habgood, *Religion and Science*...

Lock had the same in mind when he categorized experimental aspects in terms of primary and secondary qualities of objects.³⁴Weights and measures fell into primary qualities and were the objective things, and so were the connections between them. Western scientific study realized shift in the study of 'reality' which emphasized efficient rather than final causality. This shift represents objectivity as it applies in the context of Western science. It is this type of objectivity as characterized by emphasis on what can be weighed and measured that is transferred to other areas of modern life and modernity in general.

An odd picture of reality is therefore presented in the phenomenon of modernity as a western phenomenon; a reality that is devoid of the traditional matter-spirit duality. Modern world has as a result become a world of colorless soundless, meaningless particles assumed by materialism.³⁵Herein lie the root of secularism of modern times in an almost atheistic rather than agnostic form. When all is said and done it must still be recognized that the riddle of modernity and indeed that of modern society with its inherent western scientism has remained a mystery to sociologists. Scholars like Herbert Spencer³⁶ and Max Weber³⁷ were pre-occupied in one way or another with causes and consequences of the modern phenomenon.³⁸Spencer tried to explain the conditions of morals as was occasioned by modern phenomenon. Weber on the other hand attempted a look at the origins of modernization in the reformations made in the protestant church. Two particular phenomena are however held to have had strong relationship with origin of modernization. These include the development of Western science, and the reformation of the protestant church, both in the Western Europe.

Western scientific inquiry introduced new assumptions about nature and society. The overall effect was the enhancement of people's capacity to plan their own wellbeing. This encouraged the assumptions that social wellbeing depended not on God's providence, but on rational social planning. Western secular schooling as a modern phenomenon and product of the same, could not escape the close association with the western scientism, and by extension the tendency to be devoid of the traditional matter- spirit duality.

7.5 Western Secular Schooling and the Environment

It is clear for Africa as it was everywhere else that colonial situation was the platform in which African world was incorporated into the modern world with its inherent westernism. This incorporation was neither on equal footing, nor thought out due to the Western world's superiority in arms and technique of economic life.³⁹ The superiority of the West in the two areas provides an explanation as to why from the onset of modern civilization in Africa, Africans had no option but to play to the tune of modernization, or else risk being left behind by a fast moving history. Consequently it has been noted that concepts and values that make up the content of the contemporary African culture has radically changed.⁴⁰ Unfortunately this appears to have happened without corresponding changes in the African framework of thought and reference. For example, in the traditional African setting, animal and plant life was preserved and survived because of its supposed kinship relations with the people. In the modern times however, survival of the same animals and plant life is left on the hands of armed guards. This is often against a monetary market

³⁹See Mazrui, *The Africans*...

⁴⁰See Mbiti, African Religions...216-228.

³⁴Habgood, *Religion and Science*...

³⁵Habgood, *Religion and Science*...

³⁶See Ochieng Ahaya, *Muslim Morality and A Changing World: Modernization and its Influence on the Muslim Youth in Mumias- Western Kenya*. (Saarbrucken Lambert Academic Publishing 2011), 79.

³⁷See Ochieng Ahaya, Muslim Morality and A Changing World: Modernization and its Influence on the Muslim Youth in Mumias- Western Kenya...

³⁸See Ochieng Ahaya, Muslim Morality and A Changing World: Modernization and its Influence on the Muslim Youth in Mumias-Western Kenya...

value placed on the same life forms; a feature which invites for the destruction of animal and plant life with a beckoning. A disconnect in view is presented as a result, between the traditional African view of animals and plants as individual beings, and the modern western informed view of the same as economic commodities. The environmental woes in Africa are partly attributed to this disconnect in view,⁴¹ and partly due to secularizing tendency in the field of education to match the modern times. The children are more vulnerable in the development of positive values due to the secularized tendency in educational system.

Specifically, mass schooling today marks one of the most fundamental shifts in parent child relationship not only in Africa but in the world as a whole. Contemporary children must spend considerable part of their lives in schools just to learn how to survive in the modern world. The extension of schooling in individual's life-spans and its expansion across the globe therefore has proved to be an irreversible tendency. We can submit at this point that the mass secular schooling as provided by modernity has interfered with the communication of traditional Africa that ours is a religious universe.⁴² The interference is seen in the parent-child relationship, and also in its significant role in providing the youth with symbols and doctrines of modernization. F Elkin and G Handel are therefore right when they note that secular schooling is often the first agency that stimulates young people to develop loyalties and sentiment that go beyond the family, and which link the young people with the wider social order.⁴³

The gist of this paper is that the western schooling culture that produced the secular world can be improved upon by the African taboo system to give the world a soul; at least in Africa where the same had safeguarded the delicate cosmic balance. At this point in time, borrowing the best from African taboo traditions, and Western modernity should provide the best form of development; progressive modernization that enhances loyalties and sentiments that ensure sustainable environment for generations to come.

7.6 Progressive Modernization on Education and Environment

The idea of progressive modernization informs this part of the study. Progressive modernization as a process entails a humble search for what is worthwhile in the traditional value system instead of discarding everything African as was done during colonialism.⁴⁴In the traditional African world view, human beings live in a religious universe; a universe where natural phenomenon and objects are intimately associated with God. Divinities, ancestors, spirits, human beings, animals, plants and other inanimate objects exist in the universe in a hierarchical order established by God.⁴⁵ The order is generally anthropocentric with the action of God and other spiritual beings directed towards the sustenance and wellbeing of human beings. Day and night, the seasons, the rhythm of life, the varieties, and chain of harmony are all attributed to God. It is immoral, and even sinful to upset the cosmic order, and this is tantamount to breach of harmony either in human society or in the lager universe. Robert Rweyemanu has reflectively observed in this case that Africans perceive as a moral obligation the need to collaborate with the ordered harmony in creation so as to preserve cosmic equilibrium. The collaboration was necessary for the orderly functioning of the God-given peace which guarantees, life, growth and survival in the world.⁴⁶

Traditional Africa therefore thrived on peace. This was not peace as conceived in relation to absence of conflict or war, but in relation to order, harmony, and equilibrium. Peace in this case was a religious value. It was a derivative from the order, the equilibrium and the harmony in the universe as divinely ordained. The obligation to maintain peace was religious. Peace was also a moral value since good conduct was

⁴¹See Mazrui, The Africans...

⁴²Mbiti, African Religions... 51-52.

⁴³Elkin and Handel, Child and Society...

⁴⁴ J. O. Agak and H. A. O. Agak, "Indigenous Education Among the Luo" in *Historical Studies and Social Change in Western Kenya: Essays in Memory of Professor Gideon S. Were*, 84-90.

⁴⁵45 Robert Rweyemamu, "Religion and Peace: An Experience with African Traditions," *Studia Missionalia*, 38, (1989).

⁴⁶46 Robert Rweyemamu, "Religion and Peace...

required of human beings if the order, harmony and equilibrium were to be maintained. People's wellbeing in the traditional Africa consisted of keeping in harmony with the cosmic totality. Things went well when people were at peace with the universe. When things went badly, it was an indication that people were somehow out of step with the cosmic order. A whole system of divination was there to assist human beings to discover the point at which harmony was broken, and how it could be repaired. The cosmic balance or equilibrium as it assured of peace also sustained the universe and the fullness of life in the traditional Africa. The taboo system policed the cosmos for this order. Taboos provided prohibitions against items, persons, types of behavior, or objects based on their ritualistic distinction either as sacred and consecrated, or as dangerous, unclean, and accursed.

Taboos as manifested in various cultures have stimulated extensive Western scholarly literature that has sought to compare, analyze, and explain them. Authors like Robertson Smith, James Frazer, Wilhelm Wundt, and Sigmund Freud dealt with taboos in one way or another. Sigmund Freud in Totem and taboo in 1913⁴⁷ related sexual taboos to sexual incest. Freud argued that such taboos were generated by ambivalent social attitude, and therefore in effect represented forbidden actions for which there nevertheless existed strong unconscious inclinations.⁴⁸Despite the extensive Western scholarly literature on taboo, there lacks a generally accepted explanation on taboos. There is instead a broad agreement that taboos current in any society tend to relate to objects and actions that are significant for social order. Taboos therefore belong to the general system of social control. Cassier is a representative of scholars who support this position.⁴⁹ He has observed that taboo system was the only system of social restriction and obligations in the early stages of man's development hence conceiving taboos in evolutionary fashion. Taboos formed the main corner stone of the entire social order, and there was no part of the social system of the early man that was not regulated and governed by taboos. This included relations such as between rulers and subjects, political life sexual life, family life, economic life, as well as relations between man and other forms of life.⁵⁰In spite of the extensive Western scholarly concern with taboos, African taboos were simply discarded as savage taboos in line with their inherent evolutionary tendencies in conception of issues that always confined anything African to the lower cadres.

Taboos in the Western view have been criticized as consisting mostly of don'ts as a result of which they have the tendency to make people passive and consequently conservative. Cassier particularly has castigated taboos as thriving on fear as a result of which they tended to make people superstitious.⁵¹ Viewed from a Western scientific perspective, 'superstition as used here implies a negation in the form of fear linked to the sacred category, and which can only seem to be improved by leaning towards the secular category. From the African perspective however 'superstitious' implies a positivism linked to the world beyond. Sarpong Peter in this latter category refers to it as the inner oracle, or the law of God written in man.⁵² A person is at peace when he obeys the inner oracle (his conscience). On the contrary, when a person disobeys the inner oracle, he lives in constant fear, especially the fear of manifestation of divine power. The Igbo express this in a Proverb; "... it is only one who has committed perjury who is afraid of thunder..."⁵³ Taboos

⁴⁷ Sigmund Freud in *Totem and taboo*, 1913

⁴⁸Sigmund Freud, *Totem and Taboo*...

⁴⁹Ernest Cassier, An Essay on Man: Introduction to A Philosophy of Human Culture, (London: Yale University Press, 1972), 106-108.

⁵⁰ Ernest Cassier, An Essay on Man: Introduction to A Philosophy of Human Culture, (London: Yale University Press, 1972), 106-108.

⁵¹Ernest Cassier, An Essay on Man: Introduction to A Philosophy of Human Culture, (London: Yale University Press, 1972), 106-108.

⁵²Peter Sarpong, "African Traditional Religion and Peace," *Studia Missionalia*, 38, (1989), 351.

⁵³Peter Sarpong, "African Traditional Religion and Peace," *Studia Missionalia*, 38, (1989), 351.

in the African tradition therefore operate on the principle of the inner oracle, and not empty fear (superstition) as presupposed in the Western sense.

African taboos are ostensibly mystical, and often employ personal explanations as they address the will of God. However what is seldom understood is that most of the taboos have underlying verifiable rational or logical explanations almost parallel to the Western scientific explanations. For example, incest taboos have rational biological implication. Joseph Osei has treated this area of African taboos in details in an article, "The value of African taboos for bio-diversity and sustainable development."⁵⁴ The article points out that taboos in traditional African worldview are not metaphysically closed. They remain traditional yet still open to modifications, deletion, supplementation, or even new interpretations to meet compelling existential circumstances such as the case of environmental degradation. For example, Boateng in Ghana employed this feature when he instituted a taboo against sex with school girls which was successful.⁵⁵ Taboos in the traditional African worldview are also epistemologically open. That is they are not absolute and external. In the contrary, they are flexible, and are affected by compelling situations. The ultimate vardstick for evaluating the most compelling situation in the African community is the wellbeing of the society. For example, among the Luo of Western Kenya, it is a taboo for a man to see the nakedness of the mother in law. Yet, compelling situations such as a medical emergency may force a medical doctor to break this taboo to treat, and save the life of a mother -in-law.⁵⁶The potency of African taboos to preserve the environment can also be seen in the cyclical nature of traditional African worldview. African worldview operates on a delicate balance in which the consequences of breaking a taboo are believed to be there and then, instantaneous, and automatic. Traditional Africa did not operate on a linear future where omissions and commissions of today would be punished with the possibility of forgiveness in the future. As a result, it can be argued that, impunity is alien to the traditional Africa. The lack of impunity, the metaphysical and epistemological flexibility associated with taboos, together with the instantaneous nature of the same taboos in traditional Africa made them a serious source of moral guidance, and motivation for social order and hence of value in education.

7.7 Childhood Taboos, Education and Environment

Animals and plants constitute human food and sustenance. The importance of animal and plant life is obviously great. To a large extent this explains why the African worldview has many associations with animal and plant life. So is the association of God with natural objects and phenomena. The African understanding of God is strongly colored by the universe of which human beings themselves are part.⁵⁷ This also makes meaningful the presence of special type of African taboos dealing with the general area of environment. In general these taboos are intended for the regulation and the ethical utilization of the environment in view of its resources for the ecological and sustainable development. Further in this category of taboos relating to environment, were those relevant for childhood development. Common taboos in this category included: Taboo against urinating in the source of water e.g. in a stream; Killing of a frog; (frog and toad were all one and the same thing); Killing of caterpillars- hairy larval stage of many insects; Killing of *Ochwinjo* bird; a Luo of western Kenya name for a particular black and white bird that is very common in homesteads; the killing or close association with the chameleon; refusal to share what food you had; and throwing away excess or extra food. There are many others in different societies.

The most serious consequence of violating these childhood taboos was often related to the mother figure in one way or another. For example killing of a frog, or killing of *ochwinjo* bird were all linked to mysteries relating to the mother such as her suffering from a mysterious breast disease, sometimes her very own death,

⁵⁴Osei, "The Value of African...

⁵⁵See K. Boateng, "African Indigenous Education: A Tool for Intergenerational Communication," in *African Culture: Unity of Rythms*, (London: Greenwood Press, 1985), 109-110.

⁵⁶Interview with Oginga Alande - A key informant and an elder of the Luo community of western Kenya.

⁵⁷See Mbiti, *African Religions*... 48.

or a mysterious fire that blazed her entire hut to the ground. Less obvious about these taboos was the given special bonding between the mother and their children in traditional African societies. Children were breastfed for more years in these societies. The possibility of causing harm to one's mother for most Africans therefore was the worst case scenario for the child. Urinating in a source of water risked a frog drinking the urine, and this could affect one's skin so that it looked like that of a frog so they said. Killing of a chameleon also met with the same fate. Killing of a caterpillar was believed to invite many more caterpillars to the house. One risked losing an arm if one did not share food in particular. Throwing away food rather than preserving it for the following day was considered the sure way of experiencing a lot of poverty related hardships in future.⁵⁸

Close analyses of the childhood taboos in the traditional Africa indicate that creeping animals feature more. Compliance with these taboos provided immediate environmental gains in terms of ensuring co – existence of people with the other forms of life. A general study with some African adults interviewed in this study showed for example that frogs as the subject of taboo occurred cross-culturally among the Abaluhya and the Luo of Western Kenya. The Killing of frogs was believed by the children to affect, or even cause death of the mother. Of more interest was the connection between these animal life preserving taboos, and the development of later life values in relation to respect for life. For example, it was apparent that people who grew up respecting the taboo on frog killing experienced some difficulties with regard to killing frogs in the later adult life. This can be interpreted variously. One possible interpretation is that taboos in traditional Africa did not just play the role of social prohibition, but also provided a means of instilling societal values. In this way, whether looked at as superstitious, or oracle of the heart, childhood taboos inculcated the positive values most of which were relevant for environmental preservation in the later life.

7.8 Taboos and Traditional African Education

Based on the above observation on taboos for children, it can be argued that traditional African education respected growth and the developmental stages of young people. This education was inseparable from other segments of life in the community. This was education to be acquired as well as to be lived, and it was a lifelong process of socializing and enculturation. The traditional African education prepared to youths for responsibility in society as adults in their communities. This explains why African traditional education has been described as, "…the sum total of experience which mould the attitudes and determine the conduct of both the child and the adult…"⁵⁹Unfortunately African traditional education as one of the goals of the educative process.

It is observed that Western education and schools are the media of promoting western culture, and that the same education and schools do not encourage indigenous education. Boateng expresses the same sentiment when he writes that the introduction of Western education has often been a hindrance to the process of cultural transmission.⁶⁰In fact, it is held in some quotas that the western education indoctrinates against the Africanness itself. It leads to the development of self-hate for anything African, and the despising of the native African culture whole heartedly. History of Western education in Africa is closely related to the general colonial period, and the period after it as the article "Education since early times" by J. E. Otiende in *Themes on Kenyan history*,⁶¹ confirms. Colonial government generally favored and supported Christian education. Apart from teaching Christian religion, Christian mission education also offered industrial education necessary for producing African labor for the emerging Western type of economy. We can therefore submit that colonial education under missionary cooperation piloted a scheme where African

⁵⁸Interview with Oginga Alande...

⁵⁹Agak and Agak, "Indigenous Education...

⁶⁰Boateng, "African indigenous Education...

⁶¹J. E. Otiende, "Education Since Early Times," in Themes in Kenyan History, (Nairobi: E. A. Educational Publishers, 1990), 145-156.

education was towards Christian religion and practical subjects.⁶²Post-colonial or independence educational policies were at best reactionary. The new African governments sought to resolve educational difficulties arising from implantation of alien systems. Attempts were also made to make education relevant and appropriate to the developing countries.

The case of Kenya is cited here. In this country the major resolutions of post-colonial educational difficulties always took form of appointment of commissions on education. Prominent commissions on education included Ominde Commission of 1964,63 Gachathi Commission of 1976,64 and the Mackay Report of 1981.⁶⁵ Ominde Commission for example had to come up with new educational policies that included tailoring education to realize man-power needs of the country, equal distribution of income, and fostering of national unity.⁶⁶ The Gachathi Report was overwhelmed by events following the Mackay Report that saw the introduction of 8-4-4 system of education in Kenya as a relevant and appropriate measure to the challenge of national development. The 8-4-4 system had a practical and technical bias.⁶⁷

It is however ironical that the more the post-colonial educational policies were reformed in Kenya and in Africa in general, the more they resembled those of the colonial period. The post-colonial educational policies in Africa are heavily laden with western empiricism and practical orientation. The advice of progressive modernity,⁶⁸that involves combining of the best of the past and present, as earlier expounded in this paper, is often missed out totally. Yes, the western education so implanted has liberated Africans from the burden of "superstitions," but is the continent not wreathing with the curse of ancestors in the form of 'parts that do not fit' as a result?

7.9 African Taboos and Western Education: The Main Argument Towards Integration

Agyakwa in a doctorate of philosophy dissertation, entitled The Educational wisdom of our fathers, has pointed out an epistemological gap between western and African ways of knowing.⁶⁹He distinguished between the western scientific method of knowing and the traditional African method of knowing. Agyakwa has argued that it is easier for African students, used to personal explanation as is characterized by African taboos, to understand western scientific explanations of phenomenon if the personal explanations are used as stepping stones to western scientific way of knowing. In which case western scientific education should not be used to eliminate a great deal of superstition as is often the case when it explains natural phenomena in terms of the natural as distinct from the super natural.⁷⁰It is in the version of this later approach that the very western scientific ways have been unable to come to terms with the environmental woes in Africa. It is therefore the main argument of this paper that it is in fact the superstitions of the traditional African ways of knowing that can add value to the western scientific ways to ensure effective environmental conservation. Western scientific ways can effectively provide the technical aspects for environmental conservations while the tradition African ways can provide the ethical and spiritual aspects of the conservation. It is with this in mind that this study proposes a potential solution in the form of introducing selected childhood and environmental related traditional taboos in the early childhood education so as to explain natural phenomenon from a super natural perspective. The aim of this is to enhance the development of positive later life values with regard to respect for, and conservation of the environment. It is only after

⁶²J. E. Otiende, "Education Since Early Times...

⁶³J. E. Otiende, "Education Since Early Times...

⁶⁴J. E. Otiende, "Education Since Early Times...
⁶⁵J. E. Otiende, "Education Since Early Times...

⁶⁶J. E. Otiende, "Education Since Early Times...

⁶⁷J. E. Otiende, "Education Since Early Times...

⁶⁸see J. O. Agak and H. A. O. Agak, "Indigenous Education Among the Luo" in *Historical Studies and Social Change* in Western Kenya: Essays in Memory of Professor Gideon S. Were, 84-90.

⁶⁹Agyakwa, "The Educational Wisdom...

⁷⁰S. O. Awokoya, "Science Education in Africa," (Watertown: Endicott House, 1961).

this stage that the young people should embark on western scientific studies that explain natural phenomenon in terms of the natural. In this way, traditional African taboos will not be treated as mere stepping stone, but as partners hence adopting a position of hypothetical consonance in the relationship between western scientific and religious approaches in the realization of future sustainable environment. Both, the African theologian (traditionalists) and western scientists must avoid their respective dogmaticism so that the result of their engagement is a unique phenomenon that is functional in the African context; "Western science laced with the superstition of the traditional African life". After all the frontiers of the 21st century western scientific investigations are slowly coming to terms with this reality as is exemplified by quantum physics. The previously large gap between religion and Western science of the18th, and 19th has since reduced under the 21st century Western scientific discoveries.⁷¹

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⁷¹See Jean Piere Lonchamp, *Science and Belief*, (London: St Pauls, 1903).