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AFRICAN COSMOLOGY AND ONTOLOGY

I shall attempt in this paper to expose and analyse the ancient African Ontology and Cosmology. It is not a critique as such but an exposition. I intend to analyse African myths about God as well as the concepts of myth. Finally I shall examine the relationship between African cosmology and the unified field theory.

A discussion on African cosmology and ontology will invariably border on an aspect of the totality of African Culture or philosophy. The Chambers's twentieth century Dictionary defines Cosmology as ' the Science of the universe as a whole: a treatise on the structure and part of the system of creation" The same dictionary defines ontology as "the Science that treats of the principles of metaphysics...the nature and essence of things". Ontology is a central part of metaphysic. It borders on questions like: "Does anything exist necessarily? Is it necessary that something, no matter what, should exist?"3 It concerned with the existence of material objects, minds, persons, universals, numbers, facts and so on. The question of the existence of God, the Supreme deity, has over the years bordered on ontology and cosmology. The cosmological argument for the existence of God is the one that argues from the nature of the cosmos or universe. In the history of western philosophy, cosmological argument for the existence of God is believed to have originated with Aristotle. The ontological argument for the existence of a Supreme deity was a pre-dominant intellectual

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question in a whole spectrum of ancient Greek philosophy. It argues that God exists necessarily. When Xenophaness, in ancient Greek period, was mentioning God, he was referring to Him as a necessary being. And the Supreme deity in Socrates' world of forms called 'Demiurge' is a necessary being. In medieval European period, some great thinkers like St. Thomas Aquinas, St. Augustine and St. Anselm devoted greater part of their intellectual activity to proving the existence of God ontologically. It seems that the first intellectual and philosophical preoccupation of man on earth was to wonder and cogitate on why and how he came to the universe; how and why there exists the universe; how the universe will probably come to an end; and who was probaly the author of all existence. It was not only the Greek philosophers, as recorded history tells us, that bothered themselves with these questions. People of other races in ancient times approached these issues in consonance with their cultures. The African medicinemen, Herbalists, Priests, diviners, hunters, warriors and so on were preoccupied with these questions especially when trying to improve on their vocations. They had always found answers to these questions, for they were not agnostics. They believed that without spiritual guidance, their work and tools would come to naught.

To be mirch African cosmology and ontology and to hood-wink inquiring minds from understanding the people of Africa, some writers and scholars have derogatively described African religious practises, ceremonies, feasts and festivals as paganistic, Heathenistic, Idolatrous and Animistic. Paganism and Heathenism are sociological terms which are unfit to apply to Africa. A 'pagan' is somebody who lives in a village But it is not only the Africans that live in villages. Although ironically, village has been used derogatively to describe Africans' homes in the country side. 'Heath' means a dirty place or a dump

Hill where vagabonds or out-lawed live. Africa is likened to this, so they described their religion as a heathen religion. The other term 'Idolatry' is derived from Idol. An Idol means a toy or an image. When the whiteman came they saw a lot of images and thought that Africans worship those images. But to Africans these are meant for concentration. Animism means the belief in the existence of spirits. The term Animism "can be applied to Igbo philosophy and Religion and Africa at large, not because they worship or revere empty objects, but because they believed that behind every human being or object there is a vital power or soul". Africans personify nature because they believe that there is a spiritual force residing in every object of nature. This is why the African religious practises, feasts and ceremonies cannot, in any way, be equated to magical and idotatrous practices or fetishism.

Whatever may be the origin or culture of a people, it would be sheer dishonesty and prejudice to deny their philosophy. According to Geoffrey Parrinder, "To say that African people have no system of thought, explicit or assumed, would be to deny their humanity...". Religion permeates every aspect of the lives of the Igbos. No wonder why Parrinder observes that "the Africans were incurably religious people".

Ontology

African ontology, according to J. S. Mibiti, is religious one. It is anthropocentric ontology in the sense that everything is seen in terms of its relation to man. Africans believe that everything that exist is a force and that none of them exists in Isolation. These forces are interrelated. "From the beginning of the world, it is assumed, there has existed a life-force, created by one God which is always active, spread throughout the universe, dispensed to all animate life-forces, man, animals and

plants, sometimes communicated to things which we consider inanimate". Tather Tempels calls this life-force 'Vital force'. while Edwin Smith calls it dynamism. Dynamism means "The belief in, and the practices associated with the belief in hidden, mysterious, supersensible, pervading energy, powers, potenat forces". 8 I would call this force the "Spiritual essence". Whether it is called 'Vital force' 'dynamism' or 'spiritual essence' it means the same thing In some parts of West-Africa the Europeans have translated the word 'Nyama' to mean energy, power, vital forces, or spiritual essence. "Nyama is often conceived of as impersonal, unconscious energy, found in man, animals, gods nature and things". 10 Medicine-men have a tendency to recognise the inner quality or power which is enshrined in a root or leaf of a tree. Medicine-men, wood carvers, blacksmiths, hunters, orators, priests and chiefs are believed to possess this power in some special degrees.

God is the Great life-force which informs and controls other life-forces. A life-force, according to K. C. Anyanwu, is possessed by a whole pantheon or mythical forces (ancestors, water spirits, divinities) that are bound up with the everyday life of the Africans. "God, divinities, ancestors, men, animals, plants, words, knowledge etc., are life-forces, though each possesses certain characteristics peculiar to its nature than the other of hierarchy". 11 The Supreme being is above all other forces. He is often considered to be so remote that men do not pray to him directly always But in times of distress many Africans turn to Him directly. His is the final arbiter. "The power of God is Supreme; all flows from him and inheres in him; Godlings and ancestors are intermediaries; prayers are offerings made to them which may be passed on to the sources of all "," According to John S. Mibiti, God is the ultimate explanation of the genesis and sustenance of both man and all things.

According to Parrinder, God is the originator and sustainer of man; the spirits explain the destiny of man. Man is the centre of this ontology; the Animals, Plants, and natural Phenomena and objects constitute the environment in which man lives, provide a means of existence and if need be, man establishes a mystical relationship with them.

There is need for a harmonious relations between God, Spirits, Man, Animals, Plants, phenomena and objects without biological life. A destruction of one of the categories will alter the cosmic balance and destroy the whole This is the root of African wholism or political philosophy (communalism).

In addition to the five categories there is a force, power of energy permeating the universe. God is believed to be the source and ultimate controller of this force. Spirits also have access to some of the powers. Some human beings have the knowledge and ability to tap, manipulate and use it. Such people are the medicine-men, preists, reinmakers and so on. Some use it for the good of the community, while some others use it in bad faith.

Ontologically speaking, Africans have no doubt about the reality of space and time In Africa, especially in Bantu thought, space is used to locate existents and time is used to measure duration. Generally speaking, Africans also believe in what Alexis Kagame calls modal beings. According to him, these are entities which, by their nature, are incapable of independent existence but, like quantity and quality, have to be attached to substantive-beings or which consist essentially in relationship between two beings (relation, possession, position etc.). In Africa, evil does not seem to have a substantive existence. It might, therefore, belong to this category of beings in African ontology.

In some parts of Africa there is the belief in great pantheon of gods which resembles the Greek, Egyptian, Roman and Hindu pantheon of gods. "Many of these gods are the expressions of the forces of nature, which men fear or try to propitiate". ¹³ These gods have temples and priests.

All Africans believe in the cult of Ancestral spirits and Reincarnation. In African thought both concepts are logically and necessarily tied together. Ancestorship arose out of the people's belief in reincarnation. In western philosophy, the duality of man was emphasised in the work of Plato, Manichaens, Rene Descartes and so on. Here, man is believed to be of composite nature, that of having body (physical) and soul (spiritual). In African thought too, a human being is believed to be dual. It is duality of man that gave rise to the idea of life after death. In all African myths of creation, it is believed that the Supreme intelligence imparts some parts of himself to man. And this is the spiritual essence or the soul. The idea is that at death the physical body returns to earth while the spiritual essence survives the physical body and continues to live on. Africans, therefore, do not doubt the existence of life after death. People claim to have seen their beloved ones who had died sometime ago either while in dream state or in the state of trance. There are stories of people who fell into coma and who woke up to narrate their experiences in the spiritual realm. In Africa, some people claim to have seen their departed mothers or fathers. It is also believed that when a person dies. his spiritual essence visits the beloved ones in distant places and will hunt where they have worked and lived when they were alive It is the above understanding, among others, that gave rise to the cult of ancestors. An ancestor is, therefore, somebody who lived on earth, died nobly and would have received the blessing of Supreme being, God. He should have left children behind to remember him as ancestor. The ancestors are among the numerous powers in the Subterrenean world which men fear and propitiate before resorting to the Supreme intelligence, God

In every African society, the ancestors are regarded as the cohesive factor between their off-springs and other spiritual forces. The social life of very family hoves round the cult of the ancestor or the ancestral shrine. Some disputes within the family are settled before the spirits of ancestor. Before a daughter is sent out for marriage, rituals are performed within the ancestral shrine and a new wife brought into the family is incorporated into the fold with some ritual performed in the ancestral shrine Ancestors are believed to be capable of protecting their off-springs. They are also believed to be capable of punishing the disobedient ones. They frown seriously against activities such as stealing, lying, poisoning which are capable of causing disharmony in the ontological coherence of the society. Ancestors protect good and innocent members of the society. They also punish the wicked ones.

In African thought, Ancestors are venerated with some rituals. Sometimes this veneration may amount to worship. But this kind of worship is not the same with the worship of God, the Supreme deity. Africans do not put ancestors and other spiritual forces on the same pedestal with God.

The relationship between all spiritual forces and God is represented by a triangle. According to Parriender, at the apex is the sky, which symbolizes the Supreme power from which all life flows and to whom all returns. The base represents the earth which is often personified as a goddess. The earth is very much revered in Africa as the producer of food and the burying place of his dead. One side of the triangle represents the

ancestors. Among ancestors are dead kings, and chiefs who are potent to help or harm. On the other side of the triangle are gods, or natural forces, "which must be propitiated lest they become angry at neglect and cause the seasons to fail". In African philosophy, God is the highest ontological and necessary being.

Cosmogony

Cosmogony is defined by Chambers's dictionary as "a theory or a myth of the origin of the universe." It is, therefore, part of a people's world view or cosmology.

A people's world-view influences their ethics, social organisations, arts, science and so on. T. U. Nwala writing on the philosophy of the Igbos of Nigeria says, "Igbo world view or cosmology consist of two basic beliefs, the Unity of all things and an ordered relationship among all beings in the universe". Igbo world-view is also to the effect that gods and men live a symbiotic life, one of muthal and reciprocal relationship. Men feed the gods and the gods provide heath, fertility of soil and reproduction". If

The world view is the public aspect of the ancient African philosophy which, according to William Abrahm, should be distinguished from the private aspect in discussing African philosophy. The public can be said to possess simple "Knowledge which is regarded as only a begining in the understanding of beliefs and customs and some individual elders can be said to possess deep knowledge". These individuals that possess deep knowledge are the Paul Radin autochthonous intellectual class (elders, diviners, priests, titled men and so on) who are continually establishing standards and reviewing existing ones.

Africans recognise and acknowledge the existence of a supreme being. There seems to be the belief that God is created from nothing and at other times from an already existent primal matter. There are different versions of the myth of creation in different African communities. Among the Igbos of Nigeria, the NRI Corpus of tradition says that the founding father of this community ERI and his wife NAMAKU were sent down from Heaven by CHUKWU, the Igbo Supreme God It is said that when ERI came down from the sky he sat on an ant-hill as the land was waterlogged. When ERI complained, CHUKWU (God) sent an Awka blacksmith with his bellows, fire and charcoal to dry up the land. "The Awka blacksmith came and performed his assignment. ERI and his people were fed by CHUKWU on substance from the back of the sky. During this period, men did not sleep. When the special food ceased to exist and after the death of ERI, his first son NRI made supplication to CHUKWU who ordered him to kill and bury in separate graves, his first son and first daughter. NRI complied with this order in consequence of which after three weeks yam grew from the grave of the son and cocoyam from that of the daughter. When NRI and his people ate these they slept for the first time". 15

E. G. Parrinder has an encyclopedia of myths of creation collected from various parts of Africa in his book, Africans' Three Religions. These include myths from Mali, Yoruba of Nigeria, Ashanti of Ghana. The Dogon of Mali and upper delta believed that God called AMMA first created the sun and moon. The earth was made from a lump of clay which was thrown into space where it spread out like a body lying face upwords. God (AMMA) was said to be feeling loneliness and so sought union with the earth. He had to excise its coteries which was like a termite hill. This myth is used to justify female excision. 19

Among the Yoruba of Nigeria, Olorun, owner of the sky lived in heaven with other divinities. Under the sky was a waste marsh without solid ground, where divinities sometimes came

down to play and hunt. According to Parrinder, God called a divine agent, ORISHANIA and gave him a snail shell filled with soil in pigeon and a hen, and sent them down below. When the soil was poured out on the marsh the birds scattered it about till earth was formed. The first place of the appearance of solid ground was called IFE which means 'Wide' (and this is the cite of the town ILE-IFE, the most sacred city of Yoruba land). In Yoruba tradition, too, it is believed that God shared the work of making man with Orishania, leaving him to mould men out of clay but reserving the breathing of life into them to himself.

There are also some myths about the origin of man related by J. S. Moisi in his book, African Religion and Philosophy. Among the Ashanti of Ghana it is said that on one Monday night a worm made a hole up through the ground, and from it emerged seven men, some women, a leopard and a dog. These men were said to be afraid at the sight of the earth but their leader Adu Ogyinae, laid his hands on them and calmed them on Tuesday. But on Wednesday, he was killed by a falling tree when they were building huts. Then the dog went out to look for fire and they cooked food. Finally, they met God of creation and he took one of these pepople as his helper. Annual ceremonies are still held to commemorate these first people.

According to Zulu myth, the first man and woman came out of a reed and the Thonga of Mozambique say that a read exploded and men emerged.

A malagacy myth says that God first made two men and a woman. One man carved a woman from wood and talked to it. The second man came across the image and covered it with clothes and jewels. Then the woman saw the image and took it to bed with her, so that it came to life and became a beautiful woman. Then the two men arrived and quarrelled over the two women

God intervened and said that the first man was father of the girl and the women its mother, so the second man should marry the girl. The first man and woman also married and the two couples are the parents of all mankind.

To most Africans, death is thought to be unnatural. It did not exist among men at the begining but it was due to the fault of some Creatures like animal. Sometimes it is blamed on witches, sorcerers and black magicians. According to Parrinder in Africans' Three Religions, the Keno of Sierra-Leone say that God told the first man and woman that they would not die for he would give them new skin. He sent these in a bundle carried by a dog. The dog was said to have delayed on the way and foolishly told other animal what was in the bundle. The snake had knowledge of this and stole the bundle, sharing the skins with his relatives So the snake changes its skin and does not die, but men die and try to kill snakes.

A Zuru story blames the chameleon for coming too slowly with the meassage that men would not die; for it stopped to eat fruit on the way, God sent the Lizard later with the message of death, he arived first and men accepted its word before the chameleon came along.

In the land of Buganda the explanation of the arrival of death comes in the long stories of the first man, Kintu and his wife Nambi whom he fetched from heaven. When the married couple were returning to earth the king of heaven, Gulu, warned them not to go back for anything. But Nambi forgot grain for her fowls and returned to get some. Her brother, death, followed her and lived with the couple on earth. He asked for one of their children as cook and when they refused he killed it. Other children died and Kintu went up to heaven to complain. Gulu told him it was Nambi's fault but after some pleading he sent another

brother, Kaizuki to stop death killing the children. Kaizuki told everybody to stay at home while he hunted for death, but some children went out with their goats and death has lived on earth since then killing whom he can and hiding in the ground.

Africans believe that the almighty is in a distant sky and could not be approached directly. Antiquated views about African conception of God have, because of this, held that African God is a remote one and uncertain. This is not true. God, though has retired to a distant place, is a reality in African society and is certain. Various myths in Africa tell us that God once lived among the people until man, I suppose, misused his free-will.

In Igbo community of Nigeria, it is believed that God (CHUKWU) once lived with the people. But while a woman and her children were cooking, she had a dirty hand which she inadvertently cleaned on the sky wall. God was said to be annoyed and so retired to a distant place. The multi-coloured nature of the sky today is seen as the reflection of the dirty hand of the woman. 20 There is a similar story among the Mende of Sierra-Leone related by Parrinder in his book African Traditional Religion. The Mende people say that God once lived in a cave and invited the animals to come in pairs but forbade them to touch his food. Unfortunately, the cow smelt the sweet smelling food and ate some. Immediately God siezed the animal and threw it out of the cave. All the animals including man sinned and suffered the same fate. So while animal and man wander about searching food, God watches them from above. The Ngombe of Congo, according to Parridder, say that men used to live in the sky, but one woman became such a nuisance that God lowered her down from heaven in a basket with enough seed for herself and her children.

In discussing the activity of God in the African world, we cannot allow our memory escape us with the fact that the idea of reincarnation is very vital to African world-view and that it could not have been possible without God as the highest force and controller of all forces. The idea of reincarnation is common to many religions including African Religions. Hindus, Buddhism and Jainism But there are subtle differences among their various conceptions of reincurnation. The idea of punishment in hell and reward in heaven in Christianity and the idea of rebirth into a higher or lower state in Plato and Indian belief are missing in African thought. The Indian attitude is worlddenying while African attitude is world-affirming. In Africa, "It is, therefore, a punishment to be detained in Hades and childlessness is a curse because it blocks the channel of rebirth, All the dead return to the earth, except perhaps certain ghosts that have been captured by Sorcerers' 21. The belief in reincarnation is, therefore, very prominent in Africa. It is believed in some areas that the number of souls created by God is limited. These souls continuously reincarnate into subsequent generation after they must have left the earth, except perhaps some of them have been captured by Sorcerers or black-magicians. The rebirth of souls accounts for the family resemblances in African families. In isolated cases, a father can reincarnate into his grand child while alive. In that circumstance, the father should not see the new child till his death. This is because, according to Igbo traditation of Nigeria, if the father sees the child, the child will die and the grand-father will continue to live.

In African idea of reincarnation, the soul or spirit of a departed one can reincarnate into more than one entities or children. It does not seem to me that there is any logical or conceptual difficulty here. The spirit of an ancestor can manifest itself in

more than one child. This is perhaps because just as God, the Supreme deity, manifests himself through Spirits, gods and divinities, the ancestral spirit, a Superior being to man, can influence more than one child. "The reborn soul may be that of a paternal or maternal relative, according to the system of patrilineal or matrilineal inheritances in force in the clan. Great efforts are devoted to marriage arrangement to ensure that there is proper affinity, so that tradition may be followed and the ancestors reborn" 22.

It is very patrinent to understand the difference between reincarnation and transmigration or metempsychosis in African thought. Transmigration or metempsychosis means a possible change into animal form. Some communities believe that after death, some people can transmigrate into beasts, leopards, pythons and so on That is why some of these animals are treated with honour whenever they are found dead. But the most popular belief about transmigration in Africans is that it is in the wicked power of the socerers and black magicians to assume the shape of an animal. So transmigration is far from the concept of reincarnation. In the cluster of forces involved in reincarnation, God is the greatest and controller of all of them.

Myth And Science

Attempt shall be made to elucidate, to a reasonable extent, the term myth. A culture that currently believes in myth is swiftly dismissed as still primitive. Myth is regarded as a mode of thought of antiquity and pre-logical people Ancient African thought and the thought of ancient people of Egypt, Sumeria, Greek Romans were densed with mythology. If this mode of thought was peculiar to early civilizations, what is its significance? Is African mythology of any social or religious value to the communities? Philosophy and science are believed to be a more

advanced and rational mode of thought than myth. Can man live and comprehend the universe without falling back on myth? Is philosophy or science completely devoid of any iota of mythological element. Africa was not the only race that wallowed and lived on myth as we have observed above. There may be wisdom in the myths of ancient African people especially with regard to the Supreme being.

Let us start to examine the concept of myth from dictionary point of view. According to Chambers's 20th century dictionary, myth "is an ancient traditional story of gods or heroes, especially, one offering an explanation of some fact or phenomenon: a story with a vailed meaning: mythical matter: a figment: a commonlyheld belief that is untrue, or without foundation dictionary definition of myth is replete with controversial propositions. Some anthropologists and philosophers would not agree with the dictionary contention that myth only relates the ancient story of gods and heroes. The function of myth goes beyond that. Some believe that it concerns legends, folktales and stories of past events, not necessarily with regard to gods and heroes. In fairness to the dictionary it could be a mythical matter, a figment, an unconsciously held belief but which renders explanation of social consciousness But that does not mean that it is untrue or lacks foundation. Even if it is dream like, yet some dreams are reflections or replay of man's experiences in his daily life. The mythical divinity or god, SHANGO in Yoruba land in Africa, was a mortal being who lived a life of extra-ordinary dimension. He is believed to have caused fire that burnt him and his family among other things. He was thereafter elevated to the status of a god with stories about his life narrated and handed down from generation with mythical tones. In short, he was a historical figure which later became a mythical figure. With this, can one say that the myth sorrounding the god, SHANGO lacks foundation or is untrue? Granted that some stories could have been unconsciously invented to further mystify the person of SHANGO, yet the foundation and true value of the myth is that SHANGO was a historical figure whose achievements and actions were witnessed by some mortal beings during his time. The Ibo of Nigeria and Mende of Sierra-Leone stories about the Supreme being could also be defended on the basis of this analysis. But they could neither be true or false. African myths of creation cannot therefore be dismissed without good and empirical reasons.

Myth, espically in African thought, is basically religious, and because it influences every aspect of African life, it is a social phenomenon Myths are associated with religious beliefs and feelings. Therefore, it is, more often than not, accompanied with rituals. It is hardly distinguishable from legends or folktales. According to Malinowski myths are sacred tales that accompany rituals. Similarly E. R. Leach described myth as the counterpart of rituals: 'myth implies rituals, ritual implies myth, they are one and the same..." Myth is a statement in words, while ritual is a statement in action. In most cases, rituals accompany African beliefs in God and gods. But rituals associated with African beliefs in gods more often than not ultimately belong to the Supreme being.

The role of individuals in the world of myths cannot be overemphasised because myths cannot exist without them. In African thought, man lives in a mysterious universe. The gods and spirits have to be consulted, respected and appeased always to ensure and enhance life "In polytheistic religions, it is natural that gods (whether anthropomophic or theomomorphic or mixed), since they are distinct individuals, will have relations with each other, and often with humans also, and that these relations will tend to find expression in continuous narratives; the most successful of these will tend to become traditional and so be classified as myth "26.

The early man feared and appeased the gods and forces of nature who were the custodians of public morality, law and order, with myths as the vehicle of transmission from generation to generation. According to Vicco, in his theory of history, the beginning of civilization occured in 'the age of gods' when men live in families and center their lives around religion, marriage and the burial of the dead. This period is followed by the 'age of heroes', the age of democrotic republics. This is the age of rational inquiry. In the age of gods and heroes, myths and poetry express the vulgar wisdom of a people. According to Vicco "only from mythology can we discover the religion, moral law, and social life of early society. Myths are not false narrative, nor are they allegories. They express the collective mentality of a given age" 6

Some parapsychologists have the tendency to equate myth to dream. They say that it operates as unconscious phenomenon. For example, Jungian approach to mythology rests upon the belief in a common human access to collective unconscious. According to him, inspite of the developed rational nature of man in modern times, he still encounters in his dream the same figures that appear in ancient and primitive mythology. African mythology, whether dream or collective unconscious, sometimes reflects the hierarchical or sociological order of the mundane society. According to Claude Levi-Straus, the structure of myth exhibits formal properties which parallel formal properties exhibited by kinship system and sometimes the linguistic structure. He says that myth exhibits binary oppositions or conflicts which are present in the structure of the society in which the myth was

born. In the myth these conflicts are reconciled. Therefore, the function of myth is to render intellectually and socially intelligible and acceptable what would otherwise be incoherent. For example, the marxit ideal society can be described as myth not only because it seems impracticable but also because it appears to reconcile the binary conflicts in capitalist world. In the African world, the vertical or hierachical order in the society finds transcendental justification in world of spirits, forces; gods and God (the supreme being). Therefore in African world of mortal individuals, opposition to the hierarchical order is divinely unjustified. Conflicts arising therefrom have been reconciled in the divlne realm.

The subject-matter of mythological narratives is not totally different from that of philosophy and science. The difference is that myth is neither true nor false. According to Alasdair MacIntyre, "myth is living or dead, not true or false. You cannot refute a myth because as soon you treat it as refutable you do not treat it as a myth but as a hypothesis or history" 27. But it is undeniably obvious that a systematised or empirical mode of thought, philosophy and science is prefered to mythological understanding of issues. According to W.K.C Guthrie "the birth of philosophy in Europe, then consisted in the abandoment, at the level of conscious thought, of mythological solutious to problems concerning the origin and nature of the universe and the processes that go on within it. For religious faith there is substituted the faith that was and remains the basis of scientific thought ... that the visible world conceals a rational and intelligible order "28.

Philosophy and science was born in the Greek world arround sixth century. Philosophers then were anxious to substitute an antiquated and dogmatic mode of thought, mythological explanations, for a more systematised undogmatic system called philo-

sophy and science. They, therefore, became critical of ancient Greek mythologies and religions. Xenophanes rationally criticised myth as anthropomorphically representing the gods. Euhemerus argued that myths were to be explained as stories about men who had been deified. Socrates and Plato did not hesitate in criticizing the old mythological religions and their gods. But ironically, Plato's Republic was punctuated with mythological elements. In the Republic, Frutiger draws a distinction between myth as allegories, as genetic explanation and as parascientific explanation. Myth as allegories is the Diotima account of the birth of Eros in symposium 9. Genetic explanation is the account of the creation in Timeaus while parascientific explanations are the account of a future life and the rewards and punishment for virtue and vice give in the Republic, Georgias, Phaedo and Phaedrus. Like Plato, modern thinkers and scientists could not avoid depending on myths in their attempts to solve some natural puzzles. The persons of some great avatars like Jesus Christ and Mohammed were built around myths. Even in the Bible and Koran,, certain stories remained resonable only at the level of myths. Among the present day scientific feats, the Albert Eistein's theory of relativity and unified field theory can only be understood if and only if some propositions are regarded as self-evident that is, viewing them as myths. Human beings may not entirely do without myths.

All the myths of creation, about God and belief in reincarnation may not be subject to Scientific verification. But they are as old as the tradition of the people. David Hume and his likes in western philosophy would definitely not subscribe to the myths because they could not have been experienced. David Hume once challenged the view that a Supreme deity was responsible for the creation of the universe. He says, "Can you pretend to show any such similarity between the fabric of a house and

the generation of a universe? Have you ever seen nature in any situation as resembles the first arrangement of the elements? Have worlds ever been formed under your eye, and have you had leisure to observe the whole progress of the phenomenon from the first appearance of order to its final consummation. If you have, then cite your experience and deliver your theory" 30. David Hume could be right only to the extent that these myths may not be subject to empirical investigation. But it is not everything or every truth that is experienced. In science, there are certain truths that cannot be verified. Take, for example, atoms, electrons and neutrons are elements that cannot be physically demonstrated. Yet, we employ them as working tools in science and technology.

Among the Igbos of Nigeria and perhaps Africans in general, myths have been vehicle for conveying certain theological lessons and truths. It conserves the people's traditions and beliefs. It is a reservoire of knowledge. In the absence of written literature oral tradition may not be functional without myths, legends, proverbs and so on. It seems to me that myth is the hall-mark or an important face in the earliest civilization. The Egyptians and the Greeks used myths to recall their traditions and legendary events and personalities or gods.

The various myths about God in Africa, for one thing, show that Africans believe in and acknowledge the substantive existence of God. The myths tend to tell us that African God is a loving one. He loves His people. He was like a father to them and He once lived with them. To the Africans, existence is a necessary and essential atribute of God. Critically speaking, the myths about creation and why God ceased to exist among the people tend to portray African God as an emotional God. And the idea of Him as a father who can be offended tends to show that African conception of God is anthropormophic. However, to the

extent that behind every object or being in the universe, there is a force or power which is accountable to and are manifestation of God, the highest power, African world-view can be said to be panpsychic. It does not seem to me there is any difficulty or contradiction in African conception of God being immanent and anthropomrophic.

It is clear from the foregoing that ancient African Cosmologists attributed nature or the universe to the ingenuity of the Supreme being, God. As we have seen, African world is a spiritual universe and her cosmology may be unscientific. It could be recalled that the Greek philosopher Thales considered water to be the fundamental element of the universe. In other words, everything is explainable in terms of water. His contemporary, Pythogoras, thought the cosmos is reducible to a few integral numbers. Anaximander of Miletus, an associate of Thales, said that the material cause and first element of things was the infinite from which arose all the heavens and the world within them. Anaximenes, of the school of Miletus, argued that the fundamental element of the universe is Air. Xenophanes said the God was responsible for Creation. Heraclitus argued that every thing was in a flux, that is everything was continuously changing.

This search for the fundamental elements in the universe has continued to agitate and inspire scientists for many years now. Today they are focusing attention not so much on particles of matter as on four forces: "gravity, electromagnetism, the weak nuclear interaction and the strong nuclear interaction". 31 It seems to the scientists that these forces derive from the same fundamental principle called the "Unified field theory". 32 Albert Einstein, a German philosopher and Scientist, grappled with the problem of establishing this theory conclusively for thirty years and failed. But the search for the unified field theory did not end with Ensteins death in 1955. His colleagues and fellow

scientists and philosophers have been optimistic as ever in their search for this theory.

For the pupose of our study, that is, African cosmology in relation to the unified field theory, we shall focus attention on the four forces for which explanation is being sought in terms of the unified field. Firstly, the gravity, which pulls every object to the ground. Secondly, the Electromagnetism that sparks lightening. Thirdly, the weak force that causes radioactivity and fourthly, the strong force that holds atomic nuclei together. The Unified field is hopefully expected here to be a unifying force of these four forces. Before the advent of this theory. Einstein had paved the way for the big-bang theory for explaining the four main forces after the big-bang. According to the big-bang theory, "A fire ball of pure energy exploded cooling as it spread outward...". 53 The creation started from these and the universe expands. But what bothers Einstein and other scientists is whether the universe will continue to expand or whether it will contract later.

At this point, an incisive and inquiring mind will begin to see the similarities and differences between African cosmology, ancient Greek cosmology and contemporary Scientific cosmology. To a large extent, African world is Spiritual and is accountable to the ultimate Spiritual being. It has much in common with the views of Xenophanes, Socrates and others in ancient Greece. Thales, Haraclitus and Pythogoras seem to be more scientific in their postulations.

The big-bang theory failed to account for what was responsible for the big-bang. Ancient African cosmologists would say it was God who was responsible for everything including the big-bang. I believe that the concept of the Unified Field Theory is the concept of African cosmology in scientific language.

Africans, as we have seen earlier, believe in diverse forces and powers. And these powers are often personified as gods and divinities. And the Supreme force is the Supreme being, God. The Igbos of Nigeria call Him CHUKWU, the Yoruba of Nigeria call Him OLORUN, the Mende of Sierra-Leone call Him Ngewo and the Ashanti of Ghana call Him NYAME. With regard to the Unified Field Theory, the African thought would personify the force of gravity as the 'god of gravity'; the force of electromagnetism as the god of lightening (for example, the Amadioha in Igbo land and Shango in Yoruba land); the weak force as the god of radioactivity and the strong force as the god of atomic nuclei. Ultimately, the Supreme force or deity will be the unified field force. The relationship which I have tried to establish between African ontology and the unified field tells us why in African thought, scientific and mechanical endeavours have spiritual causes and explanation

Conclusion

African ontology and cosmology is panpsychic. Everything that exists has a spiritual cause. And these spiritual causes are ultimately manifestations and servants of God. The Unified Field Theory too, is panpsychic. It has been observed that when western science talks of forces, Africans prefer to talk of spirits and gods. On this score, do we talk of African Spiritualism or science? It seems that science and spiritualism overlap in African culture. Anything you might call scientific feat in African culture must invariably have a spiritual under-pinning.

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NOTES

- Chambers's, 20th Century Dictionary, ed. E. M. Kirkpatrick (Britain, Richard Clay Ltd. 1983), p. 283.
- 2. Ibid., p. 885.
- 3. A. R, Lacey, A Dictionary of Philosophy, (London, Routledge and Kegan Paul Ltd. 1986), p. 128.
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- 5. Parrinder, Geoffrey Africans' Three Religions, (London, Sheldon Press 1969), p. 25.
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- 8, Parrinder, Geoffrey; African Traditional Religion, op. cit. note 6, p. 2.
- 9. The 'Vital force' or the dynamism of man suggests the duality and the composite nature of man. One aspect of man is the physical or the body while the other is the vital force or dynamism, which is spiritual in nature and which many people believe to continue to exist after the physical body. This spiritual or ontological aspect of man is what I would rather regard as the Essence of man. It is the life of man. Because it is spiritual in nature I would call it the spiritual Essence.
- 10. Parrinder, G. E.; op. cit. note 6, p. 22.
- 11. Anyanwu, K. C.; op. cit. note 7, p. 50.
- 12. Parrinder, G. E.; op. cit., p, 24.
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- T. U. Nwala; Igbo Philosophy, (Lagos, Uteramed Publications Nig. Ltd. 1985) p. 26.
- 16. Ibid, p. 65.
- C. S. Momoh, 'African Philosophy: Does it Exist?' Diogenes, 1985
 p. 65.
- Afigbo Adiele, op. cit., p. 37. Adiele has discussed extensively the origin and culture of Igbo people.
- 19. Parrinder, G. E.; Africans' Three Religions, op. cit, note 5, p. 29.
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- 25. G. S. Kirk, Ibid, pp. 29-30.
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- 27. Ibid. p. 435.
- W. K. C. Guthrie, A History of Greek Philosophy (Cambridge, 1962), p. 29.
- 29. Diotima is an imaginary person engaging Socrates in a discussion about love. Eros is the desire or love for good. Love is a half-way between mortal and immortal. It is an infermediary between men and gods. It is a great spirit among other spirits. According to Diotima, on the day Aphrodite was born, among the gods present was 'contrivance', the son of invention. In the course of the feasting, poverty came to be substituted to be for food. Contrivance became drunk and went into the garden of Zeus where he was overcome by sleep. Poverty, in order to improve her wretched condition, went and lay with him and conceived love. Because love was begotten on Aphrodite birth-day and because he liked beautiful things like Aphrodite he became her follower and servant. Love, therefore, bears the Chracter of his father, poverty, and his mother, contrivance. He is, therefore, poor like his mother poverty. And being his father's son, he always wants to get what is beautiful and good. He is bold. He yearns after knowledge and he is a lover of wisdom.

For details see *Plato*, the Symposium ed. Betty Paidice (Penguin Books 1911), pp. 81-82. It is interesting to note here that most African Myths like the account of the withdrawal of God from man are of this form. In other words, they are in allegorical form.

- David Hume quoted by Richard H. Bopkin, Philosophy Made Simple,
 (London, W. H. Allen 1979), p. 146.
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