An Essay on Naturalized Epistemology of African Indigenous Knowledge

Kiatezua Lubanzadio Luyaluka

Abstract
The whole culture of the Black man, his religion, his cosmology, his technology, and so on possesses scientific bases. However, the epistemological bases of his science differ from those of modern Western thought. And, this difference prevents those who study Black African culture on the basis of Western epistemology to discover its scientific scope. In this article, the author develops the naturalized epistemology of the African traditional science. This epistemology teaches us that the African starts from the notion of God, to whom all reality is attributed; the Black African science is mainly a deductive science in which knowledge is of a revelatory nature. Contrary to the Western epistemology, the focus of the epistemology of the African science is the moral and spiritual conformity of the initiate to the religious norms and the praxis of the knowledge he produces. Far from being a bunch of superstitious beliefs, the African traditional religion, which is the basis of African lore, is demonstrated today, thanks to the apologetic tools developed by the Institut des Sciences Animiques, to be a scientific knowledge whose cosmology leads to the holistic “theory of everything.” This proves the natural convergence between African traditional lore and Newtonian physics.

Keywords
epistemology, cosmology, indigenous, African

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Introduction

In a world dominated by the scientific and technological prowess of the Western culture, the African indigenous knowledge (AIK) seems to many as unscientific, delusory (Ani, 2013) and as no more than a bunch of magical beliefs (Mahaniah, 1989). It is, however, possible to prove that this perception of the Black culture is wrong.

The existence of initiatory systems and the necessity of the possession of technologies indispensable to the maintenance of big centralized states imply the presence of scientific lore in pre-colonial Africa. Moreover, the African’s perception of reality is obviously different from the Western’s, their cultures proceed from different cosmological and spiritual approaches; thus, different perceptions of reality must lead to different approaches to knowledge (Owusu-Ansah & Mji, 2013; Tempels, 1945).

This article, after displaying the major debates of the proponents of AIK as well as the critiques, purposes to expose the naturalized epistemology of AIK; the study of the nature of the African pre-colonial science and its difference from the Western empirical-rational science. The concept of naturalized epistemology was first coined by W. O. Quine in 1951 as alluding to epistemology as a science describing “the internal structure of the sciences and their evolution” (Sagaut, 2008, p. 13); thus, it presupposes the existence of a science.

To prove the presence of a science in pre-colonial Africa, the Bible will be used heuristically to hypothesize the existence of two approaches to the understanding of the universe: a materialistic and a spiritually based one. This implies two essential kinds of naturalized epistemological views, the lunar and the solar. Two new alternatives will be proposed for the demonstration of the existence of the two main kinds of sciences induced:

- the analysis of the biblical discourse and
- the demonstration of the existence of a technology in pre-colonial Africa, which could be acquired only through the mastery of some scientific knowledge.

For the last point, I will evidence through the Bible the alternate use of the solar and lunar epistemologies in the passage of the Hebrews from an original Egyptian influence to the Hellenic. Next, thanks to the Kôngo initiatory system, I will reveal the nature and bases of the African pre-colonial science. Finally, a cosmological argument will prove the scientific validity of these epistemological bases by deducing them from empirical facts of the universe.
Previous Attempts in the Study of AIK

The first studies of the African’s epistemology focused on the worldview to abstract the operative mode of his thought (Udefi, 2014); they used an ontological approach to epistemology (Udefi, 2014); the work of Placid Tempels inaugurated this approach. Tempels (1945) wrote about the ontology of the Bantus that “it penetrates and informs the whole thought” of the Africans and “dominates and directs their behavior” (p. 9). The works of these pioneers do not meet the unanimous approval of Black scholars (Wiredu, 1998); some reject these ethno-philosophies as not representative of the indigenous thought of Africans but of their authors and as presupposed on Western views (Udefi, 2014).

The other approach mentioned in the history of African epistemology is that of Senghor; it draws conclusion from anthropology (Airoboman & Asekhauno, 2012; Ani, 2013; Udefi, 2014). This poet of negritude summarized his view by the famous phrase: “Emotion is African, as reason is Hellenic.” Senghor is criticized for “denying Africans any capacity for engagement in rational discourse and a reduction of the African mode of knowledge to sensuality and emotion” (Udefi, 2014, p. 110). His opponents point also the litany of scholars in the West who “hold to intuition as a way of knowing” (Airoboman & Asekhauno, 2012, p. 16); their existence weakens Senghor’s view. The poet, moreover, runs the risk of reducing the African to a “pre-logical mental frame” (Udefi, 2014, p. 110).

Modern African professionals of philosophy do also work to prove the existence of an African epistemology; some of them “seek for African equivalent of Western concept” (Udefi, 2014, p. 110). For Wiredu (1998), though relying on anthropology, this approach must be “linguistically informed and conceptually critical” (p. 23) in the study of the data of the particular African ethnic concerned. Critics contend that this approach is too “simplistic and commonplace”; what is presented as African epistemology is “beclouded with Western ideas and couched in Western language” (Airoboman & Asekhauno, 2012, pp. 15-16).

Finally, the need to refute the mystifying ideology of the “zero contribution” (Mabika, 2002, p. 167) of Black men in the history of science and technology led afrocentric scholars toward a rereading of the ancient Egyptian culture to elucidate its Negroid nature. These works are acclaimed by many, see Ntumba’s preface of Obenga (1990), as a posteriori and more valid proof of African philosophy than ethno-philosophy.

I will rely on anthropology to establish the existence of scientific knowledge in pre-colonial Africa, different from the Western view. But, contrary to Senghor and ethno-philosophy, my approach will be scientifically accountable,
thanks to the Kôngo initiatory system and its systematic theodicy. Being “linguistically informed and conceptually critical,” my approach will avoid all the critics made against African epistemology.

There are various kinds of AIK. Ndubisi (2014) mentions the following categories: perceptual knowledge, common sense knowledge, old age knowledge, inferential knowledge, mystical knowledge, oral tradition, and wholistic knowledge. My focus is the study of AIK along the solar-lunar divide; thus, I will deal with the kinds of knowledge peculiar to the solar epistemology because in this case, a different paradigm is involved; thus, I will spare my views from being “beclouded with Western ideas and couched in Western language.”

**Biblical Insight**

Although the mythical and symbolic accounts of the Holy Scriptures preclude them from being serious fountain of scientific empirical proofs, they can however offer useful heuristic insights in the search for truth. The history of science teaches us that scientific investigation can be enlightened by being inspired by unscientific factors; therefore, the philosophy of science does not preclude the influence of these elements (Ladyman, 2002).

The interest offered by the biblical account is enhanced by the fact that the teachings of Moses are those of a man who acquired his knowledge in the initiatory frame of the Egyptian temples. Both the Bible (Acts 7: 22) and Josephus Flavius (n.d.) bear witness to this fact. Moses worked to introduce the Egyptian religion to the people he was leading in the desert fleeing the fury of the army of Pharaoh after the failure of the heretical attempts of Akhenaton to change Egyptian theism (Luyaluka, 2015; Pierre, 2001).

Genesis 1: 16 is a verse of great epistemological heuristic implication. The Modern King James Version reads, “God made two great lights: the greater light to rule the day and the smaller light to rule the night, and the stars also.” God created the moon and the stars (hence the sun) to rule the nights. This implies two approaches for the illumination of benighted humankind: the solar approach (represented by the stars) and the lunar one:

- The lunar approach implies a thought centered on the earth, a symbol of matter as opposed to the heaven, the spiritual, enthroned above mankind. It is obvious that, due to this materialistic focus, this kind of thinking turns naturally away from the supernatural.
- The solar approach is the one in which the thought of mankind is centered on the sun, the divine; the Bible alludes to God as “a sun and a shield” (Psalm 84: 11). The Sun was a symbol of God for the Ancients, the symbol of the demiurgic Ra in Egypt.
Thus, the Bible inspires us the following hypotheses:

**Hypothesis 1:** The existence of two main epistemological approaches, the lunar and the solar, which result in two approaches to scientific knowledge.  
**Hypothesis 2:** The solar approach implies an initiatory science gravitating around the religious educatory frames.

The hypothesis of the solar-lunar divide is presented by many scholars as different views of the “wholeness of the universe”; for the lunar thought, the predominant view of the West, this wholeness is the physical cosmos where God and the supernatural have no place in cosmology (Mabika, 2002, pp. 8-9); while, using the solar approach, the African sees in the wholeness a unity of the visible and the invisible (Ani, 2013) instead of the Western dichotomy (Igboin, 2012). In the anthropology of ancient Egypt, this unity resulted in the affirmation of the freedom of soul illustrated in depictions by a bird or a butterfly hovering over man or his corpse (Maspero, n.d.). The theological implication of this freedom is the doctrine of the resurrection of the dead in the beyond, or the continuity of life, a central theme of the *Egyptian Book of the Dead*.  

These hypotheses imply that in the attempt to demonstrate the existence of scientific lore in the pre-colonial Africa, one should not always focus on the Western perception of science and philosophy, a different paradigm may be involved. If traditional Africa is the locus of the solar paradigm, then its science and philosophy must be of a nature leading to a technology not always susceptible to be apprehended correctly by the Western materialistic paradigm.

**Biblical Historical Proof**

My two hypotheses can be verified through the history of the Hebrews. Their generations-long biblical captivity in Egypt implies that they adopted cultural elements of this African state; one of these was the doctrine of the freedom of soul; thus, this doctrine and its implied continuity of life in the beyond must have been central to the Hebrews worldview.  

One of the missions of Jesus was to rescue this old doctrine from the negative Hellenistic lunar influence that rejected it. The Sadducees, first called the Hellenists, “were eager to bring [in] Grecian culture and thought” (Stedman, n.d.; Windsor, 1969, p. 33) against their traditions. They “did not believe that soul continued to exist” (Porton, 1992, p. 892) after death, a position tantamount to the rejection of the solar epistemology based on the freedom of soul. Jesus and his disciples countered this trend by saying “the dead are raised.”
Debating the Sadducees, Jesus argued,

The fact that the dead are raised Moses himself showed in the story about the bush, where he speaks of the Lord as the God of Abraham, the God of Isaac, and the God of Jacob. Now He is not God of the dead, but of the living; for to him all of them are alive. (New Revised Standard Version, Luke 20, pp. 37-38)

Paul voices the same conviction in I Corinthians 15: 16: “if the dead rise not, then is not Christ raised”:

Note the use of the present tense by Paul and by Jesus to affirm that Moses, Abraham, and Isaac are alive: the dead rise. This is a proof of the doctrine of the resurrection of the dead in the beyond, an outcome of the freedom of soul. Being central to the solar epistemology, this freedom was expressed in Egyptians’ depictions as the bird hovering over man or his corpse. Although to many lunar theologians, resurrection is only eschatological, Dummelow (1908) admits that in the above cases it is not restricted to, but includes, Socrates’s view of the immortality of the soul, “strictly speaking” Jesus argument is “for human immortality” (pp. 917, 698).

Thus, we learn that the Hebrews were in the solar paradigm and that the early Christians, lingering in it, fought to counter the Grecian lunar epistemological trend.

**Proof From the Existence of Technologies in the Pre-Colonial Africa**

Senghor is right “no civilization can be built without techniques; Negro-African civilization is no exception to this rule” (Udefi, 2014, p. 110). But debating on the existence of technologies in pre-colonial Africa, the easiest attempt is to allude to the colonial and local museums; thus, the quest is reduced to showing the rudimentary tools used by our ancestors. Obviously these elements do not necessitate the mastery of a science, hence the difficulty of proving, through colonial ethnography, the existence of a science in pre-colonial Africa.

I rather propose to reason by analogy to sustain the case of pre-colonial Africa. The practice of political science implies that the existence of a centralized state of the size of France requires the mastery of the technology of communication and locomotion; it is impossible for a centralized state that huge to enforce its unity if no communication and no efficient means of locomotion from one extremity of the country to another are available. History teaches us that the development of the first Western worldwide empires (Portugal, Spain, and United Kingdom) followed as one of the consequences
of the mastery of the technology of maritime navigation from the 15th century (Windsor, 1969).

With about 2,500,000 square kilometers (Batshikama, 1971), the Kingdom of Kôngo was by far 4 times bigger than France. For the maintenance of such a centralized state having three vassal kingdoms (Madoungou, 1985) without a technology of locomotion and communication, lunar historians argue that these people used tom-toms and gongs. But it is obvious that those instruments could be used only for short encoded messages to be sent to short distances, according to the Western empirical vibratory science.

These rudimentary tools are not sufficient to ensure the scope of the communicative ability required for the maintenance of the unity and the security of a state 4 times bigger than France; besides, not a single experiment has been, or can be, made in order to conclusively show that a message such as the communication of this article could be conveyed through the means of tom-toms and gongs or similar devices. Thus, the African used a technology of communication and locomotion that escapes the empirical rational means of investigation.

On the other hand, it is not completely false to assert that the Africans used musical devices to communicate intricate messages; Pigafetta (1881) emphasizes their ability to convey thoughts through these means. It was reported to me by an elder that *mfumu*² Ngoyibila of the village Mpangu and *mfumu* Nsekemba of the village Masangi (both villages being situated in the sector of Ntimansi, territory of Mbanza-Ngungu in the province of Kôngo-Central, Democratic republic of Congo) used to communicate with each other through the means of a traditional guitar (*nkokolo*). These villages being some kilometers apart, this communication cannot be explained through physical vibratory science. Thus, even the admission that the only means of communication were the rudimentary musical instruments impels an explanation that is beyond the ken of the modern Western investigative approach.

Because it is obvious that the pre-colonial Africa had the mastery of a technology of communication and locomotion, a technology that cannot be accounted for through lunar science, it follows that their origin and nature can be explained only by the recourse to the solar approach to science and spiritually based technology.

**Lessons From the Egyptian History**

Ancient Egypt was at the top of technological and scientific prowesses during at least 30 centuries. This conclusion can be drawn by considering, for example, their pyramids, which even for the modern engineers, is a huge challenging technological feat that evades all lunar explanations; the Egyptians’
science was in advance of lunar science in many areas. It is known also that they used to open the skulls; certain skeletons found had an opening that shows signs of cicatrizing, meaning that the patients have been healed (Hovind, 2006).

They had some mastery of astronomy. Their knowledge of chemistry was the most advanced of that time. The word chemistry comes from the Arabic al kemit, which means the art of the Egyptians; and Maspero (n.d.) affirms that, “The Egyptian chemists were able to produce very bright dyes by methods then unknown to Greece or Rome” (Vol. 11 part a). Many Greeks students went to be taught in the Egyptian temples (Diop, 1972).

History teaches us that the Egyptian science was linked to religious practice; education was initiatory and scientists were in fact priests; all sciences were inseparable from religion and righteousness (Mabika, 2002). Thus, we learn from the ancient Egyptians’ focus on the divine that, like the Africans, they used the solar approach to science.

The Sub-Saharan Replica of Egyptian Mastery

The Egyptian solar expertise had many sub-Saharan echoes. Speaking of the Kôngo’s “wonderful manner” of making stuffs from palm tree fibers, the Italian author Pigafetta (1881) wrote of their brocade as “much more valuable than” the Western (p. 30). According to the historian Mahaniah (1983), blacksmiths were arrested in colonial Congo “for having produced through initiation in their workshops objects such as sewing machines, bicycles and guns” (p. 172). For Obenga (1990), the Dogon’s astronomy, including their description of Sirius B, “a star so small, so dense, so difficult to perceive with bare eyes” is outstanding (pp. 297-298). “One must admit that they possessed an astronomical science of a high level.”

Diop (1987) reports a successful cesarean by a traditional Ugandan medicine man; Obenga (1990) adds cases of laparotomy, a healing of fracture by osteosynthesis in 1911, and “living surgical practices” of a muswo muynzi “the physician of the bones” in 1979 (p. 325). It is also know that the autochthones of the equatorial Africa practiced painless extraction of teeth while anesthesia was not yet know in the West (Trilles, 1932).

I witnessed a gun assault in my family where a nephew was shot and left with a double fracture of the femur (Voice of Congo, http://www.woiceofcongo.net, November 12, 2013). Financial circumstances lead us to seek the cheapest expertise of traditional medicine. The bone was set in 5 days and, being seated on the floor, the nephew could lift his leg unaided and without a plaster cast or any other physical device! It is reported that in the Congolese town of Kikwit traditional practitioners can remedy to the same cases in 3 days.
To those who may rush to use the miraculous explanation to account for these cases, Wiredu (1998) shows that in Africa the natural/supernatural dichotomy has no place; thus, he concludes that “the notion of a miracle does not make sense in this context, if a miracle is something supposed to happen contrary to the laws of ‘nature’” (p. 33).

### Classification of Initiatory Frames

The Egyptians teach us that solar science was characterized by an essential resort to the revelatory mode of thinking: dreams, oracles, and revelations played a key role. Diop (1972) shows that the oracles were used even for judicial decision, and Herodotus (n.d.) says that they were used even to solve puzzling geographic problems about the Nile. This explains the essential nature of the notion of the freedom of soul. Because the solar science is linked to religious practice, to understand its science, the study of the initiatory frame is a must.

Egyptologists classify the initiatory lore of the ancient Egypt into the great and little mysteries (Schuré, 1979), an insufficient classification, because the soldiers are shown as a special class of citizens on par with the priests. Maspero (n.d.) affirms, “the power of Pharaoh and his barons rested entirely upon these two classes, the priests and the soldiers” (Vol. 2). Therefore, it is adequate to speak of the sacerdotal, the martial, and the civil initiations.

The deeper anthropological study of Kôngo culture reveals the very same features in the classification of initiatory lore to which one must add a second classification into divine, human, and demonic. My concern here is the highest Kôngo initiations; therefore, I neglect the different rites of passage or of healing, which are not representative of the core of the system.

The Kôngo divine initiation was sacerdotal (Kimpasi), the human mystery was civil (Lêmba) and martial (Kinkîmba). Witchcraft, a deviation condemned by society, was not formally taught; to fight it was one of the aims of the initiatory sessions (Bittremieux, 1936; Van Wing, 1956). Witchcraft is not to be confused with kindoki as does Nkulu-N’sengha (2009a, 2009b). Kindoki is the initiatory lore and the power it confers (Canson, 2009; Luyaluka, 2012), while witchcraft, n’soki, is their misuse.

### Core Elements of the Imitation

Central to the initiation are the symbolical death of the disciple to find himself among the illuminated ancestors, symbolized by the initiators (Mahaniah, 1983), and his resurrection back to the communities with a renewed being and new knowledge. This succession of life and dead teaches the continuity
of life in the beyond and illustrates the importance of the freedom of soul in the acquisition of knowledge from illuminated ancestors.

Basic to the Bukôngo, the Kôngo religion, is the notion of the Verb, the divine completeness of being as the presence of the divinity in man (Fukiau, 1969) and around. The Verb was called the Kimalungila in the Kimpasi, the Kimahûngu in the Lêmba, and the Kitafu-Maluangu in the Kinkîmba, where it was symbolized by the python and the rainbow (Mbûmba-Luangu). The Verb is generally typified by the male-female unity (Fukiau, 1969), and it implies the articulation of the divine mystery in the three Kôngo academies.

The Kimpasi

The fief of the Kimpasi is the south-eastern region of the ancient Kingdom of Kôngo. Noticeably, the two great figures of the Bukôngo (Kimpa Vita and Simon Kimbangu) belong to the area of the Kimpasi. The high priest, always named Nsaku Ne Vûnda according to his clan (Mahaniah, 1982), belonged to the region dominated by the Kimpasi. Batshikama (1971) shows that this clan is the Kôngo channel of divine revelations, the clan of the Kôngo Levites; thus, the Kimpasi was a sacerdotal academy. The power acquired through the divine mystery can be used only for good purpose, as its basis is the purification of thought.

The Lêmba

The word lêmba comes from the verb lêmba (to appease); thus, we learn that the destiny of the Lêmba was to bring the conditions of peace within the society, to heal through material means the social and physical illnesses in the society. Of the Lêmba, Janzen affirms,

> It is described as having been “a medicine of the village”; “a medicine of the family and its perpetuation”; “fertility medicine”; “the sacred medicine of governing” . . . according to one clan head; “the government of multiplication and reproduction” . . . , by a former Lêmba wife; and “sacred medicine integrating people, villages and markets” . . . , by a contemporary merchant and clan head who wrote a local history. (Janzen, 1982, p. 4)

The Lêmba was the Kôngo traditional university including the schools of law, trade, medicine, and so on (Fukiau, 1969).

The Kinkîmba

As a human initiation, the mission of the Kinkîmba was the protection of the land against invasions coming from outside, the Kinkîmba was a martial
academy. Bittremieux (1936) incidentally proves this by informing us that in the initiatory hut were found men’s tools including “pebble guns” and “wooden rifles for tournaments” (p. 37).

The martial nature of the Kinkîmba is also conveyed by the very name kinkîmba, which stems from kimba, meaning to run, as can be understood by the conjugation of all that follow. Bentley (1885) gives us the following meaning of the component kiba: stroll about, travel about. For the word kimba, Laman (1932) supplies the French meaning vaillant, which corresponds to brave, courageous, valiant, bold, daring, and so on; for Bittremieux (1936), the word kinkîmba comes from kimba meaning to be courageous, valiant of heart. All these words evoke physical endurance and prowesses; thus, the Kinkîmba was a martial academy.

The python, mboma, is an African martial symbol. A Kôngo army commander is called nkuamboma, mamboma, or ngamboma, the owner of the python. The Prime Minister of Loango bore the title of Ma-Mboma-Tchiluângu; for Madoungou (1985) this name implies, “The acquisition by this character of the ntchiama (rainbow) whose animal incarnation is the python (mboma), and which extends its magical protection on all that surrounds it” (p. 18). This is a clear pronouncement of the protective mission of the Kinkîmba. It is also a proof that despite the existence of a ministry of defense, the Prime Minster was the real commander of the army in Loango; hence, his nickname “Captain Death.”

About the So initiation among the Betis of Cameroon, an author quotes this affirmation of Philippe Laburthe-Tolra: “The rite of python-vane was a formation to endurance whose equivalent is the contemporary military training” (Seme, 2008). The same characteristic is seen in the predominantly martial initiation of the Benin as the divinization of the python.

**Epistemological Import of the Religious Frame**

The fact that the disciple had to “die” to find himself symbolically among the nkukunyûngu, the illuminated ancestors, and the ontological hierarchy of beings imply that reality is more substantial the more one rises in the hierarchy; this reveals that ultimately all reality is found in Nzâmbi Ampûngu Tulêndo, the most high in the hierarchy; thus, the great prophet Simon Kimbangu discloses this Supreme Being to be All-in-all, wena wa kalûnga (Bandzouzi, 2002), all reality is in Him and is His manifestation.

The second lesson drawn from the Kôngo initiatory system is that at the core of the formation of the elite is the knowledge of the divine. Whether engaged in the civil or in the martial initiation, the disciple had to learn the highest spirituality based on the presence of the completeness of the divinity in and around man, the Verb.
The third lesson is that the highest purpose of the three initiations was to enable one to get in touch with higher humanities, the illuminated ancestors, who in Mpêmba-Kalunga (the holy world of the dead) live fully their divinity, compared with us, or those who lived a life of divine purity while they were here. These are the sources of the true knowledge belonging to Nzambi Ampûngu Tulêndo coming through His SonMbûmba Lowa, the solar demiurgic creator, by the way of the hierarchy (Bandzouzi, 2002).

The next lesson is that, being engaged in the human initiation, the sufficient condition of the success of the disciple is the compliance to the ethical rules in order to be able to get in touch with the ancestors having the needed human experience. This does not contradict what has been said before because the students learn more than what is needed in real experience.

The last lesson is that, because all the initiates were versed in the knowledge of the divine, true knowledge is seen as being included in the knowledge of the divine. Moreover, because the initiate had to die symbolically to be in touch with the world of the illuminated ancestors, the physical realm was seen as a feeble representation of the realities of the higher planes.

Thus, the Bukôngo reveals the epistemological bases of the solar science to be these truths:

- All reality is in God.
- All knowledge is included in the knowledge of God.
- The physical is only a feeble perception of the spiritual.

The Production of Spiritually Based Technologies

At a higher level, the necessity of the divine mystery for one engaged in the human is that his ultimate goal is the inception of new “spiritually based technologies,” the divine use of min’kisi (plural of n’kisi) for the welfare of the community. Through the progressive purification of thought, an initiate should, at the cost of much perseverance, persistence, and patience, happen to develop, thanks to the presence of the Verb in him and around him (the divinity of the illuminated ancestors surrounding him), an authority over the “Spirits of nature,” a divine n’kisi A said to originate from water, mpêmba (Van Wing, 1956, pp. 391, 395-396): purity is its source.

Initiation was very expensive, requiring the contribution of the whole clan; the fees for the Lêmba, for example, amounted to “the equivalent of several years trading or wage labor” (Janzen, 1982, p. 36). Thus, the power A is an asset of the clan that must be perpetuated. While A is laboriously gained through the divine mystery, its perpetuation as B is operated in the human through mere faith in the ancestors and obedience to the ethical norms.
Table 1. Table of the Methods of Initiation.

<table>
<thead>
<tr>
<th>Mode of initiation</th>
<th>Acting energy</th>
<th>Consented sacrifice</th>
<th>Acting force</th>
<th>Means of acting</th>
<th>Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Through divine Spirit</td>
<td>Divine will</td>
<td>Sin and carnal-self</td>
<td>The Word of divine Logos</td>
<td>Spiritual understanding (Science or divine consciousness revelation or intuition, reason) Purity Intuition and inspiration Faith</td>
<td>Illumination (Contemplation of Spirit; concentration, argumentation) Spiritualization of thought Meditation Prayer of faith, ascetic life</td>
</tr>
<tr>
<td>Through saints ancestors</td>
<td>Divine will</td>
<td>Sin and carnal-self</td>
<td>Faith of saint-ancestors</td>
<td>Spiritual understanding Purity Spiritual consciousness Faith</td>
<td>Illumination (revelation, argumentation) Spiritualization of thought Contemplation, meditation Prayer of faith, ascetic life</td>
</tr>
<tr>
<td>Through personal spirit</td>
<td>Personal will</td>
<td>Divine self</td>
<td>Personal beliefs</td>
<td>Hypnotism Faith</td>
<td>Autosuggestion Corporeal or mental exercise</td>
</tr>
<tr>
<td>Through matter</td>
<td>Human will</td>
<td>Faith in divine Spirit</td>
<td>Belief in matter</td>
<td>Faith</td>
<td>Food, alchemy Corporeal or mental exercise</td>
</tr>
<tr>
<td>Through personal spirit of ancestors</td>
<td>Ancestral spirit will</td>
<td>Divine self and individuality</td>
<td>Ancestral beliefs</td>
<td>Ritual purity Faith Magnetism, hypnotism, electricity Fear of ancestral customs</td>
<td>Observance of sacred laws Invocation, incantation, alchemy, devotion Suggestion, autosuggestion Argumentation</td>
</tr>
<tr>
<td>Through demonic spirits</td>
<td>Demonic spirit will</td>
<td>Divine self Human being Longevity Bodily organs Purity Divine spirituality Material goods</td>
<td>Demonic logos</td>
<td>Hypnotism, magnetism, electricity Faith Disorder, impurity, sin, dirtiness Fear of demons, doubt, and ignorance.</td>
<td>Suggestion Invocation, incantation, devotion, alchemy Corruption of thought Demonic possession benightedness (argumentation, suggestion)</td>
</tr>
</tbody>
</table>
As a divine power, A can be used only for good purposes, being based on divine purity. But B can be used for good or for evil purpose, although this last use is forbidden. Being artificial, B can be called fetish; while it is anomalous to call A fetish because the higher divine n’kisi is God Himself, Mpûngu Tulêndo, the N’kisi which has all authority; mpûngu and n’kisi are synonymous. As long as the ethical “purity” is maintained, the n’kisi B can be transmitted indefinitely from one generation to the next. The corruption of the use of B results in a demonic n’kisi, the result of losing the succor of the illuminated ancestors.

All these imply that if Africa has to thrive again from its solar epistemological bases, and this is the easiest way and an urgent must, the divine initiation and its preponderance over the human initiations must be reestablished in our present cultures.

**Domains of Knowledge in the Lunar Approach**

The domain of investigation in the lunar science can be represented as follows in Figure 1:

The lunar approach of science describes between the physical, the ethereal, and the spiritual domains of investigation. It abandons the two last domains to religion and magic, while it concentrates all its observations on the physical domain (Mabika, 2002).

**Schema of Lunar Science**

Since Plato’s negation of the freedom of soul after birth, the West has begun to turn to induction as its main tool in the search for truth; this gradual negation of the freedom of soul reached its peak with the experimental method (As-Sadr, 1987). Thus, the schema of the lunar science in the acquisition of knowledge includes the following:
a. Problem → observation → induction → hypothesis → experimentation → theory → science.

It is obvious that considering the lunar science reliance on induction, the focal point of the lunar naturalized epistemology is the study of methodology, especially for the sake of analyzing the contexts of validation and justification of scientific truth because the validity of the inductive conclusion cannot be read directly from the premises.

**Domains of Knowledge in the Solar Approach**

The solar science, being holistic (Ani, 2013; Mabika, 2002; Wiredu, 1998) in its understanding of nature, it embraces the whole universe in a single vision; thus, its domain of investigation is ideally the spiritual, but it includes the physical and the ethereal domains as limited perceptions of reality (Figure 2).

In the solar science there is no distinction between the domain of investigation of science and religion. The object of all knowledge is spiritual reality. The physical domain being only a limited perception of reality, solar science gives it a lower profile. Thus, religion in the solar epistemology can be expressed in a scientific verifiable manner, as can be seen below.

**Schema of the Solar Science**

The solar approach, the approach of the Black Africans, uses a line of the production of knowledge different from that of the Western lunar science.
Being initiatory in its nature, the pre-colonial African science includes the following two schemas:

b. Problem $\rightarrow$ ethical and spiritual conformity of the initiate $\rightarrow$ revelation or intuition$^3$ $\rightarrow$ religion or wisdom $\rightarrow$ praxis

c. Problem $\rightarrow$ ethical and spiritual conformity of the initiate $\rightarrow$ revelation or intuition $\rightarrow$ science $\rightarrow$ praxis (elucidation of revelation and intuition)

These schemas reveal that the solar lore and lunar do not proceed from the same epistemology; the focus of the African naturalized epistemology is different from the Western view. The lunar lore and the solar one are so different in their conceptions and approaches that one cannot properly judge the AIK regardless of these differences, and above all, by being based on the definition of science provided by the Western view as the only valid standard.

**Definition of AIK**

Given its difference from the lunar science pattern of production of knowledge, the solar science does not meet the same criterion of definition with the modern Western science. In the solar approach, science alludes to the general knowledge or to the elucidative knowledge.

d. Science $\rightarrow$ religion + wisdom + science (as elucidative knowledge).
e. Science $\rightarrow$ elucidative knowledge.

Due to the speculative nature of Western thought and to the use of induction, the epistemologist is forced to consider methodology in defining its science (Philip, 2006): whether in the solar view, science (elucidative knowledge) can only be defined as an elucidation of an intuition or a revelation intended to convince the non-initiate; thus, solar elucidative science is essentially pedagogical and non-crucial for the true initiate who never questions the validity of the heavenly revelation. The solar elucidative science obeys to the schemas c and e.

The remedy of an African herbalist has been reached by him or his ancestors through the schemas b and d; this wisdom is science as general knowledge. About its *modus operandi*, our herbalist may “summarily” say, it always works through the power of the ancestors; a naïve answer for a lunar scientist. But if our herbalist is pressed by circumstances to give a deeper answer, he can use the schemas c and e and have the elucidative knowledge necessary to
the lunar science. As far as his medical practice is concerned, this knowledge is not essential.

Thus, seen in the context of solar epistemology, the Bukôngo as bequeathed through our tradition is a science as general religious knowledge. But the tools of apologetics developed by the Institut des Sciences Animiques (ISA; see below) are science as elucidative knowledge, thus they are not essential to the practice of the Bukôngo.

Induction has a low posture in solar approach. In the traditional palaver, for example, contradiction leads to the suspension of reasoning to allow the parties involved to seek the revelations coming from the ancestors; while in the lunar approach, using induction, both parties will keep on arguing until one wins.

### The Focus of African Epistemology

Lunar science is mainly inductive; the skepticism of Hume about the justification of inductivism has brought the necessity of the study of methodology and the means of justification of theories as the main focus of epistemology (Ladyman, 2002). But AIK is first of all a revelatory. Hence, the main concern of the epistemologist in the pre-colonial context is the ethical and spiritual conformity of the initiate (the scientist) to the initiatory norms and the practical nature of the knowledge acquired. Thus, the validity of AIK is seen in the following:

- The praxis: True AIK aims the practical resolution of the problems of the community. Speaking of this aspect of the solar science, Williams (n.d.) says that “all Egyptian science is eminently practical.”
- The perfection of the initiatory frame or the existence of the human mysteries along with the divine: The absence of the divine mystery deprives Africa of the highest solar technology, the mastery of the “Spirits of nature.”
- The preponderance of the divine mystery in the initiatory frame: Any preponderance of the human mystery leads to the devolution of the basic divine component, and this affects negatively the epistemological system and the technology based on it. Moreover, the preponderance of the martial element leads to a martial religion, while the preponderance of the civil erodes the role of the high priest in favor of the king.
- The maintenance by the initiate of the ethical or the spiritual conformity: This is the essential condition for his communion with the
enlightened ancestors, a communion that is essential to the acquisition of higher knowledge.

**Characteristics of Black Indigenous Science**

Martin (2008) describes the African indigenous epistemology as including four main ways of knowing: divination, revelation, intuition, and reason. Reason is not foreign to AIK (Nkulu-N’sengha, 2009a), but is not to be defined in accord to the Western categories. The Bukôngo sees reason as a series of direct and/or indirect revelations leading to the solution. “A thought came to me” will say a Ne-Kôngo alluding to a new idea, meaning that it came to him from a higher plane rather than as the cogitation of the cerebral cortex.

The African traditional knowledge presents the following characteristics:

- **Divine origin:** Indigenous lore is a direct revelation from the ancestors, or an indirect one bequeathed by tradition; thus, God is its primeval source.
- **Religious initiatory frames:** The proper initiatory frames of the Egyptian science were the temples. The scientist was also a priest. In the same way, the natural initiatory frames of the African pre-colonial science were the initiatory academies; we have seen above that among the Ne-Kôngo even the human academies included divine lore.
- **Spiritually based:** This is the natural outcome of the religious initiatory frame. Spirituality is required for the inception of the highest technology of the AIK, the mastery of the “Spirits of nature,” which can be acquired only through divine purity.
- **Essentially deductive nature:** It starts from God to His creation; and, it can be proven through deductive apologetic tools. Induction is not foreign to the African traditional paradigm (Udefi, 2014), but it has a very low profile.
- **Scientific holism:** In the AIK, all knowledge is comprised in the knowledge of God, the Most High. Thus, science is holistic; in this holism, the universe is seen as an indivisible whole where the parts (the invisible and the visible) find their meaning only in their participation to the whole.
- **Social and relational:** Its mode of acquisition is collective, based on the relation with the higher humanities, and is community oriented (Ani, 2013; Owusu-Ansah & Mji, 2013). Mabika (2002) puts it in his own way: “The formal holistic object is fundamentally relational and
dynamic: it does not separate a thing from its principle of intelligibility” (p. 9).

- Respectful of nature: The separation of humans with other parts of the universe, which leads to their feeling of superiority and to abuse of nature is absent in the holistic and mutually enforcing ontological approach of the solar science (Ani, 2013).

- Cost-effective: Even though initiation was expensive, the acquisition and transmission of technological knowledge invited no new fees. The practice of this technology is also extremely cheaper than the implementation of lunar technology. The lunar scientists have spent billions of dollars in order to find their “theory of everything,” while, thanks to revelation, the holistic “theory of everything” of the ISA has been reached with “meager” resources without a funding institution.

**Facto-Deductive Defense of the Bases of the Solar Science**

The ISA is an afrocentric think-tank, which endeavors to endow the African indigenous religion (AIR), especially the Bukôngo, with apologetic tools for its scientific defense. Among the tools devised by the ISA are the following:

- The *kemetic* cosmological argument, which provides for the a posteriori deductive demonstration of the validity of the doctrines of the Bukôngo. This argument is an efficient proof of the scientificity of the AIR.

- The *kemetic* big-bang cosmology, a logical and mathematical demonstration of the movements and stability of bodies at the astronomical and at the subatomic levels in a single theory: a holistic solar “theory of everything.” On April 29, 1980, at an inaugural lecture as the Lucasian professor of mathematics at Cambridge, Stephen Hawking estimated in 1980 that lunar science could find its “theory of everything” in 20 years, but it still escapes all the efforts of the lunar rational-empirical science.

In an article published in *the Journal of Pan African Studies* (Luyaluka, 2014), the ISA offers these solar tools as a scientific demonstration of the unity of AIR and Newtonian physics in the solar epistemology.

The approach of this solar cosmological argument is called facto-deductive because, like the experimental sciences, it starts from an empirical fact, and like the formal sciences, it follows a deductive approach. In a summarized manner, it can be presented as follows:
• There are individualities and particular circumstances in our universe; therefore, our universe is an individuality.
• The possession of a particular individuality is a contingency.
• There is a necessary cause explaining this possession of an individuality.
• Being the cause of an individual universe, this necessary entity is an individuality.
• The possession by this necessary cause of an individuality implies the existence of other necessary causes endowed at least with a potential causation.
• The possession of an individuality even by a necessary cause is a contingency.
• There is an ultimate necessary cause, which includes all these necessary relative individualities (the Sons of God) and explains their contingency.
• This ultimate cause is God, the Most High.
• The Most High is absolutely infinite, infinite in the quantity of necessary individualities He includes, and in the quality of His individuality because any lesser stature will entail contingency. Being absolutely infinite, God includes all reality.

As to the possibilities of an existence separate from the absolutely necessary infinite plane, there are four possible solutions to the existence of our contingent temporal universe:

• Our universe does not exist: An invalid hypothesis because the existence of our contingent universe is assumed as an empirical premise of the cosmological argument.
• Our universe exists outside the eternal necessary plane: This assumption is not valid, being absolutely infinite; the necessary plan includes all reality.
• Our universe is on the eternal necessary plane: Contrary to this claim it should be noted that the infinite is indivisible, and because the finite cannot exist in what is essentially indivisible infinite, this hypothesis is impossible.
• Our universe just exists along with the eternal necessary plan. This last hypothesis is the only one which remains valid, however it implies the following:
  o Our universe is only a limited perspective of the necessary plan because this last includes all reality.
Our universe is only a temporal perspective of the necessary plan because this last embraces all eternity, infinity of life.

Our universe involves an illusory limitation of a necessarily infinite reality.

Our universe exists only in a temporal and illusory consciousness of the creator, because he is one of the relative necessary beings.

This implies that the phenomena of our universe are mere perspectives of the spiritual reality; it follows epistemologically that the scientific knowledge and the religious must have the same bases demonstrated a posteriori to be the following deductive truths:

- All reality is in God and is spiritual.
- Any knowledge is comprised within the knowledge of the Most High.
- Matter is only a limited perception of spiritual reality.

The Facto-Deductive Demonstration of the Validity of the Solar Technology

We have seen above that the highest solar technology implies the initiate’s authority over the “Sprits of nature.” How can one prove the validity of this solar paradigm?

Trinity was a doctrine of solar religion. Sayce (1903) speaks of the “famous trinity of Osiris, Isis, and Horus, which became a pattern for the rest of Egypt” (p. 38). It symbolically teaches the unity of the Father (Osiris), the Son (Horus), and divine completeness of being (the Verb, seen as the conjunction of Osiris and Isis, the male-female unity). Trinity is proverbial in the Bukôngo: “Makua maitatu malâmba Kôngo, mamôle mbodi mâmbu.” This literary means, the Kôngo nation is a pot standing on three stones, two stones are a mess; that is, trinity is the essential feature of the Bukôngo. Trinity can be drawn through the cosmological argument:

- Being absolutely without contingence and absolutely infinite, God is indivisible.
- Thus, as the manifestation of the individuality of the Father, the sum total of reality, the Sons of God are the expressions of the completeness of the Father, the Verb.
- The Sons are inseparable from the Father who is the sum total of reality.
- Therefore, the Father, the Son, and the Verb are inseparable in their substance, their activity, and their being. The Father acts eternally in
the Son through the Verb. The Son acts eternally for the Father by the means of the Verb.

- The Father is Spirit, the Supreme Principle animating all reality.
- Because the Father always acts through the Sons, each Son animates an aspect of reality.
- Thus, according to the solar trinity, each Son is manifested in the universe of the creator as a Spirit, the animating principle, of an aspect of reality.

These “Spirits of nature” are coeternal and coexistent with the Father, their existence is not a superstition, but a provable aspect of AIK. It is a shame to see African scholars call the appeal to these Spirits magic, arguing that “beliefs in spiritual agency must be significantly altered to accommodate scientific development” (Ciaffa, 2008, p. 130). The recourse to these Spirits relies on the solar science whose bases can be scientifically demonstrated while the basic presupposition of the Western science, reality is material, can never be demonstrated.

Starting from an empirical base and proceeding by deduction, the validity of this cosmological argument is obvious because in a deductive reasoning, the “conclusions merely reveal what their premises already state” (Ladyman, 2002, p. 20); therefore, its premise being an empirical true fact, the conclusions of the kemetic cosmological argument are true facts.

Moreover, the cosmological implications of this solar theodicy are mathematically verified by the explanation of the movements and stability of the bodies at astronomical and subatomic levels in the deterministic Newtonian physics (Luyaluka, 2014). Thus, it can be concluded that the AIK is a valid scientific approach for the search of reality.

This argument shows that, contrary to the lunar science whose presuppositions are accepted a priori, the solar science seats on scientific bases whose validity can be proven a posteriori. This implies that it is anomalous to judge the solar science from the perspective of the lunar a priori bases whose validity is falsified by the solar kemetic cosmological argument.

**The Future of the AIK From the Perspective of Solar-Lunar Cycle**

The solar science is not peculiar to Africa; besides, the Persians knew the solar-lunar cycle (Figure 3) and referred to it as the God of light and the God of darkness taking turn after 3,000 years (Volney, 1826); while the ancient Egyptians used to name the solar phase of this cycle “the return of the Osiris from the Amenti” (Rawlinson, 1886, chap. II §26).
According to the great Kôngo prophet Simon Kimbangu, the world is at the wake of a great revolution: “the Black man will become White, and the White man will become Black” (Bandzouzi, 2002, p. 91). The prophet did not expect a racial mutation, but an epistemological shift, which will bring the next advent of the preponderance of the solar science.

Looking prospectively at the same future, Cheikh Anta Diop (1984) has seen the need for a return to a past of cohabitation between religion and science. We have seen that this cohabitation is the very mark of the solar science. Diop wrote “African philosophers, armed with their cultural and historical past, are able to participate in the building of this new philosophy which will help man to be reconciled with himself . . .” (p. 186).

It is thus a must today for the African scholars to grasp the scientific import of the AIR and AIK, and work for the restoration in the AIR of the preponderance of the divine mystery; this is the *sine qua non* condition for the return of Africa to the efficacy of its glorious solar past.

**Conclusion**

This study aimed the development of a naturalized epistemology of the AIK. For this purpose, I demonstrated the existence of a science in the pre-colonial Africa by adding to the means used thus far the biblical proof of the existence of two basic epistemologies: the solar (used by the Africans) and the lunar, which is the preserve of the Western civilization.

I demonstrated the epistemological bases of the AIK to be scientific, *a posteriori* deductive truths. Starting from different cosmological convictions,
the solar science is revelatory and divine in its origin; thus, the word science in the solar epistemology alludes to the general knowledge, which comprises religion, wisdom, and science (elucidative knowledge) or, in a restricted way, to the elucidative knowledge. Solar science studies reality as being ultimately spiritual.

Contrary to the lunar epistemology, the focal point of the solar epistemology is the perfection of the initiatory frame, the conformity of the initiate (the scientist) to the religious norm and the practical nature of the knowledge he produces.

Finally, I stressed the urgent need for the African scholar to understand the scientific import of the AIK as well as of the AIR upon which it is based, and to work for the reestablishment of the preponderance of the divine mystery in our spiritual cultures; this is a sine qua non condition for the return of Africa to its glorious solar past as expected by the Ancients.

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Notes

1. Term used to designate a chief, and elder, or a man of honor.
2. A “Spirit of nature” governs an aspect of reality: spirit of fertility, spirit of rain, spirit of invisibility, and so on. Thus, the solar explanation of the building of the Pyramid is that the priests knew how to command the “Spirit of the heavi-ness” to leave the stone temporary; Jesus alludes to the same technology in Mathew 17: 20.
3. Revelation implies a conscious contact with an ancestor, while in an intuition the receiver perceives the communication of an ancestor as seeming his own thought. That is why the African initiate is prone to follow an intuition despite the contrary dictate of the reason!

References


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**Kiatezua Lubanzadio Luyaluka** has a PhD (honors) degree from Trinity Graduate School of Apologetics and Theology. He is currently the director of the Institut des Sciences Animiques, a research and initiatory center focusing on African spirituality and epistemology. His publications center on a defense of African spirituality and epistemology.