Full Length Research Paper

Origin of Iron Technology in Africa: The Abiriba Blacksmithing in Focus

Onuoha Chidiebere

Department of History and International Relations, Abia State University Nigeria.

Email: onuohachidiebere123@gmail.com

Accepted 16th June, 2017

Abstract
This study deals with the origin of iron technology in Africa, with emphasis on the origin of Blacksmithing in Abiriba. Blacksmithing made the people of Abiriba famous in Pre-Colonial era, their scope of itineration include, Cross River Igbo Area, Umon, Efik, Uzuakoli, and its environs. These places are presently in Abia, Ebonyi, Cross River and Akwaibom states. The study highlighted the following: origin of iron technology in Africa; Blacksmithing in Igboland: An Overview; the origin of Blacksmithing in Abiriba and sources of raw materials. The study adopted a historical method of quantitative content analysis which includes the analysis of data from field trips, oral interviews and secondary sources such as books, journals and internet sources. The finding reveals that intellectual debates are till on concerning the origin of iron technology and that the origin could be hidden in the virgin area of archaeological discovery. On the origin of Blacksmithing in Igboland and Abiriba, is still subject to controversies as no Igbo Blacksmithing community agrees that they learnt the craft outside their domain. In Abiriba, the information from oral sources entails that it originated from autochthonous or through diffusion.

Keywords: Blacksmithing, Africa, Abiriba, Igbo, Nigeria.

INTRODUCTION

The people of Africa participated in iron technology as one of their cultural traditions. The evolved various means of interacting and subduing their environment during the pre-literate and pre-Colonial period. The introduction of technology in Africa played significant roles in promoting agriculture, domestic implements, and military tools and in construction. The Igbo people as part of Africa were not left behind in these technological activities. The following communities in Igbo land participated, they are, Nkwere, Nsukka, Abiriba, Agbaji-Udi among others. These communities were blacksmithing as well as smelting communities. These technological feat that the people were known for were stifled by the Colonial Government in Nigeria that did not want any technological advancement that will undermine their economic motive in Africa.

However, the focus of this study is on the origin of Blacksmithing in Abiriba. Abiriba is presently in Ohafia Local Government Area of Abia State, Nigeria. Blacksmithing technology made the people of Abiriba very famous, their influences stretched to areas that covered four states namely, Abia, Ebony, Cross River and Akwaibom states, presently in South Eastern and South-South Nigeria. This was as a result of how important their goods were to the people and also through their organized itineration system supplied the people the products that served agricultural, domestic, and military and construction purposes. However, irrespective of how
famous blacksmithing made the people of Abiriba, its origin has remained obscured. To this end, this study is poised to bring the origin of blacksmithing to spotlight, and in bid to achieve this, the study examined the following: origin of iron technology in Africa; blacksmithing in Igbo land: an overview. It also discussed the origin of blacksmithing in Abiriba and sources of its raw materials.

**ORIGIN OF IRON TECHNOLOGY IN AFRICA**

Before delving into the subject matter of this study, it is pertinent to trace the origin of iron technology in Africa. The exact date of origin and development of iron-working in Africa at large has remained a controversial issue and hence cannot be concluded either from written literature or from oral information. Scholars have different views about the origin of iron-working in Africa and West Africa in particular. Two schools of thought have tried to analyse the beginning of iron-working in Africa. They are the "Exotic" and the "Indigenous" schools, otherwise referred to as the "Diffusionist" and the "Independent or Autochthonous" schools of origin. These schools of thought on the origin and development of iron working in Africa represent two opposing ideas in the provenance of iron industry.

The indigenous or independent theorists argue that the earliest reported evidence of metal smelting in sub-Saharan Africa is Nubia where small numbers of copper artefacts have been recovered from sites dating after 4000BC, Okafor 1993. It was further posited that this industry probably came from Egypt where the technology for smelting copper was introduced from Upper Egypt between 2686 and 2182BC, Child and Killick 1993. This was because Egypt was believed to be the origin and epicentre of high culture and cradle of civilization. This idea was supported by a German scholar, Ludwig Beck, in 1884 and 1903 who said that "Everywhere, an original art of producing iron among numerous native tribes of Africa were not imported but original."

Some archaeologists believe that metallurgy was not practised elsewhere in sub-Saharan Africa until the early millennium BC, with the exception of Ethiopia. However, the smelting industry of Ethiopia remain uncertain just like any other known history of metallurgy in the world. But a fully developed bronze and iron working industry with strong stylistic affinities to Southern Arabia existed by the fifth century BC.

From what can be seen, available data are pushing back independent origin back to the middle of the second millennium BC which could make Africa the home of the oldest metallurgies. According to Peter Schmidt, "The hypothesis for independent invention is currently the most viable among the multitude of autochthonous hypothesis". Christopher Ehret also concurs when he asserts that: Africa south of the Sahara it now seems was home to a separate and independent invention of iron metallurgy.... To sum up the available evidence, iron technology across much of sub-Saharan Africa has an African origin dating to before 1000 BC.

If this assertion is considered, it could lead to speculate that independent invention of iron evolved from Africa and was never introduced or diffused into the continent from any other part of the world. Still on this school of autochthonism, most Africa scholars believe that iron smelting in Africa emanated from different places in Africa, and do not support foreign origin and diffusion outside Africa. E. Okafor, tends to lend support to independent origin of iron technology within Africa when he opined that this development, responding to differing environmental circumstances, the type of ores available, socio-cultural factors and economic needs, resulted in the wide range of technologies that have archaeological and ethnographic records. It is meaningless to speak of the development of iron working in Africa, as if there was a single and uniform linear process of development across the continent.

He tends to stress that rather than one single centre for the development and spread of the iron technology, that there could have been several centres for such a development. What could inform this trend of thought is the fact that the interplay between man and his environment, and some social and economic factors usually forces man to device means of responding or tackling environmental challenges. In other words, technology, which is a cultural tradition developed in human community for dealing with the physical and biological environment, could develop independently in several centres as man responds to survival challenges.

There also others who agree with the independent evolution, such as Jan Vansina who took the rather extreme position that iron smelting began in several places at about the same time naming the western Great Lakes area, Gabon, the Termit Massif, the Taruga site in central Nigeria and the Igbo region in south-eastern Nigeria. This line of thought was not peculiar to him as British historian Roland Oliver, holds the opinion that iron smelting could have occurred many times over in the world and that Africa iron-working probably originated in the northern part of the continent.

It is noteworthy that Africa archaeologists, who believe in the autochthonous provenance of iron technology, do not have a generally agreed time of probable origin. In the beginning, it was Egypt, followed by Taruga and later Nsukka. The excavation conducted in central Nigeria at Taruga (NOK Culture) showed a different date which dwarfed the position of Egypt as the independent place of origin in Africa. Formerly perceived as the earliest place of independent origin of iron works, the NOK Culture was
famous for its terracotta figurines which produced iron in the first millennium BC. Speaking about the NOK culture, Alpern asserts that:

The Taruga site consists of three acre flat terrace in a well-watered, wooden valley about 55 miles southwest of the village that gave the NOK culture its name. Bernard Fagg, the British archaeologist who identified the culture in the 1940s excavated 13 iron smelting furnaces there in the 1960s... Tuyere fragments slag, charcoal, and iron objects were also found on the site; and abundant pottery suggested a settled community. Unlike other NOK culture sites, Taruga yielded no polished stone axes, hinting at a full iron using society.\textsuperscript{10}

It therefore, implies that if this date of the NOK culture is accurate, the implication is that Nigeria is the home of iron industry in sub-Saharan Africa. However, it was also believed that the dating was merely contrived on consensus since radiocarbon dating are especially conducted on chance, and a consensus seems to have emerged for just that period of the beginning of metallurgy at Taruga.\textsuperscript{11}

Furthermore, evidences of independent origin today seem to suggest that iron metallurgy has its root inNsukka, Nigeria. Edwin Okafor, in his attempt to unravel the truth of the sources of iron, had excavated metallurgical furnaces in Nsukka some 150 miles south of Taruga and concluded that bloomer iron smelting probably began there around the fifth century BC, much same time as at Taruga, and that iron ore reduction in Nsukka began around the time of the earliest one even though the calibration pattern on iron working activities are not at present sufficiently precise or reliable to settle the question of origins.\textsuperscript{12}

D.D. Hartle’s excavation in 1975, the result of an archaeological survey, suggests that a village/farming way of life was established in the area at least 5000 years ago when the use of iron was introduced from the north after AD and that bronze/brass objects diffused into the area sometime latter from the south.\textsuperscript{13} The point of argument here is to show that in spite of the divergent of opinions, iron metallurgy may have had its roots in Africa and that if these claims and others are correct, it suggests that iron was first of all produced in Nigeria and from there spread to other parts of Africa. This view is supported by many historians and archaeologists, based on archaeological evidence. Considering the diversity of melting furnace types in different West African communities (Nigeria inclusive), the variations in the techniques of iron production, dates obtained for iron smelting in West Africa, the abundance of rich iron ores in many parts of Nigeria, and the well-established pottery industry in some parts of Nigeria, it has suggested by many scholars, as stated earlier that the Nigeria area could have been one of the centres for the independent development of this technology.\textsuperscript{14} Still on the issue, Aremu maintains that iron technology in Africa was older to that of Moroe when he asserts:

Opposed to the diffusionists are the advocates of the independent invention of iron technology in West Africa. They noted that the date of iron working in Taruga, central Nigeria (700BC) predatesthe advent of iron in Moroe (500BC), one of the corridors that the diffusionists argued as the highway for the arrival of iron in West Africa.\textsuperscript{15}

On the other hand, opposing camp, the exotic school of origin argues that iron smelting in Africa diffused from other part(s) of the world to Africa after it was saturated with iron and that it was through the process of socio-economic interaction that Africa disclosed the knowledge to her descendant. In other words, diffusionists believe that iron smelting technology emanated from one place and possibly from one man (and at a place) and that the knowledge gradually spread to other parts of the world. The proponents of exotic hypothesis include Thurstan Shaw.

According to him, “Inventions were only made once and a new idea spread out like ripples on a pond, to other parts of the world, neighbouring people had to learn it from the original inventors and then pass it on to the other side and so on”.\textsuperscript{16} Still on the origin of iron metallurgy, he further reiterates that the development of iron metallurgy does not have West African origin, in his words:

In the case of iron, this area was in north eastern Anatolia, a part of Asia Minor, where it was invented about fifteen hundred years before Christ – whereas iron did not become common in Egypt until 600BC. In North Africa however, Carthage was founded in the ninth century B.C by the Phoenicians who had already learnt the use of iron. The Carthaginians traded with the people of the desert to the South of them and their lines of engravings on rocks showing wheeled vehicles which trace out a route to reach the River Niger near Gao. Perhaps then, it was along this routes that knowledge of iron working spread from north Africa to the Niger valley some five hundred years before Christ and then down the valley of NOK culture area.\textsuperscript{17}

Shaw’s assertion above suggests that West Africa could not have had any knowledge of iron technology had the trade relationship between the North and West not existed. What is of paramount importance here is that many among holders of the diffusion hypothesis do not have a common source of its origin, but base their claims on individual idiosyncrasies and self-willed deduction leading to multiple sources of iron diffusion in West Africa and the world at large.
Oliver and Brian who are of the independent origin hypothesis debunked Shaw’s claim by suggesting that chariots do not of themselves provide evidence for the use of metals, for it has been demonstrated that a light chariot, suitable for hunting or slave – raiding could be made entirely of wood and leather and by using only stone tools for carpentry tanning, Rolan. Furthermore, Gordon Childe Gordon sees all developments and civilizations as having evolved in the Middle East as a result of two revolutions namely, the domestication of crops and animals as represented by the Neolithic Revolution, and the urban revolution as characterized by city-dwelling and metallurgy. Surprisingly, some archaeologists have said that despite some reports of presumed Carthaginian iron technology, no early evidence has ever been found of iron working at Carthage.

In the same vein, it is often argued that iron smelting is so technical that it could have been discovered only in one location in the world from where it spread to other parts. This diffusionist theory claims that the legendary Chalybees of the Hittite empire discovered this technology at about 1500 B.C. The proponents of this theory further claims that after the collapse of their empire, Hittites spread this idea to other parts of the world through trade, warfare, and cultural contacts.

Another theory on the origin of iron metallurgies in Africa is the theory of diffusion within Africa. Traditionally, Africa has been divided into two parts when discussing its historical metallurgy, with Mediterranean North Africa, the Nile valley, and the Red Sea Coast considered separately from Sub-Saharan Africa because Bronze – Age metal working was confined to the Nile Valley. Having this in mind, Tylecote who is one of the strong proponents of diffusion within Africa speculates that it was from Egypt that iron technology came to West Africa because Egypt appears to have participated early in the use of copper (with early finds from 5000BC), and because Egypt had a direct formative influence on the advent of metallurgy in Meroe, which in turn, as has been observed, spread it to other parts of Africa. Tylecote was not alone on the issue of iron diffusion with Africa. Raymond Mauny concurred with his assertion that:

...by Ca 1100 BCE, the Phoenicians had common knowledge of iron working and at about the same time they began exporting them, colonizing the western Mediterranean; Carthage (the Phoenicians) passed along its knowledge of iron to the Berber natives of the region around the sixth century B.C.E. and they in turn transmitted it to their fellow Berbers in the Sahara.

The implication of this impression is that knowledge of iron-working diffused from North Africa and did not develop independently. Alpern, responding to the origin of iron works in Africa as analysed by scholars, rightly observed that:

Many people responsible for many of the earliest radiocarbon dating in Sub-Saharan African – Lambert in Mauritania, Gerbenart and Roset in Niger, MacEachern in Nigeria and Cameron, Van Grunderbeek in Rwanda and Burundi, have expressed the belief that metallurgy came from the Middle East or the Mediterranean basin; others like Schmidt in Tanzania and Clist in Gabon (and Grebenart and Van Grunderbeek as well) have discarded their earliest dates.

From this observation, one can conclude that the general claims of the archaeologist on the uses of the carbon dating system may not be sustainable for academic development and as such should either be discarded or improved, and that enthusiasm for autonomous origin seems to have a coloured interpretation. Furthermore, the speculations and the ideas that Africa is the home-base of iron is contrived solely on finds of iron artefacts and products and on not the remains of actual furnaces or other production remains. The idea that Africa seems to be the cradle of iron-working is still a simmering issue in the minds of most scholars who think otherwise. Alpern, however, presented an intelligent argument in favour of the stance of diffusionist theory with this assertion:

How could Sub-Saharan Africans have hit upon iron metallurgy when masters of copper and bronze metallurgy in the Andes, Iberia, Italy, the Balkans, the Indian sub-continent, and south-east Asia apparently never managed to do so; even the hyper-inventive Chinese did not begin producing iron until at least half a millennium after the Middle East, which makes their independent discovery of technology debatable.

The above feeling of the external diffusionists is that independent Africa did not have any experience of copper and bronze smelting technology and hence may not likely be the cradle of iron provenance. A Nigerian Archaeologist, Bassey Andah is of the view that Africans could have acquired the experience by the process of pyrotechnological experience of making pottery, and that pit firing raises temperature high enough to smelt iron from laterite blocks used to prop up the pottery being fired, Andah 1979. He further reiterated that, "people is used to working a metal by first melting it stood a good chance of inventing some form of smelting process not necessarily dependent on large, high temperature furnaces borrowed from the copper melting process".

These pottery remains included those excavated by D. D. Hartle earlier mentioned, which yielded evidence of human habitation for at least 5,000 years ago, as had earlier been noted. But Merrick Posnansky seems to
suggest in subtle stand which contrasts with both Andah and Hartle. According to him, West Africa had produced no positive evidence of pit – fired pottery before the Christian era, and pit-firing does not seem to have been employed anywhere else in Sub-Saharan Africa in ancient times. But the confusion which Andah brought is that, “Nigerian pottery was open-fired at a very low temperature”. Considering the above, it seems questionable or doubtful that sub-Saharan Africa, through the experience of pot-making developed the art of smelting and fashioning iron.

The debate about the origin and spread of iron-working technology remains a continuum for a very long time to come. Whether the idea of independent invention was based on wishful thinking or unsubstantiated claims will also remain an exercise of further studies. But of importance is the fact that both the diffusion and independent origin theories do not have modern scientific laboratory method of measurement. Engenia Herbert has observed that the debates have often been politically charged, and its oscillations influenced by ideological concerns. Also, doubts that sub-Saharan Africa invented iron smelting have at times almost been equated with racism. It is in opposition to the above that Schmidt, while introducing his subject theme, avers that:

The paradigm of Africa’s inferiority in technological life is widely thought throughout the West and Africa; entrenched historiography... underwriters continued technical domination of Africa historical representation that portrays African inferiority has been instrumental in the economic and psychological subjection of the continent.

From the above assertion, one thing stands out that Schmidt’s project lacks scientific backing. Though his aim may be to deconstruct Western representations about Africa’s iron technology development. He further asserts that ideological and political project to depreciate the myth of African technological inferiority spurred him. In other words, Schmidt embarked on defending Africa technological innovation.

Racism, bigotry and politics mixed with the uncertainty of the carbon-dating techniques have created an atmosphere of discord in the reconstruction of the origin and spread of iron smelting technology. From all indications, evidences show that an autochthonous origin seems certain and satisfactory. It is based on this that one can assert that in the absence of any other pure scientific evidence, and judging from the multiplicity of local furnaces, and slags quite different from the ones built from outside, that indigenous iron-working originated from among the people.

This, one believes, was made possible by the ingenuity and persistent search by the Africans for technological appurtenances and wherewithal for a sustainable political and socio-cultural development in Africa, especially in Nsukka where evidences of iron working are numerous. One is inclined to agree with French Archaeologist, Gerard Quenchon who concludes the matter, “Having root does not mean they are deeper than those of others” and that “it is not important whether Africa. Metallurgy is the newest or the oldest and if new discoveries show iron came from somewhere else, this would make Africa less or more virtuous”. In other words, knowing the exact date of the discovery and origin of iron technology is inconsequential because as it does not add or remove anything.

This research, having weighed the intellectual, historical and archaeological evidences in the light of reality, posits that the origin of iron working may not be authentically ascertained at the present until more authentic means of dating along with more archaeological findings in Africa, yield more accurate dates of origin to dwarf the available records. However, the research is not also in doubt to say that iron working in Africa is more ancient, though its origin remains hazy. In the same vein, for the fact that all the findings that were made do not include other blacksmithing communities in Igbo land is a proof that extensive findings have not been made and this research can postulate that the exact date or origin of this iron technology could be hidden in what it calls hidden or virgin areas for archaeological discovery. Also, these virgin areas could just hold the answer to this sophisticated puzzle of the origin of iron technology.

**BLACKSMITHING IN IGBO LAND: AN OVERVIEW**

In Igbo land blacksmithing was a viable economic activity during the pre-colonial and colonial period, it played a paramount role in sustaining agriculture. The following communities became famous as a result of this craft, they are: Awka, Nsukka, Nkwere Agbaji Udi, and Abiriba. Besides these famous communities, there are other blacksmithing and smelting communities in different part of Igbo land like Uturu, Umukabia, Abala and so on, who were also great in this iron technology. These communities were not reckoned as blacksmithing communities like these famous ones either because they did not carry out their craft beyond their locality or that they have not received enough scholarly exposure. On the origin of iron technology or blacksmithing in Igbo land, almost all these communities in Igbo land claim that their knowledge of blacksmithing was not gotten from any place outside their domain. In fact, that it was a transcendental gift from the gods. They hold tenaciously to the view that the gods taught them the craft. For instance, the people of Nsukka hold the view that a god call chukwukereguru taught them the art of blacksmithing, Awka people claimed that a chief god called Okanube came down from the sky and taught them blacksmithing.
In Nkwere the story is similar, as they also claimed that the supreme God sent Ogadazu (Nkwere god of blacksmithing) who taught the people the craft.\textsuperscript{38}

The reason for this attribution of origin of blacksmithing to divinity could be said to be due to lack of information on the origin occasioned by the inability of the ancient men of these towns to transmit this history to their next generation and as a result of the shortcomings in arriving at a universally acceptable time and place of origin that is still a subject of debate as explained above.

In Igbo land much archaeological work has not been carried out to ascertain its origin. This historical and archaeological lacuna has created a gap in knowledge which every community explores to its historical advantage to establish their independent of the knowledge or origin of blacksmithing. It is worthy to note that blacksmithing in Igbo land had the highest clustering in Nsukka-Okigwe cuesta.

Nsukka-Okigwe cuesta is a range of hills which stand as a distinct mark on the landscape of South-Eastern Nigeria with a spectacular combination of highlands and valleys and symphonic diversity of saddles and convex summits. This cuesta could be divided into three sections, namely: the Nsukka plateau; udi-Awgu highlands and the Okigwe scarpland.\textsuperscript{39} As noted earlier, this cuesta has a higher degree of smelting and blacksmithing communities or sites than in other part of Igboland. It was also rich in iron ore this was the reason why blacksmithing thrived therein. Its trade route runs from Nsukka through Awka, Orlu, Okigwe to Bende.

**BLACKSMITHING IN ABIRIBA: A HISTORICAL BACKGROUND**

The origin of the craft of blacksmithing in Abiriba, to the best of the researcher’s knowledge, and as unveiled through oral interviews, could be traced from four main versions, namely, First Migration version, Metaphysical version, other waves of migrant’s version, and Autochthonous version.

**First Wave of Emigrants Version**

There are some people who are of the opinion that the first people that migrated from Akpa to Abiriba were a generation of blacksmiths. As they sojourned from one place to another, they practiced their blacksmithing craft. Notable among the proponents of this version of origin among the blacksmiths was Egbuta Eke.\textsuperscript{40} Sydney Emezue and Ukaegbu Nmaju supported this version of the origin of blacksmithing in Abiriba when they asserted, that “Prior to their settling on the present location, Abiriba people had acquired the knowledge of producing iron from stones and working iron such that the abundant iron stones found in the hills became a source of potential wealth”.\textsuperscript{41} In the same vein, Onwka Njoku concurs with the theory of Akpa migration from Cross River area, stressing that historically the origin of blacksmithing in Abiriba can be found within this migration.\textsuperscript{42} He further postulates that the need to get a conducive environment for both smelting and blacksmithing drove the people from place to place till they settled in their present location.\textsuperscript{43} This stance also received endorsement from Prof. Mkpa Agu Mkpa, when he asserted that these group that migrated from Akpa had blacksmithing with them.\textsuperscript{44}

However, the research will examine the strength of the defence in which the prospects of the first migration tradition of Abiriba had. It is an established fact that not all the people of Abiriba migrated from the Cross River area, given the fact that there were various waves of migrations or that there are people who described Abiriba as an amalgam of people from different migration waves. It is also generally believed that the first migration started from Akpa to Uruakpan, or Usukpan, to Ena-Uda and Ena Offia and then to Udara Abuo and later to Agboha (that is in the present day Abiriba location).\textsuperscript{45} It is noteworthy that of all the communities that the first wave of Abiriba migrants sojourned, none is a blacksmithing community. Most of these communities were wood carvers, sculptors, medicine-men and warriors. This could be connected with the fact that the first crafts engaged in by the Abiriba were wood carving, sculptors, medicine-men are also warrior agents. As Oby I. Eke Agbai has rightly observed:

Abiriba people lived at Akpa along upper Cross River. They later lived at Ena which is also along the upper Cross River Area. These two areas have Ekpe masquerade as their cultural heritage. The history of Abiriba has it that they also lived in the area of Eko and therefore it was natural for these people’s culture to rub off on Abiriba people. It could be said they adopted these culture as part of their own natural norms.\textsuperscript{46}

Considering this, one will not be in any difficulty to fuse the facts that the first migration wave into Abiriba migrated with wood-carving profession and warriors propensities and some cultural practices but not blacksmithing. Based on this, the researcher asked the following question. If these emigrants did not pass through any blacksmithing community, how come these people and scholars attribute blacksmithing to it? Eke Egbuta, in response to the question, adduces that the first migration was made up of a mixed multitude and that the blacksmithing lineage was part of that movement.\textsuperscript{47} This answer received an endorsement also from Onwuka Njoku when he postulated that there was also a Jukun-Benue wave that migrated to the Cross River area which later formed part of the first migration, some of who were blacksmiths.\textsuperscript{48}

In this regard, the notion that the first migration wave came with some blacksmiths in the light of the above has not failed the test of validity .To this end, it is possible to infer that the first migration may hold the clue to the origin
of blacksmithing in Abiriba.

Metaphysical Version

In Abiriba, just as in other African societies, the environment and nature are infused in every aspect of their lives and culture, and the cosmology and beliefs are intricately intertwined with the natural phenomena and environment. In the light of this, religion and the elements of nature is inseparable.\(^{49}\)

This is the reason why the people of Abiriba believe in the supernatural interventions in the affairs of their lives and occupation. Based on this, Ukegbu Oji and other people were of the view that the people of Abiriba, especially their forefathers, did not learn blacksmithing from anybody or place.\(^{50}\) In fact, Ukegbu Oji postulates that blacksmithing originated from Abiriba but he could not explain how it originated.\(^{47}\) Okebe Agwu opined that the art of blacksmithing was a talent (Akara) that "Obasi bi elu" (God that lives in Heaven) bestowed on the sons of Abiriba as he bestowed other talents to different people of the world.\(^{51}\)

Enyinna Eze cited the Abiriba blacksmithing guild known as "Nkuma Asaa" (Seven stones)-representing the seven traditional kindreds of the blacksmithing in Abiriba as the people that first received the talent and spread it among the people. He also claims that from creation, God gives talent to every community to enable them to survive in this hard earth, due to the fact that God cannot send the equipment from heaven but will release the means to get the equipment to men who care to consult him.\(^{52}\)

This line of thought is not surprising because religious belief is highly entrenched in Abiriba. For this reason, attributing issues to supernatural intervention is very natural. Another reason for this religious or metaphysical attribution could be that since most of the people may have had any knowledge of the origin of the blacksmithing in Abiriba they tend to attribute it to a metaphysical phenomenon or want to keep their "famous superiority status" or reassigning their prestige to somewhere.

Other Waves of Emigrants Version: There were people who were of the opinion that the later migration from places introduced this blacksmithing craft into Abiriba. It could be recalled that there were other waves of migration into Abiriba from Ibeku, Biase, Isu, Ibibio and from Afikpo. It is believed that these migrants came with some crafts into Abiriba. These latter migrations were people from different places, and history has it that they came into Abiriba with various crafts.\(^{53}\) In supporting this version, Engr. Nmecha Nmecha speculate that people must learn something from somewhere that there is nothing like saying that something is not learnt from anywhere. He reiterated that Abiriba learn blacksmithing from the first emigrants and other blacksmithing emigrants from Uturu, that the uniqueness of Abiriba blacksmithing was as a result of this merger of knowledge.\(^{54}\) Based on this, it will not be out of place to speculate that one of the crafts that these emigrants came with was blacksmithing.

Autochthonous Version: There are some who hold the view that Abiriba became famous in blacksmithing because the aborigins of Abiriba were blacksmiths. Notable among them is Oji Oji, who opined that the first wave of migrants met blacksmiths in the present location of Abiriba. In his narration he emphatically opined, that at Ihebu Ameke precisely, at Ndi Obia, Abiriba ancestors met one Okpurukpu Ukaji a blacksmith who specialized in the making of hoes, popularly called "Uwelle" (matchets) and other farm implements and weapons of war notably "Mpam" (knives and cutlasses) as well as spears. It was believed that the Abiriba ancestors reached an accord with Ihebu Ameke to live in peace with each other and as a people of one family... Okpurukpu Ukaji the blacksmith trained some youths in his profession continued in the making of hoes, matchets, spears and other implements which were purchased mainly by the people of Ohafia.\(^{55}\)

The articles were so much in demand by the people of Ohafia who sold to other towns. Okpurukpu Ukaji felt that he would make more profit by establishing at Ohafia and this was the first experiment of business outside Abiriba, and Ohafia became the first beneficiary of Abiriba business experiment and technology outside its locality. After staying for some years at Ohafia, Okpurukpu Ukaji came in contact with people from Arochukwu who always came in large numbers to purchase blacksmiths products. He decided again to move to Arochukwu and establish his business there. After some years at Arochukwu, Okpurukpu Ukaji returned home to Abiriba and collected Nwafor to go with him to Arochukwu as a business apprentice. Some believed that Okpurukpu Ukaji took Nwafor with him from Abiriba to Ohafia and then to Arochukwu.\(^{56}\) The researcher having weighed the different stance taking by the blacksmiths and scholars is of the view that the first migrants had blacksmiths in their midst and also that they met blacksmiths when they arrived to Abiriba.

SOURCE OF RAW MATERIALS

The findings of the researcher based on oral account and evidence revealed that Abiriba sourced their raw materials for blacksmithing from two sources namely, within Abiriba and from Uturu. Engr. Nmecha Nmecha, Nnanaa Ikwoonwu, Oji Oba Kalu and Prof. Mkpa Agu Mkpa all were of the view that Abiriba sourced their raw materials within Abiriba.\(^{57}\) At different occasions without
any of them seeing each other during my field work all said that they got their blacksmithing materials from the sand. They went further to say that the heat the sand with a particular material called ikiji until they get the raw materials for blacksmithing. The researcher requested to provide the fund so that what they said could be demonstrated before him and they told him that he has to be initiated before he could be able both to carry out the experiment and watch the process. When the researcher persuaded Nnanna Ikwuonwu he took him to their blacksmith shrine and brought a what he called “ikiji” and gave him and also told him that if government is interested in investing on blacksmithing that with sand that they are ready to produce iron and use it to manufacture things.

However, few of the people that attempted to relay the account were of the opinion that Abiriba blacksmiths got their raw materials outside Abiriba. This stance received endorsement in the work of Adiele Afigbo where it was stated that Abiriba obtained their iron ore from the mines along the Okigwe-Arochukwu cuesta. This Adiele’s stance was also supported by Prof. Onwuka Njoku who told the researcher that the Abiriba blacksmiths sourced their raw materials around the region that Adiele mentioned. This stance led the researcher to embark on a field trip to ascertain if the above information contained any substance on the source of raw materials. The information gotten from this trip revealed that Ugwuelle in Uturu was a smelting community. At Ugwuelle the researcher saw slags scattered everywhere and even brought some home. The people said that their forefathers smelted iron and that they sold it to other blacksmithing community including Abiriba at Orie Ndu market at Ovim. Considering the fact that the trade route runs from Okigwe to Bende and its environs it is the view of the researcher that the people of Abiriba who also benefited from the trading activities in this region also sourced some if not all their raw materials from Uturu the nearest smelting community to Abiriba.

CONCLUSION

The overviews of this article, revealed that there two schools of thought on the origin of iron technology in Africa, namely, the exotic or diffusionist school that viewed its origin from outside Africa and the autochthonous school that hold that it originated from Africa. The cardinal reality on this controversy of origin is that due to lack of reliable data its origin is yet to be ascertained. In the same vein, the origin of blacksmithing in Igbo land was anchored on divinity due to the inability of the ancient men to transmit to the younger generation and as result of lack of scientific acceptable data. The concentration of smelting and blacksmithing communities in Igbo land was at Nsukka-Okigwe Cuesta. Consequently, the origin of blacksmithing in Abiriba was holistically viewed from four perspective, namely: First wave emigrant version, autochthonous/metaphysical version, other waves of migrant version, and the aborigine version. The research speculates that that origin of blacksmithing in Abiriba could be traced to the first version and also to the aborigine. Abiriba sourced their blacksmithing raw materials within and outside their domain.

REFERENCES

3 Ibid.
6 C. Ehret, "The Civilizations of Africa: A History to 1800", in S. B. Alpern, Did They or Didn’tThey Invent It? Iron in Sub Saharan Africa...., 42.
8 J. Vansina, "Historians, Are Archaeologists Your Siblings?" HA 22 (1995) in Alpern Did They or Didn’tThey Invent It?.., 42.
9B. Fage, Nok Terracottas in Alpern, Did They or Didn’tThey Invent It?...39.
19C.V. Gordon, "New Light on the Most Ancient East", in T. Shaw, Why Darkest Africa? Archaeological Light on an Old Problems,
20Childs and Killick, in Stanley B. Alpern, Did They or Didn't They Invent It?..., 50.
24R. auny, "Essai sur l'Historic des Metaux Afrique Occidentale" BIFAN 1952 in Alpern, Did They or Didn't They Invent It?..., 46.
25S. Alpern, Did They or Didn't They Invent It?..., 82.
27S. Alpern, Did They or Didn't They Invent It?..., 85.
29Ibid.
30M. Posnansky, “Introduction to the Later Prehistory of Sub-Saharan Africa” (Quoted in “General History of Africa”) in S. B. (eds) Alpern, Did They or Didn't They Invent It?..., 84.
31 B. W. Andah, Nigeria's Indigenous Technology (Ibadan: University Press, 1992), 76
32E. W. Herbert, “African Metallurgy: The Historians' Dilemma” In S. B. Alpern, Did They or Didn't They Invent It? 89
33S. Alpern, Did They or Didn't They Invent It? 89.
36Iron in Africa: Revisiting the History, Accessed March,
40E. Eke, 91 years old, retired blacksmith, interviewed at Ameke, 29 June, 2016.
42The researcher and Prof Onwuka Njoku an authority on Iron Technology in Igboland had a fruitful discussion on the subject under investigation.
43Ibid.
44The researcher had a discussion on the origin of blacksmithing in Abiriba with Prof. Mkpa Agu Mkpa at his residence in Umuahia the 21st of December,2016.He opined that there two schools of thought on the origin of blacksmithing in Abiriba.That one schools holds that the first emigrats were blacksmiths while the other holds that blacksmithing started in Abiriba for defensive purposes against hostile neighbours and that the raw materials are gotten from Abiriba.
45U. Oji, 83 years old, retired blacksmith, interviewed at Amaogu, 2 Feb, 2016.
46E. Eke. Interview cited
47E. Eke. Interview cited.
48O. Njoku. Interview cited.
49O. Agwu, (87 years old), farmer/blacksmith, interviewed at Abuo, 1 Jan, 2016.
50E. Eze, (94 yrs), Farmer/Blacksmith (Retired), Interview, Abuo, 27 June, 2016.
51E. Eze, interview cited
52O. Agwu, (87 years old), farmer/blacksmith, interviewed at Amaogu, 2 Feb, 2016.
53E. Eze, interview cited
54E. Eze, interview cited
55O. Calu, (65 yrs), Trader, interviewed at Amaogudu, 5 March, 2016.
56The following blacksmiths and scholars all concurred that Abiriba blacksmiths got their raw materials from within Abiriba.They are Prof. Mkpa Agu Mkpa, Engr. Nmecha Nmecha, Nnanna Ikwuonwu, Agbeze Ikwuonwu and Chief Oji Obi Kalu.