Linguistic Genocide against Development of Indigenous Signed Languages in Africa

Emmanuel Asonye, Mary Edward and Ezinne Emma-Asonye

bstract The UN 1948 Convention on Linguistic Genocide did not expressly **L**consider the gradual but continuous suppression of minority languages and cultures by a superior one and/or the authorities, which has been the situation with, not just the spoken languages as has been emphasized in literature, but the signed languages in Africa. However, the Convention's definition of 'genocide' includes "...destroying in whole or part, or of preventing preservation or development." Significant number of African signed languages are said to have originated from American Sign Language ASL (Asonye, 2016), a few others have their bearing from British Sign Language BSL and French Sign language LSF (Nobutaka, 2004). Some of these African signed languages are still threatened or at least influenced by their foreign "parent languages" till this day. While the indigenous African signed languages are struggling to emerge, and develop, the undue influence of their foreign counterparts continue to suppress the languages, delude the users, learners and even teachers of the languages.

Edward (2015a) and Asonye (2016), both have reiterated the gradual endangerment of signed languages used in Africa, which is claimed to be caused by contact with spoken languages, local laws, formal education, and other post-colonial ideologies. Thus, these signed languages are gradually being battered by social and educational policies. Apart from village sign languages, many African countries can also boast of national sign languages.

This paper argues that the Africa's deaf communities are rich in signed languages which are sustained by several socio-cultural factors including the obvious lack of linguists' interest to study signed languages, and have been under the continued attack of the colonist languages and cultures considered superior because they are documented and largely studied, It also seeks to demonstrate patterns of the effects of linguistic genocide on signed languages in Africa and their users. Examples are drawn from the signed languages used in selected deaf communities in Nigeria and Ghana. A multidisciplinary approach was used in the data collection and analyses, which includes simple questionnaires and interviews from deaf individuals, deaf educators, and signed language instructors. A large corpus of indigenous signed language items was also collected from different deaf communities and were analyzed and findings show that these signed languages have developed unique structural features distinct from the ASL, Signed English or any other imposed signed language.

1.0Introduction

A number of African signed languages are claimed to have originated from American Sign Language ASL (Asonye, 2016; Nyst, 2010) and others have their bearing from British Sign Language BSL and French Sign language LSF (Nobutaka, 2004). The undue influence on some of these African signed languages by the foreign languages is felt till this day. The influence is mainly through "borrowed" materials of the parent signed language that are used in teaching in schools for the deaf. The lack of print materials in most signed languages used in these Deaf schools is a major reason for relying on foreign materials, especially when the signed language of education is a product of a foreign signed language. Whereas this influence is mainly on signed languages of education used across African communities, there remain another "battle" on local signed languages.

Local or indigenous African signed languages are found in many African communities (Nyst, 2010). In Ghana, Adamorobe Sign Language (AdaSL) is a village signed language that is used in Adamorobe, a village with a high rate of genetic deafness (Nyst, 2007, Edward, 2015a). Nanabin Sign Language (NanaSL) is a home sign system developed by a family in Ekumfi (Ghana) with a high rate of genetic deafness (Nyst, 2010). Bura Sign Language is a village sign language used in Bura, an Hausa community in North-East Nigeria (Blench & Warren, 2006). Maganar Hannu also known as Hausa Sign Language is local sign language that is used in Kano State in Nigeria (Schmaling, 1997). Village signed languages develop within small communities or villages with a high incidence of hereditary deafness (Meir et al. 2010) and home signs are usually used by families with recorded deafness affecting two or three generations. Both village sign languages and home sign systems are products of local communities and are therefore indigenous legacies. Most indigenous African signed languages are older than the foreign based signed languages and an example is AdaSL which is older than Ghanaian Sign Language (GSL). Okyere & Addo (1994) record that coexistence between Deaf and hearing people at Adamorobe dates back to the year 1733, and this implies that AdaSL begun in the 18th Century. GSL on the other hand was introduced in the 1960's through the effort of Andrew Foster. Thus, whereas, many foreign based signed languages in African countries are through the effort of Andrew Foster [1], indigenous signed languages are community legacies and most times no individual can claim ownership.

The use of indigenous signed languages in Africa dates back to the transatlantic slave trade where it was identified that the deaf people used gestural resources to communicate (Miles, 2004). Apart from the signed languages of education, village and home signs have been used in several communities in Africa (Nyst 2010). The indigenous signed languages are faced with language endangerment (Edward 2015a, Nyst 2010) because of

the preference of the new signed languages of education. The existence of societal norms and laws has reduced the numbers of deaf populations in some societies (Edward 2015a; Kusters 2012; Nyst, 2007). While the indigenous African signed languages are struggling to develop, the undue influence of their foreign based counterparts continue to suppress the local signed languages, delude the users and learners of the languages. Studies conducted in different deaf linguistic communities in Nigeria and Ghana show the influence of ASL on the signed languages used in these countries.

The signed languages of Africa have been under constant contact with the spoken languages used in the communities. Edward (2015a, 2015b) discusses the effect of language contact on AdaSL. One of such contact has led to the pidginisation of AdaSL by some speakers of Akan in Adamorobe. She quotes that, "[t]he pidgin AdaSL has the structure of Akuapem Twi and the signers try to incorporate the few AdaSL signs that they know" and the result "is primarily gestural rather than a regulated sign language like AdaSL" (Edward, 2015a). Further, the gradual endangerment of signed languages used in Africa, is claimed to be caused by contact with local laws, formal education, etc. (Nyst, 2007; Edward 2015a, 2015b). The gradual linguistic genocide of indigenous African signed languages is therefore a compounding of several issues.

Whereas indigenous signed languages are struggling to develop, most foreign based signed languages in some African countries are yet to develop enough study materials for learners. Research conducted at the School for the Deaf Kuje in Abuja in 2016 [2] revealed that students and teachers rely on materials from American Sign Language (ASL) to teach. Thus, deaf signers in ¹Kuje and most parts of Nigeria rely on ASL materials for teaching and learning. However, deaf signers in this school and several parts of Nigeria have developed a distinct signed language that is similar to ASL but very relevant to the Nigerian community. Language development policies in most African nations seem to overlook the importance of signed language documentation and the development of material for studies. Further, as more linguists in Africa research on languages that are used within their communities, research work on signed language linguistics is limited to the very few and most times the ground-breaking researches in signed languages within Africa are conducted by foreigners. The problem is compounded by the seeming neglect of government intervention in Deaf education. For example, although primary and junior high school education

¹Andrew Foster, a deaf missionary from America is credited with the emergence of Deaf education in many African nations (see, Nyst, 2010).

² S-deli community engagement project in Nigeria

is free in Ghana and Nigeria (for both mainstream and special schools), the resources available to some special schools are not adequate for the students.

Special attention to minority languages in many African countries is needed to sustain them from possible endangerment. However, since this intervention is delayed in most countries, there is a gradual extermination of minority languages and some signed languages (like AdaSL) are potential candidates for language death if all users shift to GSL. This paper seeks to discuss "this linguistic genocide" and also offer possible solutions to both indigenous and foreign based signed languages in Africa to thrive and also maintain their statuses.

2.0 Methodology

A large amount of linguistic and demographic data has been collected from various deaf communities in Nigeria the past four years through grassroots community engagement and family intervention outreaches. Major data collection instruments include signed language videos comprising name signs, monologue shots, and discourse sessions; personal interviews with deaf individuals, (adults and students), family members and signed² language instructors; questionnaires and reports from deaf schools. Sensitization forums at different deaf communities aimed at discussing the social stigma faced by deaf individuals and their signed language(s) and the solution included the deaf individuals, their family members, deaf educators/sign language interpreters and school administrators.

Signed language materials collected are being classified distinctively as "school signs" and "out of school signs". While the "school signs" represent signs taught/learned in school, "out of school signs" represent the signs that are not necessarily taught in the classroom, may be part of home signs, village signs or gestural expressions. In the Special School for the Deaf Kuje and Junior Secondary School Pasali, both in Abuja, Nigeria, several words were signed differently in school and outside school by the same deaf students in different contexts. Nevertheless, over 95% of Nigerian Deaf³signers acquired/learned signed language in Deaf schools, where they

²We use the expression Nigerian Sign Language to refer to the linguistic entity, which is an embodiment of the culture of deaf people in Nigeria, and the expression Nigerian signed language as a more general term "parallel to spoken or written language (Wilcox,

³Deaf with the capital 'D' is widely used in literature to refer to those who are culturally deaf (see Padden & Humphries, 1988; Padden, 1999; Stokoe, 1999; Kannapell, 1999; Wilcox & Wilcox, 2002), as opposed to other signed language users, who are also members of a deaf community. We also use the term here as a collective noun rather than adjective.

are led to believe that they are learning American Sign Language (ASL) (Asonye, 2017). In the same vein, a similar percentage of deaf educators and signed language interpreters in Nigeria believe they are using American Sign Language, as a result, we make attempts to find out the similarities and differences between ASL and the signed language varieties used in Nigeria.

Data from interviews, questionnaires, and personal stories are focused, among other things on establishing the literacy level in signed language of members of deaf communities, which include the Parents of Deaf Children PODCs, Children of Deaf Adults CODAs, deaf educators, etc. in relation to the documentation and development of the Indigenous Nigerian Sign Language INSL. It also extends to finding out the level of linguists' representation and participation in the study of signed languages, since our earlier studies have shown that linguists' non-participation in the study of signed languages is a major mitigating factor against the development of African signed languages (Asonye and Emma-Asonye, 2013; Asonye and Rarrick, 2017). The data on signed languages used in Ghana were recorded through a series of fieldworks done in 2014 and 2016 by one of the authors. These research works involved both deaf signers of GSL and AdaSL. Other people who were interviewed included both hearing and deaf teachers of deaf schools at Mampong, hearing and deaf signers of Adamorobe, some national executives of the Ghana Deaf Association etc. This large corpus of data from Ghana and Nigeria represented both village and urban sign languages. To identify the linguistic influence on the sign languages, selected data from the corpus were transcribed and annotated. The selected data was chosen because the authors found traces of linguistic influence in the conversations, the individual signs etc.

2.1 African sign languages

Deafness in African history is recorded by Miles (2004). In this paper, Miles presented an overview of deaf cultures in African histories based on earlier research works. According to Miles, "Celine Baduel-Mathon (1971) made a detailed classification of gestural communication in West African countries from documentation of the previous two centuries, but described no formal SL used by deaf people" (Miles 2004:535). Deaf cultures within African histories were recorded to have used gestural resources for communication. Adamorobe deaf signers were quoted in this paper as the earliest deaf group in Africa to have a coordinated signed language. Okyere & Addo (1994) cited that the signed language in Adamorobe emerged as early as the 18th century. Miles' (2004) historical records also showed deafness in Northern Africa; for example, Egyptian records lamented over hearing loss and evidence from papyrus demonstrate that the word deafness was in use in ancient Egypt. In Western part of Africa, especially in Adamorobe (Ghana), deaf and hearing people recounted the history behind deafness in the community and several

reasons were given for the cause of deafness in Adamorobe (see Nyst, 2007; Kusters 2012 for review).

Thus, signed languages have not been new to many societies in Africa. The emergence of foreign based signed language in Ghana was tied to evangelism. Andrew Foster's missionary works led to the establishment of several deaf schools in many African countries (Nyst, 2010). The co-existence of foreign based and local or indigenous signed languages in Africa have led to the terms urban and rural sign languages. The urban sign languages refer to the signed languages of education which are usually the foreign based signed languages. The rural signed languages are the village signed languages and the home sign systems. Few urban signed languages in Africa are products of indigenous signed languages (e.g. Lingua Gestual Guineense in Guinea-Bissau, Langue des Signes Mileane/Langue des Signes Bambara in Bomako, Mali c.f. Nyst 2010).

Most indigenous signed languages in Africa are at the verge of language endangerment. This endangerment is due to mostly human actions and in this paper, we refer to this process as linguistic genocide (more details in section 3.0). Turning to a popular American example, "for 2 and half centuries, 1690-1950, a high rate of hereditary deafness appeared in the population of the Island of the Martha's Vineyard in Massachusetts" (Groce 1985:43). The people on the Vineyard developed their own signed language that never became identical with American Sign Language. The main reason for the death of the signed language used in Martha's Vineyard in Massachusetts (USA) was the movement of Deaf signers to other communities through education and marriage. Currently, rural, and urban signed languages are used side-by-side in most African societies and the prestige given to urban signed languages (e.g. GSL in Ghana) is indicative of a gradual shift to these signed languages to the detriment of the rural signed languages.

3.0 Linguistic Genocide in Perspective

The UN Convention of 1948 captures linguistic genocide in different perspectives which however point towards a singular act or intention – to kill a language; to suppress a language towards its extinction. Linguistic genocide, which was discussed alongside physical genocide was considered a serious crime against humanity:

Any deliberate act committed with intent to destroy the language, religion or culture of a national, racial or religious group on grounds of national or racial origin or religious belief, such as (1) Prohibiting the use of the language of the group in daily intercourse or in schools, or the printing and circulation of publications in the language of the group; and (2) Destroying or preventing the use of libraries, museums, schools, historical monuments,

places of worship or other cultural institutions and objects of the group. (Encyclopaedia of Genocide and Crimes Against Humanity, 2005)

The UN 1992 General Assembly further captures the "Declaration on the Rights of Persons Belonging to National, or Ethnic, Religious and Linguistic Minorities" thus:

Article 1/1: States shall protect the existence and the national or ethnic, cultural, religious and linguistic identity of minorities within their respective territories and shall encourage conditions for the promotion of that identity.

Article 2/1: Persons belonging to national or ethnic, religious and linguistic minorities... have the right to enjoy their own culture, to profess and practise their own religion, and to use their own language, in private and in public, freely and without interference or any form of discrimination.

Article 4/3: States should take appropriate measures so that, wherever possible, persons belonging to minorities may have adequate opportunities to learn their mother tongue or to have instruction in their mother tongue (UN General Assembly, 1992).

In the light of the above excerpts, deaf individuals in Nigeria and in all other African countries belong to the minority groups, either ethnic or national minority. In Nigeria, the Deaf are part of the national minority groups – they are a linguistic community, but the question is whether the language used in this community qualifies as "their own language", "their mother tongue". Over 98% of deaf children in the world never receive education in their most fluent language, Sign Language, the language of their group (Jokinen, n.d.). This in general sense refers to the act of forcibly giving education to deaf children in spoken or aural language as opposed to signed language, but in the African setting, we are concerned about deaf children forcibly receiving education in an alien signed language, a language they cannot culturally claim.

3.1 Patterns of Linguistic Genocide against African Sign Languages

American Sign Language (ASL) is the language of deaf education in most, if not all countries in West and Central Africa (Nyst, 2010), and only Zimbabwe for now has a constitutionally recognized national signed language. African signed languages are often described and classified according to their source in relation to either ASL or British Sign Language, BSL (Asonye, 2016). The fact is that, with Nigeria as an example, the signed language varieties used in deaf education in most African countries have evolved and developed grammatical structures different from ASL used in the United States of America or BSL used in the United Kingdom today, yet the deaf signers and deaf educators rather chose to profile the languages used in schools for the Deaf as ASL. This is the *neo-colonial* ideology, which has resulted in the lack of commitment by the deaf and hearing signers to the development of the

national signed languages and the suppression of the home and village signs. Kusters (2014) has done an extensive work on this type of ideology in shared signing community of Adamorobe. Our studies in Nigeria among deaf communities also indicate that the word *ASL* is used more often by deaf students and their teachers to refer to their language than the words *Sign Language*, and the words Nigerian Sign Language are hardly used at all, even when used, there is a nuance of confusion on which Nigerian sign language is referred. An average deaf student, for instance would choose to say, "I know American Sign Language" rather than "I know signed language".

Studies show that deaf people in various times and in rural communities such as deaf communities in Kano, Nigeria (Schmaling & Hausawa, 2011), Bamako in Mali (Nyst, 2015) have always invented, adopted, or developed out-of-school signs, home signs or village signs with which they communicate, and this linguistic behaviour is traceable back to deaf education era in Africa. The origin and development of ASL is traceable to Old French Sign Language (OFSL), although there were records of Natural Signed Language used at the Martha's Vineyard and other deaf communities before the emergence of Old American Sign Language (Wilcox and Wilcox, 2002), but today we have French Sign Language (LSF) and ASL as two distinct languages and not LSF-American Sign Language as has been suggested in African setting - ASL-based Nigerian Sign Language, ASLbased Ghanaian Sign language or Nigerian ASL, Ghana ASL, etc. (see Nyst, 2015). It is in our view that this pattern of linguistic genocide is subtle but powerful; it prevents deaf people of African descent from protecting "the existence and the national or ethnic, cultural, linguistic identity" (UN Convention, 1948).

This pattern of linguistic genocide against African signed languages is also seen in "Prohibiting the use of the language of the group in daily intercourse or in schools..." (Encyclopaedia of Genocide and Crimes Against Humanity, 2005), as young deaf individuals from a signed language active community or village has no choice but to drop the local sign s/he has learnt as soon as s/he gets enrolled into a deaf school regardless of how fluent the deaf individual is in the local sign, and regardless of the fact that natural signed languages have often and spontaneously developed among primary sign users (Jokinen, n.d.). Students of Junior (Inclusive) Secondary School Pasali in Abuja, Nigeria, stated that at first, they were confused as to which sign to use, and later they gradually embraced the classroom sign at the expense of the local signs they knew. Deaf students from Adamorobe (Ghana) studying at a nearby School for the Deaf in Mampong Akuapem, have to switch to GSL at school because that is the language of instruction and communication at the school. This very subtle switch has led to most educated young Adamorobeans to use GSL at home. As reported by Nyst (2007) and Edward (2015a) the signers switch to AdaSL completely only in the presence of old deaf signers who do not know GSL. However, the impact of GSL on AdaSL is enormous as some of the old deaf signers have gradually borrowed some GSL signs and these appear uncontrolled in their conversation.

It is incredibly worrisome that over 50 years ago, a version of ASL (Old ASL) with "The Joy of Signing" was introduced into African countries, with time and events bringing change throughout the linguistic world, 50 plus years later, the most officially reliable sign language book used in the Deaf classrooms in Africa is "The Joy of Signing", while the mother language ASL has continued to evolve through a lot of study by both deaf and hearing experts. What is the joy of signing and imposing a language that has refused to develop upon African deaf communities? Today, sign language in Nigeria and other English-speaking African countries are closely assuming the structure of Exact Signed English (ESL) or Signing Exact English (SEE), which is rather characterized as a devised or derivative signed language – a language of classroom (Jokinen, n.d). SEE, a component of Manually Coded English (MCE) is described as a means of communication invented with the aim of assisting deaf children in Western world to learn English – it is not a natural language like ASL.

3.3 The Status of Nigerian Sign Language (NSL) and Ghanaian Sign Language (GSL)

Over the past four years, lots of linguistic studies have been going on in Nigerian Deaf Communities like never before. A lot of signed language data has been collected from different deaf communities across the country. Prior to now, studies on the Nigerian Deaf had largely focused on Deaf education (e.g. Adima, 1989; Eleweke, 2002; Ajavon 2003; Ajavon, 2006, etc.), Deaf welfare and service provision (e.g. Adepoju, 1984; Eleweke, 1997; Akinpelu, 1999, etc.), and little or nothing had focused on the development of Nigerian Sign Language. Ajavon's (2011/2012) project, A Sign Language for Nigeria, seeks to develop a dictionary for NSL that is compared with ASL. We have, in the course of our studies in Nigerian Deaf Communities, heard about isolated efforts of some deaf educators, especially in the Southwest, towards inventing and preserving a more indigenous NSL for deaf classroom education, but such efforts have hardly been sustained for two major reasons, which we will discuss in this section: the seeming unwillingness or inability of deaf community members to develop their language (Asonye, 2017), and the unwillingness or failure of linguists to study signed language and participate in its documentation (Asonye & Emma-Asonye, 2013; Asonye, Emma-Asonye & Edward, 2018).

Nigerian Sign Language has been described as a variety or a dialect of American Sign Language (Nyst, 2010), not because formal teaching of signed language to deaf children was first introduced by an African American, or because the variety of Nigerian Sign Language referred to evolved from ASL, but because the users and teachers of the language appear to be caught up with the neo-colonial attitude influenced by linguistic genocide and they are comfortable believing that they are using a foreign language, which they have no obligation to develop (Asonye, 2017). In addition, some undocumented views we collated in our outreaches claim that NSL is a form of ASL because they share a common vocabulary repertoire, but it is our view that the presence of spoken English in Nigeria and its status as a language of education brings a huge influence of vocabulary in the spoken language, which to an extent has influence on the signed language. The classroom sign language has retained a good number of English vocabulary items because 99% of hearing teachers in deaf schools use Nigerian English or at least Nigerian Pidgin in their everyday lives and as such, import English vocabulary in their signs.

The historic call for the development of Deaf education in Nigeria by both deaf and hearing scholars, (such as Adelogbe, 1974; Igwe, 1988; Ihenacho, 1988, Eleweke, 2002 and others) has no doubt helped to get Deaf education thus far, although much is still to be done, but significantly the call has failed to capture an important aspect of Deaf education – signed language development. The call for the documentation and development of Deaf language is as important as the call for a better Deaf education, if not more. Since the call is a one-sided call, deaf scholars, who are products of classroom signs have no choice but to relapse to the influence of the imposition of *foreign signed language* in their linguistic community, even when the sign they learned is neither used by deaf signers in America nor in any other Western World, but in Nigeria, and probably a few other African countries facing a similar linguistic identity crisis (Asonye, 2017).

Nigeria deaf population still pays allegiance to Andrew Foster for his contribution and efforts to Deaf education in Nigeria and other West African countries (Eleweke, et al, 2015). Efforts of indigenous and foreign deaf scholars who have contributed to the development of Deaf education in Nigeria are documented (Eleweke et al, 2015), but the need for the documentation of Indigenous Nigerian Sign Language seems not to have been thought of by Nigerian deaf scholars. On the other hand, our studies (Asonye and Emma-Asonye, 2013; Asonye and Rarrick, 2017, and Asonye, Edward & Emma-Asonye, 2018) suggest that linguists' unwillingness to undertake the study of signed languages is another great disadvantage to signed language development in Nigeria. Nigeria is one of the African countries that has received commendations for establishing Special Education Departments at Tertiary level (Kiyaga & Moores, 2003), yet no Nigerian College or University is currently offering a course in signed language linguistics as at the time of this article, and the institutions that offer Special Education courses, such as the University of Ibadan, the

University of Jos, Alvan Ikoku College of Education, College of Education, Oyo, etc, do not have courses in sign language documentation or sign language linguistics and end up training their students in classroom signed language, while the indigenous signed language varieties remain endangered.

The emergence of signed language research in Ghana began with Frishberg's (1987) work. However, local researchers were not involved in linguistic research of sign language until the late 2000s. Although several research works were done on deafness, deaf education etc., linguistic research began recently. Currently, GSL is the language used in institutions devoted to the deaf and among the educated deaf in Ghana. GSL just like the signed language used in schools for the deaf in Nigeria and many other African signed languages, where Andrew Foster worked, traces its root from ASL. All the educated deaf GSL users who were interviewed (in Accra, 2014) attested that although there exist similarities between GSL and ASL, they would rather refer to the signed language used in Ghana as GSL since it has a certain uniqueness that differentiates it from ASL. This contradicts the views towards NSL that were shared by some users (deaf signers, interpreters) and teachers in Abuja and Pasali. AdaSL and other home signs systems used in some villages and homes in Ghana are indigenous signed languages and different from GSL, especially in sign structure. Documentation of the first dictionary of GSL was pioneered by Boison et al. in 2001 and recent additions and changes have been made to some of the signs in this old dictionary although there is no official revision to the old dictionary. For example, signs for DOCTOR, NURSE, etc. as represented in the old dictionary have been replaced with new signs. New dictionaries have been produced by other teachers and instructors of GSL and some of these are scorned as being more of ASL than GSL.

Research works on rural sign languages have been produced for AdaSL and Nanabin Sign Language (Nyst 2007, 2010; Kusters 2012, 2014; Edward 2015a, 2015b). Whereas research on the rural sign languages have indicated the potential threat to their survival (Nyst 2007; Edward 2015a), very few linguistic researches have been done on GSL (Edward, 2014, work in progress, MacHadjah, 2016). Currently, GSL is taken as a course in some Ghanaian Universities and Colleges. These courses are tailored to teach hearing students GSL so they can act as interpreters and teachers of the Deaf. In the University of Ghana's Department of Linguistics, linguistics research on GSL is done in addition to teaching the students to sign. Thus, students are prepared and introduced to the linguistics of GSL through a year-long course.

Some private Nursing Training Colleges in Ghana have started teaching basic conversations in GSL to the Nursing students. These conversations are made up of simple questions that are asked at the Hospital and signs for sicknesses and diseases. The longer-term goal of this pilot

project is to make Nurses capable of communicating with deaf people who patronize hospitals without interpreters. Some Government Hospitals in Accra (e.g. Ridge Hospital) have in-house interpreters for deaf people who patronize their facilities. These measures are tailored to bridge the communication gap between deaf and hearing people. Although these steps are to mitigate the communication barrier, only few interpreters are available in government and private institutions. The National Television in Ghana has a signed language interpreter assigned to the major news bulletin (at 7pm) and also interpretation services are rendered in GSL for major national events. These efforts may seem great but most deaf people within rural communities do not get access to these facilities. For users of village and home sign systems other than GSL, these services are not relevant to them since they barely understood GSL.

At the time of developing this article, the Department of Special Rehabilitation Sciences, College of Administrative Studies and Social Sciences, Kaduna Polytechnic, Kaduna, Nigeria organized "an intensive training in American Sign Language and Communication" for professional signed language interpreters in Nigeria based on "medical vocabularies, psychiatric assessment of the psychotic deaf patient... legal terminologies and principles of courtroom... principles of advanced descriptive American Sign Language, etc," held on Monday August 28 to Saturday, September 2nd, 2017 at the University of Port Harcourt Medical School. Our concern for this laudable training program is on the subject - the title. We reached the organizers of this program to find out why and how the program was based on "Advanced American Sign Language" and we were informed that some of the signs to be taught in the program were locally generated indigenous signs, despite the emphasis on ASL.

3.4 Are Local Signs Threatened?

Over 95% of deaf children in Africa and beyond are born by hearing parents (Jokinen, n.d, Asonye, 2017). In sub-Saharan Africa, where congenital hearing loss in children is largely caused by accidental factors, preventable or other undiagnosed diseases and defects as opposed to genetic factors (McPherson &Swart, 1997), hearing parents play little or no positive role in their children's signed language acquisition, although the importance of good parent-child communication has been emphasized in literature as one of the factors that ensures a child's safety and development. Hearing children would have learnt over 700 words at age 3, while their deaf mates would have learnt about 25 words at same age.

Studies carried out in over 40 deaf schools in Lagos Nigeria (Asonye and Rarrick, 2017; Asonye et al, 2017) show that only about 1.8% of hearing parents of primary and secondary school deaf students can sign, and about

same percentage of siblings of these deaf students can also sign. Different families devise their own means of communication with the deaf member, which, most times excludes signing. These deaf children are left with little or no sign language access until they get lately enrolled into a formal school, where they begin to learn classroom signs, because of lack of Early Intervention and Deaf Mentoring Programs.

In Adamorobe, young signers are gradually shifting to GSL as the preferred language of communication. This preference introduced at school is gradually being accepted by some of the old uneducated signers. The need for a deaf signer in Adamorobe to acquire bit and pieces of GSL is now necessary for understanding young signers and also for interpersonal communication among other deaf groups. Although most GSL signers will refuse to refer to their language as ASL, the Joy of Signing is still used in many clubs and churches to teach both deaf and hearing signers GSL. Edward (2015a) reported of the influence of religion on local sign languages; the lack of materials in GSL and AdaSL or other local/indigenous signed language has led most religious groups and other clubs to rely on ASL material to teach signed language in their classes. These classes are usually free and attract a good number of people who are interested to learn signed language and thus, pass on the ASL influence. Are local signs threatened? Research evidence shows that they are. To what extent are they threatened? To the extent that they need urgent and conscious attention towards their documentation and further development.

3.4.1 ASL Vs. SEE

Deaf and hearing signers in America understand the horizontal line that represents the spectrum between American Sign Language (ASL) and Signing Exact English (SEE) or simply spoken English. The difference - the gap between ASL and spoken English has been emphasized in literature (see Klima and Bellugi, 1979; Fromkin, 1988; Wilcox and Wilcox, 2002; Humphries, Padden &O'Rourke, 2004), and an average deaf signer with the knowledge of the two forms of signing can effortlessly code switch between the two forms, depending on the context. This is the beauty of any language - the user's ability to 'manipulate'. The ASL signer, who is also skilled in signing English (Kannapell, 1989) knows when s/he code-switches, and understands the difference between the two; s/he also understands that ASL is the embodiment of AmericanDeaf Culture, as opposed to English (Padden, 1989).

The above described linguistic attitude is applicable to any linguistic community, especially to Nigerian Deaf Linguistic Community. If Nigerian signed language users would acknowledge the status of the signed English and be able to differentiate it from the indigenous signs which is an embodiment of Nigerian Deaf Culture, plus a more conscious effort among the language users to develop the indigenous signs, this would make many

more deaf people to be more skilled in INSL. Despite the indiscriminate projection of the term ASL among Nigerian Deaf Communities, many signed language users we have met agree to the fact that Deaf in Nigeria hardly have mutual intelligibility with Deaf in America, who sign 'real ASL' or 'deep ASL'. A professional signed language interpreter, in Team S-DELI⁴, Kindness Okoro, in an oral interaction, explains how she was able to adapt her signing style to appear less of signed English and more of culturally adapted style. According to her, the deaf individuals she interprets for often commend her style as 'beautiful'. It is therefore our take that, while Nigerian signers could keep their version of signed English, (at least for the fact that English is an official language in the country), conscious efforts should be made towards the development of the indigenous signs, some of which are found among local signers, and mostly, out of school.

We are aware that varieties of indigenous Nigerian Sign Language exist across the various deaf communities in the country, especially as a result of the influence of spoken languages on signed languages. To this effect, we have often been asked how we intend to represent all the varieties in our documentation, and our answer has been that we will represent as many varieties that would be captured on our lexical entries, in line with the WFD (World Federation of the Deaf) recommendation. Meanwhile, the question is soften asked with the misconstrued understanding that signed language is a signed version of spoken language. WFD discourages the standardization of one signed language over others in a State with more than one variety such as Nigeria but supports the representation of all that exist in a documentation material.

The literacy campaign experiment by the Nicaraguan government that led to the development of a complete signed language with syntax and grammar by deaf children that were not yet exposed to school, is one of the modern evidences of human innate ability to develop language (Birth of a Language, 2011). The above experiment is applicable to any linguistic community, either at the village, regional or state level, geo-politically. We are aware of some scholars' views that "there is nothing like Nigerian Sign Language", because of its multilingual nature, but we see this view as coming from the language ideology that signed languages are forms of spoken languages. However, from the point of view of national sign language, Nigeria has no recognized national sign language. Every natural signed language is a language of its own, developing over time out of the community of its users, though not without the conscious efforts of its users to work towards its development. It is our candid opinion, therefore that the linguistic ideology that sees ASL or SEE as replacing indigenous Nigerian

⁴ Team S-DELI is the team of field linguists and other professionals working towards the documentation and development of Nigerian Sign Language, Save the Deaf and Endangered Languages Initiative.

Sign Language, is an ideology that is insinuated by linguistic genocide, and such that threatens the existence of local signed languages in Africa.

4.0 Linguistic Impact on Local Signed Languages in Africa

The study of signed language linguistics, which began in the 1960 with the work of William Stokoe, Sign language structure: an outline of the visual communication systems of the American deaf, could be said to be an already established discipline in the Western society (Mcburney, 2006), but we doubt if such could be said of the discipline in the African society. Linguistic studies, no doubt has greatly improved the status of signed languages around the world and changed people's perspectives of it, but how much of linguistic impact has been felt among signed languages in Africa? Research work on African signed languages by African linguistics began recently. Earlier research works on African sign languages were mostly pioneered by people outside the communities. (Frishberg, 1987 on GSL and AdaSL; Nyst & Baker, 2003 on Ugandan and Malian sign languages; Nyst, 2007, 2010 on AdaSL and several West African sign languages, Kusters 2012 on AdaSL, Blench & Warren, 2006 on Bura Sign Language in Nigeria etc.). There are few indigenous linguists involved in African sign language research, such as Machadja (2016), Edward (2015), Asonye & Emma-Asonye (2013), Orie (2013).

We happened to get in touch with Nancy Frishberg in the course of developing this work, who gladly shared some of her experiences in (1987) while studying AdaSL in Ghana. She stated that the signed language used in the State school was not referred to as ASL, even though "it had some influence." "The State school had mostly kids from hearing families, while the village school had all native signers, but without someone to guide a bilingual educational program", she stated. Sixteen years after, Victoria Nyst, studied the signed language of this same village, and nine years ago, Annelies Kusters did a study on the same language. We therefore observe the gap in time within which these studies took place, and we also observe that each of these scholars studied Adamorobe Sign Language AdaSL (and GSL), not ASL.

The earliest serious linguistic study on a Nigerian signed language we have known is Constanze Schmaling's study of Hausa Sign Language (HSL; transliterated as "Language of the Hands"), carried out between 1994 and 1998, first published in Schmaling (1997; 2000; 2001;2003), then Blench & Warren, (2005) on Bura Sign Language. We are equally aware of Ajavon's (2011/12) "A Sign Language for Nigeria" (although we had no access to this work as at the time of writing this article), Orie (2013) on Yoruba Sign Language. Among the above-mentioned studies on Nigerian signed languages, Schmaling (2003), though focused on Hausa Sign Language (HSL), is critical about the "transfer" of a developed foreign signed language,

(such as ASL in Nigeria), to another Deaf Community (or country). This, according to her, "is not only difficult but also problematic." Until today, the Nigerian Deaf Community is still dealing with the problem of the introduction of ASL variety to Nigeria, which was not conceptually bad, however, its consequences are viewed from the perspective of linguistic genocide or linguistic dominance.

5.0 The Way Forward (Future of indigenous sign languages in Africa)

The introduction or importation of European and American signed languages to African countries, no doubt, has imposed an anaemic underdeveloped status on indigenous signed languages such that we still refer to indigenous African signed languages as "local signs" or local gestures", and the foreign signed languages as developed signs (Schmaling, 2003; Asonye, 2017). A number of foreign signed languages imported into different African countries have been accounted for by different scholars as follows: Botswana - ASL, Danish Sign Language, German Sign Language; Ethiopia - Swedish Sign Language, ASL, and Finnish Sign Language; Gambia - Dutch and British Sign Languages; Mali - ASL, and LSF; Tanzania - ASL, Swedish Sign Language, Finnish Sign Language, and others; Ghana - ASL; Nigeria - ASL (Okombo, 1991, 1992; Akach, 1993; Schmaling, 2003). In Nigeria, both deaf native signers and hearing professional signers have been in a kind of confusion on the status of ASL vis-a-vis indigenous signed language(s), although some are coming to the realization of the fact that the indigenous signed languages need to be developed to a standard status. It is a pity that the Sign Language Working Group of 1970, (Schmaling, 2003) never concluded their work of "modifying" ASL for Nigerian use, and never had their work published, although we have heard that some indigenous signed language book is available for deaf educators in the western part of the country (Oyo State College of Education); we have not had access to such a book.

The way forward for African signed languages, no doubt lies in the conscious and collective efforts of signed language users, activists, linguists and educators to document and develop the languages. Asonye and Emma-Asonye (2011), Asonye & Rarrick (2017), and Asonye, Edward and Emma-Asonye (2018), have all emphasized the need for more African linguists to embrace the study of signed languages, and bring their professional efforts to the signed languages in the same way they are doing for spoken languages. Younger African linguists have a future with the study of African signed languages as it is a profoundly untapped area of study. Linguistics departments of more African Universities could incorporate signed language studies in their course curriculum to train more signed language linguists and augment the efforts of Special Educators. Days are gone when indigenous languages users or community members relied solely on foreign scholars for the study and development of their languages.

More language activists and advocates should spring up from among Children of Deaf Adults (CODAs) and Parents of Deaf Children (PODCs). Our organization, Save the Deaf and Endangered Languages Initiative (S-DELI) has recently begun the incorporation of CODAs and PODCs in the documentation and developmental process of Nigerian Sign Language, although the program is still at the sensitization stage, which will be followed by the training stage.

Most importantly, Deaf in Africa should be highly concerned with the nature and future of their language, and they should be more committed than any other group in the development of their language. We are aware of the stratification gap between the few educated and successful deaf population in Africa and the less educated population. If the findings of the ongoing Deaf documentation project of S-DELI across Nigeria, where about 80% of deaf population is unemployed, and 86% have Secondary School Certificate, were to be applied to other African Deaf communities, we would appreciate the fact that more deaf individuals need better education to understand their role in the development of their language. Unemployment within the deaf communities in Ghana (especially the rural communities) is overwhelming (Edward, 2016, 2017). Since linguistics is still a young discipline in Africa, and sign linguistics, language documentation, and communication disorders are still somewhat strange to most Universities in the continent, we assume that very few (if any) of the few educated African deaf scholars (some of whom are abroad) would be found in any of the above disciplines. That buttresses the importance of linguists wading into the situation. They will assist in the training of deaf individuals on signed language linguistics and signed language documentation programmes.

6.0 Conclusion

Indigenous signed languages used in many African nations have been battered through imposition of ASL (and other foreign signed languages) and unfavourable governmental policies that have hindered the development of these signed languages. The status of most African indigenous signed languages suggests they are endangered. The neglect of the scientific study of signed languages by many linguists within African is not just a coincidence; there is not much motivation to learn and even develop the linguistics of signed languages that are almost moribund. As bleak as the situation might seem, we suggest an alternative view. African signed languages will thrive if users and learners of these signed languages are not deluded with imposed foreign signed languages. We are much aware of the role of ASL and other foreign signed languages in developing many urban signed languages in Africa. However, just as no ASL signer will deliberately refer to ASL as OFSL, we also believe that, it is time that signers

and other users of African signed languages appreciate their signed languages as bona fide indigenous properties instead of gradually turning the language to ASL and other foreign signed languages.

Development of Deaf lives and the development of signed languages move hand in hand (Edward 2016, 2017). As signed languages (both of indigenous and foreign backgrounds) are developed, deaf people will also emerge and develop their talents and intellect through their own languages. Furthermore, signed language linguistics could still be a thriving field in Africa. When we identify the uniqueness of our signed languages, we can then develop linguistic materials that are representatives of African signed languages. Thus, African signed language linguistic study will make it possible for deaf scholars to be involved in the description of their own signed languages. As minority languages, African signed languages are likely candidates of linguistic neglect if language users and policy makers fail to play their part in sustaining the language. Currently, there are over 250 million people suffering from hearing impairment (Mathers et al. 2000) and these people whether suffering from partial or total deafness are classified as members of the Deaf Community. Language is a distinguishing aspect of every community and the constant use of a language promotes it, while the gradual decline in the use of a language is indicative of language endangerment. In the case of African signed languages, the gradual decline in the use of the languages can be attributed to undue influences from other imposing languages.

Alternatively, both indigenous and foreign based sign languages that are used in African nations can preserve their distinct features through encouraging the users and learners to accept these signed languages and avoid undue foreign influence, after all, every language matters. Furthermore, the production of local dictionaries and linguistics materials in the sign languages will ensure that users and learners do not rely on foreign materials for the study of their sign languages.

References

- Adelogbe, R. A. (1974). Curricula and methods in education of the Deaf in Nigeria. Presented in United Nations Educational Scientific and Cultural Organization: Expert meeting on education of the Deaf. Paris: UNESCO Headquarters. September 1974.
- Adepoju, G.A. (1984). Section: Special problems of the hearing impaired in developing countries. In R.G. Brill (ed.). *International congress of the Deaf: An analytic history*. Washington DC: Gallaudet.
- Adima, E. (1989). Special Education. Ibadan: NYS Educational Publishing.
- Ajavon, P. A. (2003). The incorporation of Nigerian signs in deaf education in Nigeria: a pilot study (Vol. 881). Peter Lang Pub Incorporated.

- Ajavon, P.A. (2006). "An overview of deaf education in Nigeria." Retrieved from theInternational Deaf Children's Society's Resource Library, www.idcs.info. Jan, 2014.
- Ajavon, P. A. (2011/2012). A Sign Language for Nigeria. In Commonwealth Education Partnerships 2011/2012. London: Commonwealth Secretariat. Pp.37.
- Akach, P. A.O. (1993). Barriers. Signpost 6(1):2-4.
- Akinpelu, F.O. (1999). Roles of supportive services for the deaf in tertiary institutions. *Journal of Nigerian Association of Specialists in management of hearing impairment*. 1(2): 41-50.
- Asonye, E. and Emma-Asonye, E. (2013). "Redefining Linguistics from the Standpoint of Sign Language". *USEM, Journal of Languages, Linguistics and Literature*. 4. pgs. 73-83.
- Asonye, E. (2016). Sign language: Africa. In Gertz & Boudreault (eds.) *The SAGE deaf studies encyclopedia*. Thousand Oaks: SAGE Publications, Inc.
- Asonye, E. and Rarrick, S. (2017). Wellness and linguistic barriers in Deaf communities in Nigeria and Papua New Guinea. Presented at the 5th International Conference on Language Documentation and Conservation. University of Hawaii, Honolulu. March 5, 2017. Doi: http://hdl.handle.net/10125/42056. Retrieved from ICLDC website, Sept 14, 2017. https://scholarspace.manoa.hawaii.edu/handle/10125/42056
- Asonye, E. (2017b, Sept. 3). What's this fuss about Nigerian Sign Language? [Blog post]. Retrieved from: http://s-deli.org/whats-fuss-nigerian-sign-language/
- Asonye, E., Edward, M. & Emma-Asonye, E. (forthcoming). Deaf in Nigeria: A Preliminary Study on Isolated Deaf Communities.
- Birth of a Language (2001). Evolution: 'The mind's big bang'. WGBH Educational Foundation and Clear Blue-Sky Productions, Inc. http://www.pbs.org/wgbh/evolution/library/07/2/1 072 04.html. Accessed, Sept. 25, 2017.
- Blench, R., and Warren, A. (2006). An unreported Sign Language for the Deaf among the Bura in Northeast Nigeria. Unpublished Conference handouts.
- Edward, M. (2014). The Phonology and the Morphology of the Ghanaian Sign Language. Presented at the Atelier International sign language workshop at the Université Félix Houphouët-Boigny, Abidjan, Cote d'Ivoire on 24th July 2014.
- Edward, M. (2015a). "Signing out": Linguistic contact and possible endangerment of the Adamorobe Sign Language. Presented at the British Association for Applied Linguists (BAAL) language in Africa Special Interest Group (SiG) annual meeting on 22nd May 2015 at Aston University, Birmingham, UK.

- Edward, M. (2015b). We speak with our hands and voices: Iconicity in Adamorobe SignLanguage and Akuapem Twi (ideophones). MPhil thesis, University of Bergen, Norway.
- Edward, M. (2016). Our Sign matter: Protecting sign language in Adamorobe. Presented at the Bridging the Gap Conference 4 held at the University of Brighton (UK) on 12th November, 2016. To appear in Language, Literature and Communication in Human Societies, University of Ilorin, Nigeria.
- Edward, M. (2017). Behind the veil: The impact of deafness on rural livelihoods in Ghana (Case study of a Deaf couple in Adamorobe). Presented at The Second Annual Lancaster University Interdisciplinary Conference on March 10th 2017, Lancaster University- Ghana Campus. To appear in Conference proceedings.
- Edward, M. (work in progress). Iconicity as a pervasive force in language: Evidence fromGhanaian Sign Language and Adamorobe Sign Language.
- Eleweke, J. (1997). Analysis of service provision for deaf people in Nigeria: developments. *Implications* forfuture Unpublished Doctoral Dissertation, University of Manchester, England.
- Eleweke, J. (2002). "A review of issues in deaf education under Nigeria's 6-3-3-4 education system". Journal of Deaf Studies and Deaf Education. 7(1) 74-82. Oxford University Press.
- Eleweke, J., Agboola, I., and Guteng, S. (2015). "Reviewing the Pioneering Roles of Gallaudet University Alumni in Advancing Deaf Education and Services in Developing Countries: Insights and Challenges from Nigeria". American Annals of the Deaf. 160(2) 75+. January 1, 2015. https://www.questia.com/read/1P3-**ProQuest** LLC. 3767020871/reviewing-the-pioneering-roles-of-gallaudet-university (Accessed Nov 23, 2016).
- Frishberg, N. (1987). Ghanaian sign language. Gallaudet encyclopedia of deaf people and deafness, 3, 778-79.
- Fromkin, V. A. (1988). Sign languages: Evidence for language universals and the linguistic capacity of the human brain. Sign Language Studies, *59*(1), 115-127.
- Ghana National Association of the Deaf. (2001). Ghanaian Sign Language Dictionary. Ghana: Ghana National Association of the Deaf. Ed, Boison et al.
- Groce, N. E. (1985). Everyone here spoke sign language. Harvard University Press.
- Humphries, T., Padden, C. and O'Rourke, T.J. (2004). A basic course in American Sign Language (2nd Ed.) Silver Spring, MD: TJ Publishers, Inc.
- Ihenacho, I.J. (1988). Remedial studies and teacher education issues in the national Policy on Education - the 6-3-3-4 system. In Akpa G.O. &

- Udoh, S.U. (eds.), *Towards implementing the 6-3-3-4 system of education in Nigeria* (pp.31-36). Jos: TechSource
- Jokinen, M. (n.d). What is Sign Language, Linguistic Rights in the UN Recommendations and Conventions and the Status of Sign Languages in the UN Member States. Retrieved from:

 www.un.org/esa/socdev/enable/rights/ ahc5docs/ahc5wfdside.ppt.Aug. 09, 2017.
- Kannapell, B. (1989). Inside the Deaf community. In Wilcox (ed.) American Deaf Culture: An Anthology. Maryland: Linstok Press.
- Kiyaga, N. B., &Moores, D. F. (2003). Deafness in Sub-Saharan Africa. *American annals of the deaf*, 148(1), 18-24.
- Klima, E. S., &Bellugi, U. (1979). The signs of language. *Psychological Science*, 1, 6-9.
- Kusters, A. (2012). "The Gong Gong Was Beaten" Adamorobe: A "Deaf Village" in Ghana and Its Marriage Prohibition for Deaf Partners. Sustainability, 4(10), 2765-2784.
- Kusters, A. (2014). Deaf Sociality and the Deaf Lutheran Church in Adamorobe, Ghana. *Sign Language Studies*, 14(4), 466-487.
- "Linguistic Genocide." Encyclopedia of Genocide and Crimes Against Humanity.

 Retrieved August 09, 2017 from Encyclopedia.com:

 http://www.encyclopedia.com/international/encyclopedias-almanacs-transcripts-and-maps/linguistic-genocide
- MacHadjah, T. (2016). Number marking in Ghanaian Sign Language. MPhil Thesis, University of Ghana, Legon.
- Mathers, C., Smith A. and Concha M. (2000). Global burden of hearing loss in the year 2000. Global burden of Disease. 18(40). Pp.1-30.
- Mcburney, S. (2006). Sign language: History of research. In Keith Brown (ed.) Encyclopedia of language and linguistics (2nd edition) 310-318. Oxford: Elsevier Science.
- McPherson, B., &Swart, S. M. (1997). Childhood hearing loss in sub-Saharan Africa: a review and recommendations. *International journal of pediatric otorhinolaryngology*, 40(1), 1-18.
- Meir, I., Sandler W., Padden C., & Aronoff M. (2010). Emerging sign languages. Oxford handbook of deaf studies, language, and education, 2, 267-280.
- Miles, M. (2004). Locating deaf people, gesture and sign in African histories, 1450s–1950s. *Disability & Society*, 19(5), 531-545.
- Morgan, R. Z. (2002). Maganar Hannu: Language of the Hands: A Descriptive Analysis of Hausa Sign Language (review). *Sign language studies*, (3), 335.
- Nobutaka, K. (2004). "The Sign Languages of Africa", *Journal of African Studies* (Japan Association for African Studies) 64. March, 2004.
- Nyst, V., & Baker, A. E. (2003). The phonology of name sings: a comparison between the sign languages of Uganda, Mali, Adamorobe and The Netherlands.

- Nyst, V. (2007). A Descriptive analysis of Adamorobe Sign Language (Ghana). Doctoral Dissertation, University of Amsterdam, Faculty of Humanities.
- Nyst, V. (2010) Sign Language varieties in West Africa. In Sign Languages: Cambridgelanguage Survey. Ed. Diane Brentari. Pp. 405-432. Cambridge, Cambridge University. Nyst, V. (2015). The sign language situation in Mali. Sign language studies, 15(2) 126-150. Washington DC: Gallaudet University Press.
- Okombo, O. (1991). Obstacles to the development of African sign languages. In Equality and self-reliance: Proceedings of the XI World Congress of the Deaf.
- Okombo, O. (1992). African languages: Will sign languages have better luck? In *East African Sign Language Seminar, Debre Zeit,* Ethiopia, Aug. 10-16, 1990, ed Finnish Association of the Deaf, 19-24. Helsikini: FAD.
- Okyere A. D. & Addo M. (1994). Deaf Culture in Ghana. In: Erting et al (ed); The Deaf Way; Perspectives from the International Conference on the Deaf Culture. Gallaudet University Press, Washington DC.
- Orie, O.O. (2013). From conventional gestures to sign language: The case of Yoruba Sign language. In Orie, O.O & Sanders,K. W. (eds.) *Selected proceedings of the 43rd Annual Conference on African Linguistics*. Somerville, MA: cascadilla Proceedings Project. 224-251. Retrieved from www.lingref.com, Sept, 3 2017.
- Padden, C. (1989). "The deaf community and the culture of deaf people." American Deaf Culture: an Anthology, Wilcox, S. (ed). Burtosville, MD: Linstok Press, Inc.
- Schmaling, C. (1997). Maganarhannu: Language of the hands. A descriptive analysis of Hausa sign language (Doctoral dissertation, Universität Hamburg).
- Schmaling, C. (2000). Magana Hannu: Language of the Hands: A Descriptive analysis of Hausa sign language. In Prillwitz, S. P (ed), *International studies on sign language and communication of the Deaf series*. Hamburg: Signum.
- Schmaling, C. (2001). ASL in Northern Nigeria: Will Hausa sign language survive. Signed languages: Discoveries from international research, 180-193.
- Schmaling, C. (2003). A for Apple: the impact of Western education and ASL on the deaf community in Kano, Northern Nigeria. In Monaghan, L. F. et al (eds.). *Many Ways to Be Deaf: International Variation in Deaf Communities*. Washington, D.C.: Gallaudet University Press.
- Schmaling, C. H., and L. Bala Hausawa (2011). *Maganarhannu: Harshen bebaye nakasar Hausa*. *Littafinafarko: Iyali*. Kano: Good Image Printing. [Hausa Sign Language, Book 1: Family.]
- Shelton, D.L. (2005) (ed.). Encyclopedia of genocide and crimes against humanity. Detroit: Thomson Gale.

Wilcox, S. & Wilcox, P. P. (2002). Learning to see: Teaching American Sign Language as a second language (2nd Ed.) Washington D.C.: Gallaudet university Press.