# Understanding Ghanaian sign language(s): history, linguistics, and ideology

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# 1.

# INTRODUCTION: SIGNING DIVERSITY IN GHANA

This study delves into the multifaceted landscape of sign languages used by the deaf community in Ghana. The central inquiry motivating this research revolves around the susceptibility of established sign languages to the influence of a new gestural environment.

The national sign language in Ghana, functioning as a school-based sign language, presents a distinctive opportunity to examine the impact of gestural substrate. This is owing to its consideration as a variety of American Sign Language (ASL) used in Ghana or a historically related ASL introduced through formal deaf education. However, to unravel the intricacies of the susceptibility mentioned above, a comprehensive understanding of Ghanaian Sign Language (GSL), encompassing its historical context, linguistic attributes, and underlying ideologies, is imperative.

The linguistic landscape of Ghana boasts numerous spoken and signed languages. Yet, our comprehension of the diversity of sign varieties in Ghana remains relatively underdeveloped. While GSL is commonly acknowledged as the national sign language, its nature, particularly within the broader deaf community, remains unclear. The signing practices within this community exhibit considerable diversity and complexity, raising questions about GSL's nature and its relationship with locally evolved signing and foreign-based signing. The nature of GSL and its connection with locally evolved signs remains unclear. GSL is sometimes associated with ASL and English, while at other times, it is attributed to indigenous languages in Ghana (Abudu, 2019; Nyst, 2008: 238; Oppong, 2007: 21, 2006:18; Oppong & Fobi, 2019:54; Sampana, 2017). This study endeavours to illuminate these complexities and contribute to a nuanced understanding of the dynamic interplay between established sign languages and their gestural environments. It uses the Ghanaian context as an unexplored terrain for linguistic inquiry.

This chapter unfolds as follows: Section 1.1 offers an insight into my understanding of the national sign language (GSL), informed by research questions on historical, linguistic, and language ideology data. Section 1.2 introduces the sign language situation and the deaf community in Ghana. Section 1.3 provides a brief overview of studies on gestural influences on established languages, while Section 1.4 provides an in-depth overview of research on GSL’s emergence, linguistic studies, and ideologies in Ghana. Section 1.5 outlines my positionality, revealing my background and inspiration for this research. Section 1.6 focuses on this book's primary data collection site, participants' information and ethical considerations. Finally, in Section 1.7, an outline of this book is presented, offering a preview of the subsequent chapters, each contributing its distinct methodology and insights to enrich our understanding of GSL and the broader sign language landscape in Ghana.

## 1.1 GSL and the signing landscape in Ghana

The term GSL as a national sign language in Ghana has often been associated with a broad and somewhat oversimplified understanding - that it is the sign language used by deaf individuals in Ghana. However, this interpretation falls short of capturing the rich linguistic complexity that defines signing in urban deaf communities in Ghana.

I have uncovered some intricacies of GSL, highlighting the variations and distinctions within the vibrant signing landscape in Ghana. GSL, in its generic sense, encompasses three distinctive signing varieties, each with unique characteristics and features.

1) ENGLISH[1] (see Figure 148 for an illustration): This signing variety is predominantly shaped by educational influence and exposure to English and ASL. It can be described as a contact variety and often represents a hybrid of ASL signs and approximations of English grammar. The lexicon predominantly derived from ASL is sometimes marked by frequent use of initialisation. ENGLISH is typically acquired through schooling, holds a prominent or superior position among other signing varieties in Ghana, and may sometimes replace or overshadow them. This contact variety, called ENGLISH, is primarily applied in formal settings such as education and religious contexts.

2) LOCAL (see Figure 152 for an illustration): This is a native signing variety that remains largely unaffected by the influence of English or ASL signs. Its lexemes are primarily derived from local natural signs, and its grammar differs from ENGLISH. LOCAL is commonly used in informal settings, such as interactions with family and friends in domestic environments. It is primarily acquired from signers in these everyday situations. However, LOCAL is often associated with lower prestige than the other signing varieties.

3) BROKEN (see Figure 152 for an illustration): This signing variety demonstrates a significant influence of local and ASL signs on its lexemes, coupled with its own grammar different from ENGLISH. BROKEN can be used effectively in both formal and informal situations. It can be acquired at deaf schools, interactions with other signers, and affiliations with deaf groups. BROKEN does not overshadow the prestige ENGLISH holds, but it is respected as a genuine and integral part of the signing landscape in Ghana.

[1] Throughout this book, I adhere to the convention, of representing sign(s) with a gloss in small capital letters.

GSL, in a generic sense, encompasses these three distinct signing varieties: ENGLISH, LOCAL, and BROKEN. These labels come from the lexicon used by deaf signers in urban contexts of southern Ghana (see section 1.6). Although additional labels are explored in Chapter 6, these three effectively encompass the diverse signing practices under the umbrella term GSL. LOCAL and BROKEN may incorporate regional or local variations, reflecting the richness and diversity within the broader GSL community. In contrast, ENGLISH represents a standardised and relatively stable variety, often featured in GSL dictionaries and recognised for its prestige. Due to its use in a formal context, ENGLISH overshadows the existence of the other signing varieties, leading to the perception that ENGLISH predominantly defines the generic term GSL. Deaf signers in Ghana primarily acquire GSL (ENGLISH, BROKEN, & LOCAL) in the context of deaf boarding schools, where English and ASL-based signing forms the foundation. Educational background also creates a noticeable disparity in GSL competency among three categories of signers: formally educated individuals who have completed at least deaf high school, semi-educated signers who did not complete basic deaf school to enter high school, and non-educated or unschooled signers. Educated signers tend to be more proficient in ENGLISH, while semi-educated and non-educated signers are conversant with BROKEN or LOCAL. However, some signers exhibit versatility, moving fluidly between ENGLISH, BROKEN, and LOCAL. This flexibility can lead to overlap in the use of these signing varieties. In instances where ENGLISH would be expected, the use of LOCAL may occur. In such cases, signers might face criticism, advice to switch, or even ridicule.

In essence, the signing practices among educated, semi-educated, and non-educated signers can differ, reflecting the diverse usages of GSL. Generally, the definition of GSL refers to the signing practices of deaf individuals in Ghana who have received formal education or are integrated into urban deaf communities. Therefore, a typical GSL user is someone educated in a deaf school and actively engaged in interactions with other GSL users. This study recognises GSL as de facto national sign language, encompassing educated, semi-educated, and non-educated users, highlighting the variations in GSL usage across different signer groups. In addition, the sociolinguistic dynamics of GSL, its relation to ASL, and its interactions with locally evolved sign languages have been explored to address questions related to gestural influences in established sign languages like ENGLISH in the GSL landscape. The following sub-questions served as a framework to help establish an understanding of GSL:

1. What is the history of emergence of GSL? (Chapter 2)
2. How does GSL compare lexically to ASL and local Ghanaian SLs, i.e., in terms of basic lexicon? (Chapter 3)

3. How does GSL compare morphophonologically to its gestural environment on the one hand and to ASL and AdaSL as reported in the literature on the other hand, i.e., in terms of Size and Shape Specifiers? (Chapter 4)[2]
4. What are the language ideologies among deaf signers concerning body-based and space-based Size and Shape Specifiers? (Chapter 5)
5. What are the language ideologies among deaf signers concerning sign varieties in Ghana? (Chapter 6)

The tripartite nature of GSL (i.e., ENGLISH, BROKEN, & LOCAL) discovered in the research for this book closely align with Herman Batibo's assertions on language usage in Africa (Batibo, 2005: 16ff). In the following part of this section, I provide a concise overview of Batibo's framework and its application to the spoken language landscape in Ghana.

Batibo's framework, explained below, posits a trifocal language structure prevalent in Africa. This structure involves using Ex-colonial languages (foreign), Dominant indigenous languages, and Minority indigenous languages (Batibo, 2005). Batibo (2005) proposes a triglossic lens for comprehending the language patterns in many African countries. This triglossic structure consists of three distinct languages with complementary roles within the same community (Batibo, 2005: 16). Batibo explains that the Ex-colonial language (e.g., English, French, or Portuguese) functions as a highly developed language for official settings, such as education, judiciary, or government affairs. Designated as the most prestigious and high code ('H'), it occupies the top tier in the structure. The Dominant language, often a widely used medium as a lingua franca in various domains like social service relations, is normally considered 'L' (low prestigious code) in relation to the Ex-colonial language but is regarded as 'H' concerning the Minority language. At the lowest level, the Minority language, considered 'L' in relation to the Dominant language, typically serves for limited communication within speaker communities, confined to ‘speaker’s territories’, “intra-ethnic communication, family interaction and cultural expression” (Batibo, 2005: 17 & 24). Batibo emphasises that minority languages typically have few speakers and are socio-economically marginalised, compelling speakers to use either the dominant or ex-colonial language (Batibo, 2005:17).

With regards to spoken languages in Ghana, some scholars (e.g., Agbozo and ResCue, 2020; Yevudey & Agbozo, 2019) have made mention of the triglossic structure of language use in Ghana using Batibo’s (2005) model. In which they consider English to be the Ex-colonial language; nine selected Ghanaian languages (i.e., Akan, Dagaare, Ga, Dangbe, Dagbani, Ewe, Gonja, Kasem and Nzema) to be

[2] While Size and Shape Specifiers are typically examined from a morphosyntactic perspective, I approach it from a morphophonological standpoint in Chapter 4.

the Dominant indigenous languages; and other Ghanaian spoken languages to be the minority language.

The language policy within the Ghanaian educational system has a historical trajectory. Alternating between a monolingual ideology that emphasizes English as the medium of instruction and, at other stages, a bilingual ideology advocating for the use of both English and a Ghanaian language. (Agbozo and ResCue, 2020). Nevertheless, it is important to highlight that the shifts in language use for education in Ghana predominantly impact the early years (first 3 years) of primary education. In contrast, the subsequent stages of education, ranging from upper primary to secondary and tertiary levels, are predominantly characterized by the dominance of English. (Agbozo & ResCue, 2020; Yevudey & Agbozo, 2019; Reilly et al, 2022; Owu-Ewie, 2006).

Presently, out of the over 70 languages in Ghana, the Government has designated nine languages—Akan, Dagaare, Ga, Dangbe, Dagbani, Ewe, Gonja, Kasem, and Nzema—as the chosen media of instruction, based on the understanding that all the communities in Ghana may use of them. In schools the selected language to use as medium of instruction is based on its geographical relevance and dominance. These languages are employed alongside English in educational settings. (Agbozo & ResCue, 2020; Yevudey & Agbozo, 2019; Reilly et al, 2022; Owu-Ewie, 2006).

Researches on language use in Ghanaian classrooms, including studies by Agbozo and ResCue (2020), Yevudey and Agbozo (2019) Agbozo (2015), Owu-Ewie, and Eshun (2015), as well as Yevudey (2015, 2013), indicate a widespread occurrence of both codeswitching and translanguaging in the teaching and learning process. Considering the plurilingual language situation in Ghana, Agbozo and ResCue, (2020) recognize the importance of translanguaging in education. Yevudey and Agbozo's (2019) study advocates for flexible bilingualism as an optimal language policy in Ghanaian education. They argue that a classroom or school with students who have prior exposure to English and/or Ghanaian languages can effectively use either English, the Ghanaian languages, or a combination of both (Yevudey & Agbozo, 2019:17). Yet, more generally, the ex-colonial language, English, continues to be perceived as a language synonymous with authority, academic excellence, international exposure, and high prestige (Agbozo and ResCue, 2020). Conversely, Ghanaian languages face a diminished prestige, with even some Ghanaians, often overlooking the instrumental value of Ghanaian languages (Agbozo and ResCue, 2020).

In the context of Ghana's spoken language landscape, the interplay between education and historical factors has seemingly shaped a triglossic structure (Agbozo & ResCue, 2020; Yevudey & Agbozo, 2019), which closely parallels the GSL landscape discussed in Chapter 2 and section 6.5.3 of Chapter 6.

## 1.2 Sign language situation and the deaf community in Ghana

Deaf signers in Ghana reportedly use several sign languages (e.g., GSL, Adamorobe Sign Language (AdaSL) and Nanabin Sign Language (NanaSL)). GSL serves as the national sign language of the deaf community in Ghana. Notable contributions to GSL research have been made by scholars such as Peprah (2021), Edward (2021b), Groen (2021), Abudu (2019), Tagoe (2018), Hadjah (2016), and Akanlig-Pare (2013, 2014). Edward and Akanlig-Pare (2021) describe the sign language situation in Ghana. They distinguish two groups of sign languages in Ghana: 1) Indigenous sign languages and 2) Foreign-based and foreign sign language. According to them, the indigenous sign languages comprise AdaSL, NanaSL and Home sign systems. In contrast, the foreign-based and foreign sign languages comprise GSL and ASL.

While GSL, ASL, and Home signs systems as identified by Edward and Akanlig-Pare (2021) are widespread across the country, AdaSL is rooted in the Adamorobe village in the Eastern Region and NanaSL is in the Nanabin village of the Central Region. AdaSL and NanaSL, reported in the literature, emerged locally in communities with a high incidence of hereditary deafness. AdaSL is relatively well-studied, in four PhD theses (Nyst, 2007; Kusters, 2015; Edward, 2021b; Morgado, 2024), and is documented in various large data sets (see Nyst, 2012). The deaf individuals in Adamorobe could be described as a homogenous group with a shared culture and environment (Kusters, 2015; Nyst, 2007). Okyere and Addo (1994) write that deaf people have been in Adamorobe since 1733. AdaSL is Africa's oldest sign language (Miles, 2004: 536; Frishberg, 1987). Edward (2021b:20) reports that out of the estimated 3000 Adamorobe inhabitants in 2016, 40 were deaf. AdaSL is currently considered endangered due to the dwindling deaf population in Adamorobe and the influence of GSL throughout deaf education (Edward, 2015; Kusters, 2020; Nyst, 2007). However, Kusters (2014a) mentions that the threat GSL poses on AdaSL is comparatively less severe than what is observed in many other communities. Nevertheless, she acknowledges a threat of endangerment due to a declining population of deaf individuals in Adamorobe.

Nanabin village is 145 kilometres away from Adamorobe village. In a recent visit to Nanabin village (11th January 2020), I observed that what could have been previously called a stable family sign language (i.e., NanaSL) has grown into a village sign language used by deaf members in the community. Nanabin has 1,456 inhabitants, as recorded in Ghana's 2010 housing and population census.[3] There are no known records of the number of deaf inhabitants in Nanabin village. However, during my recent visit, I encountered twelve (12) Deaf individuals[4], five (5) of

[3] No update has been given yet in the 2021 recent census.

[4] A native informant I contacted in a friendly conversation, told me there are more deaf people in the village. Upon further interrogation with the informant, he was

whom were members of the deaf family mentioned by Nyst (2010). Of the 12 deaf individuals I encountered, the youngest was five years old, and the oldest was 89. The deaf community in Nanabin seems to have limited contact with GSL. It reveres GSL as an elite/school sign language and views NanaSL as a "gesture language".

Signed English, Signing Exact English and Simultaneous Communication constitute signing systems identified among some signers in Ghana (Kusters, 2015:45 &151; Nyst, 2010: 410; Oppong, 2007:12). Signed English may incorporate signs from GSL within the framework of English word order, intending to convey the precise English meaning of each word. In contrast, Signing Exact English utilizes signs and markers to illustrate the grammatical features of English. Signing Exact English demonstrates heightened precision in representing English grammar and syntax compared to Signed English. The term Simultaneous Communication is occasionally employed to emphasize speech that coincides with the signing systems. It is crucial to note, however, that these signing systems are distinct from sign language.

Home signing is also identified among groups of deaf signers in Ghana (Abudu, 2019; Edward & Akanlig-Pare, 2021). Edward and Akanlig-Pare (2021) only cite sources that describe home signs as being based on gestures and restricted to family use, while Abudu (2019), in her thesis, clearly shows how Home signs are used in deaf schools in Ghana. The account of Abudu (2019) suggests that home signs are not limited to the family domain but could be found among deaf people in the urban community. It is, however, unclear if the signing variant mentioned by Abudu's (2019) thesis and Edward and Akanlig-Pare's (2021) paper as home signs are the same sign variant. What is however certain from these two works (i.e., Abudu, 2019; Edward & Akanlig-Pare, 2021) is that there is a local signing variety which is not limited to the home but found among deaf signers in urban deaf communities. Abudu (2019) explicitly stated that the national sign language comprises elements from ASL, home signs, and Signed English, the latter being referred to as "invented English codes" (Abudu, 2019:92). Nyst (2010) also highlighted the presence of locally evolved signs within GSL. In a 1997 international conference presentation by Mary Addo (a former interpreter and teacher for the deaf), she acknowledged the existence of a local sign language alongside a foreign-based sign language in the country (Addo, 1997). Addo (1997) explained that this local sign language in Ghana likely originated within homes through the influence of gestures and gradually extended to the community.

In the next paragraph, I depend on Reed's (2022) review to clarify my understanding of the term Home signs and other signing variants found among deaf individuals.

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able to name about sixteen (16) deaf members he knows in the community but believes there could be more.

Reed (2022) provides sociodemographic features to describe the various signing systems (e.g., Deaf community sign language, Village sign language, Family sign language, & Home sign). **Deaf community sign language,** characterised by its primary use among deaf individuals, diverse user network, association with education and urban environments, strong cultural identity, and multigenerational usage, serves as a vital means of communication and cultural expression within deaf communities (Reed, 2022:629). According to Reed (2022), Deaf community sign languages are frequently linked with the notions of deaf culture, deaf identity, and deaf social interaction and are commonly designated as national sign languages. On the other hand, **village sign language,** typically found in rural areas with a notable prevalence of deafness, features a predominantly hearing user base, may have limited deaf social integration and identity, and is situated within close-knit, multigenerational communities (Reed, 2022:630). **Family sign language,** another signing system primarily employed within the family unit, is characterised by its use among multiple deaf family members, spanning generations, often found in rural areas. The family sign language may or may not involve contact with other deaf individuals and is typically developed collaboratively by both deaf and hearing family members, with a focus on intergenerational transmission (Reed, 2022:630ff). The **home sign** is closely related to the family sign language, a unique form of communication primarily developed by a solitary deaf individual, often a child in a nuclear family, who lacks contact with other deaf individuals. It is chiefly the creation of the deaf signer, characterised by frequent attempts at communication. Notably, the home sign is not passed down intergenerationally (Reed, 2022:631). Reed also makes a distinction between Home sign in a rural setting and those that can be found in an urban setting with an oralist approach. In such cases, caregivers may deliberately avoid gesturing with the deaf child as they prioritise oral communication (Reed, 2022:632). In an oralist setting, Home sign often emerges in urban areas and is closely associated with caregivers who aim to teach the deaf child lipreading and spoken language. In a rural setting, Home sign is a form of communication commonly associated with children and adults living in rural areas. In such contexts, the deaf user may or may not have contact with other deaf individuals. Rural Home sign typically emerges as a product of collaboration between a deaf person and members of their hearing community. Communication fluency in the Rural Home sign can vary within this form of signing and may even be transmitted intergenerationally. Additionally, with the Rural Home sign there is often a community expectation that the preferred way to communicate with deaf individuals is through gestures. (Reed, 2022:632).

By applying the reviewed categorisation by Reed (2022), I can classify GSL as a deaf community sign language, while NanaSL and AdaSL fall into the village sign languages. The two village sign languages are not mutually intelligible and are distinct from GSL (see chapter 3; Hadjah, forthcoming; Tahoe, 2018; Nyst,

2010). While NanaSL and AdaSL are generally not mutually intelligible, the linguistic distance is relatively low in certain contexts. Recognising occasional linguistic proximity, Nyst (2010) acknowledges cultural influence on the sign languages in Ghana and explains that any lexical similarities may result from shared gestures from the cultural environment.

However, there is a challenge in considering the “Home signs” identified by scholars in the Ghanaian community. Although Edward and Akanlig-Pare (2021:123) acknowledge the existence of these home sign systems, there have not been detailed studies conducted on them in Ghana. Using the sociodemographic criteria outlined by Reed (2022), the term "Home sign" might be a misnomer, as it can be found among deaf individuals within the broader deaf community. Considering the role, it plays in deaf schools as projected by Abudu (2019) I propose that this variant aligns with LOCAL.

According to Edward and Akanlig-Pare, (2021) the sign languages in Ghana are in contact with each other and with Ghanaian spoken languages which may result in code-mixing and linguistic borrowing. They note that, AdaSL’s close contact with GSL has gradually eroded the “purity” of AdaSL due to code-mixing. Edward and Akanlig-Pare, (2021) also mention that while AdaSL grapples with the linguistic influence of GSL, largely stemming from deaf education where GSL is employed, GSL itself is subject to the influence of ASL. It was identified that certain individuals and religious groups are promoting ASL signs in their efforts to teach sign language. Edward and Akanlig-Pare, (2021) acknowledge the dynamic usage of GSL in Ghana and mention that in certain domains, ASL serves as a substitute for GSL due to the availability of ASL learning materials in the country. They conclude that indigenous sign languages in Ghana are endangered and call for linguists to study the sign language situation in Ghana to help maintain Ghanaian indigenous sign languages.

### 1.2.1 Deaf demography

Recent data from the 2021 Population and Housing Census, conducted by the Ghana Statistical Service (2021a), posit that there are 470,737[5] individuals with "hearing difficulty"[6], which accounts for 1.5% of Ghana's 30,832,019 populace. Precise figures delineating the deaf community remain elusive due to the census's use of hearing impairment for their report. Yet, a 2022 Ghana National Association of the

[5].Representing people who are five years and older.

[6] “Difficulty in hearing refers to challenges or problems faced by a person in distinguishing or hearing sounds from different sources in one or both ears, even when using hearing aids.” (Ghana Statistical Service, 2021a: 25).

Deaf (GNAD) report[7] resonates with these census figures, estimating nearly 500,000 Deaf individuals in Ghana. GNAD, formed in 1968 by deaf Ghanaians, affiliated with the World Federation of the Deaf (WFD) and the Ghana Federation of Disability Organisations (GFD), is a primarily non-governmental organisation in Ghana devoted to advocating the well-being of the deaf community (Fobi & Doku, 2022) [8].

### 1.2.2 Sign language legislation

The de facto national sign language (i.e., GSL) has gained recognition in various sectors of Ghanaian society, including television stations, tertiary institutions, and even within the Ghanaian parliament. However, GSL is not officially recognised by law as an official state language. The language does not have legal recognition and does not have an explicitly protected status in deaf education, but it is used as a language of instruction for deaf education throughout the country. During the celebration of the International Day of sign languages on 23rd September 2021, GNAD called for the legal recognition of GSL. Generally, sign language has protective status in certain legal documents such as the Persons with Disability Act, 2006 (Act 715) and the Inclusive Education Policy without referring to any named sign language. For instance, Article 21 of the Persons with Disability Act (715) mandates that

> "…teacher training institutes [which] shall include in their curricula special education, such as 1) **sign language**".

Additionally, in pursuit of education policy, aimed at fostering an inclusive and learner-friendly school environment to enhance the overall quality of education, the strategy acknowledges the importance of sign language without specifying any particular language. It articulates the following:

> "Promote the availability and training of relevant professionals as well as facilities for medical assessment, educational assessment, training in social skills, psychological assessment, occupational therapy, physiotherapy, **sign language**, braille and speech recording, and speech/language assessment." (Ministry of Education, 2013:7).

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[7] https://gnadgh.org/gnad-launch-a-training-of-trainers-program-for-ghanaian-sign-language-instructors-at-kwame-nkrunah-university-of-science-and-technology/

[8] See to Fobi and Doku (2022) for an in–depth history of GNAD.

Among the sign languages in Ghana, GSL was the first to be documented. Highlighting GSL prominence, GNAD published the first GSL dictionary in 2001. Subsequent editions appeared in 2015 and 2022 with the support of Ghana Ministry of Education. In addition to these print editions, GSL dictionaries are also available online and as mobile applications. There are also OpenPose data on GSL (See Fragkiadakis et al. 2021).

### 1.2.3 GSL education

Currently, the major public universities in Ghana offer GSL teaching. The University of Education, Winneba (UEW), was the first to offer courses in sign language in the late 2000s. Currently, in collaboration with Western Oregon University, UEW occasionally offers interpreter courses in sign languages. In 2017, GNAD, in partnership with the University of Cape Coast, started offering a Diploma course in sign language for interpreters in Ghana. Kwame Nkrumah University of Science and Technology (KNUST) in 2018 also introduced sign language teaching for some select health programs.

The University of Ghana also began focusing on GSL linguistics in 2010. Through initiatives led by key figures like Prof Felix Ameka, Francis Boison, George Akanlig-Pare, Marco Nyarko Stanley, and in collaboration with Ulrike Zeshan from the University of Central Lancashire UK, the University of Ghana introduced a GSL linguistic curriculum at the Department of Linguistics (Edward & Akanlig-Pare 2021:124). This initiative has contributed to the training of sign linguists, including myself. Among the universities in Ghana that provide sign language instruction, the University of Ghana uniquely emphasises the linguistics of GSL.

Beyond GSL education, no documented evidence of formal education is dedicated to other local sign languages in Ghana. Outside of academic contexts, certain individuals (e.g., Mr. Jonathan Amoah)[9] and groups (e.g., churches, Church of Christ & Jehovah's Witnesses) are known for offering sign language instruction.

## 1.3 Gestural influence and established sign languages

An increasing number of studies on sign language emergence finds that sign languages are susceptible to influences from their gestural environment (de Vos, 2012; Loon et al., 2014; Nyst & Tano, 2018). A pertinent example are the body-base Size and Shape Specifiers that have been documented in Ghana among the users of Adamorobe Sign Language (AdaSL) in the Adamorobe village of the Eastern

[9] Other deaf individuals who are currently deceased were also known for offering sign language instructions (e.g., Mr. Francis K. Boison & Mr. Alexander D. Okyere).

Region (Nyst, 2007). Such body-based Size and Shape Specifiers have not been reported for ASL (Klima & Bellugi, 1979).

While emerging sign languages may assimilate gestures from their linguistic environment, it is unknown to what extent established sign languages are still susceptible to their gestural environment and changes in it. The case of ENGLISH with the cover label GSL provides a seemingly ideal test case for this question, as this language is generally assumed to result from the introduction of ASL in deaf education in Ghana (Runnels, 2020; Ilabor, 2010). Kusters (2014a:153) observed the integration of numerous conventional gestures into AdaSL. Additionally, she posited that "this is not the case with GSL", relying on the assumption that GSL signers attribute higher prestige to ASL-based sign language in comparison to "local sign languages and gestures" (Kusters 2014a:153). If GSL turn out to be using body-based Size and Shape Specifiers, too, like AdaSL, this would suggest that an established language was susceptible to influences from its new gestural environment. Thus, if ENGLISH does not introduce body-based signs in its use of Size and Shape Specifiers, this suggests that established sign languages may not be susceptible to a new gestural environment after emergence.

This seems to be a straightforward hypothesis, but in fact there turn out to be a number of fundamental issues that need to be clarified first. A crucial issue to clarify first is the nature of the relationship between GSL and ASL. Clarifying this issue requires a comprehensive study in terms of history, linguistic properties, and language ideologies.

## 1.4 Ghanaian Sign Language: emergence, linguistics, and ideologies

### 1.4.1 Emergence of the GSL

It is often assumed that the GSL community emerged due to the introduction of ASL and Signed English in deaf education by Rev. Foster in tandem with the establishment of deaf education in the country (Nyst 2007:26). However, other studies nuance that idea. While Foster introduced ASL and English-based signs, he also employed a broader range of communication methods, including gestures, fingerspelling, writing, lipreading and speech (Foster, 1975, 1960a; Kiyaga & Moores 2003; Nyst 2010; Okyere & Addo, 1999). Nevertheless, resource constraints led to a heavier reliance on sign language (Runnels, 2020: 169ff; Ilabor, 2010:49).

The formation of a new deaf community in the boarding school in the late 1950s comprised individuals from diverse backgrounds, fostering the emergence of GSL. The school's language environment, influenced by Ghanaian languages, English, home signs, village sign languages, and the introduction of ASL, catalysed GSL's development (Oppong & Fobi, 2019:54; Hadjah, 2016:7; Kusters, 2015:152; Oppong, 2007; Oteng, 1997).

Figure 1 illustrates the circumstances leading to the emergence of GSL. On the figure's left side, individuals from varied linguistic backgrounds converge at a school for the first time. The right side shows ASL and English as dominant instructional languages. Hadjah (2016:7) highlighted that "intense interpersonal contact" among student groups in the school led to the development of GSL. The creation of a boarding school thus became a catalyst for GSL's rise. Given the lively linguistic interactions in the deaf school, Oppong and Fobi (2019: 53) suggested that GSL originated as a "blend of American and Ghanaian signs, which later developed into Ghanaian Sign Language."

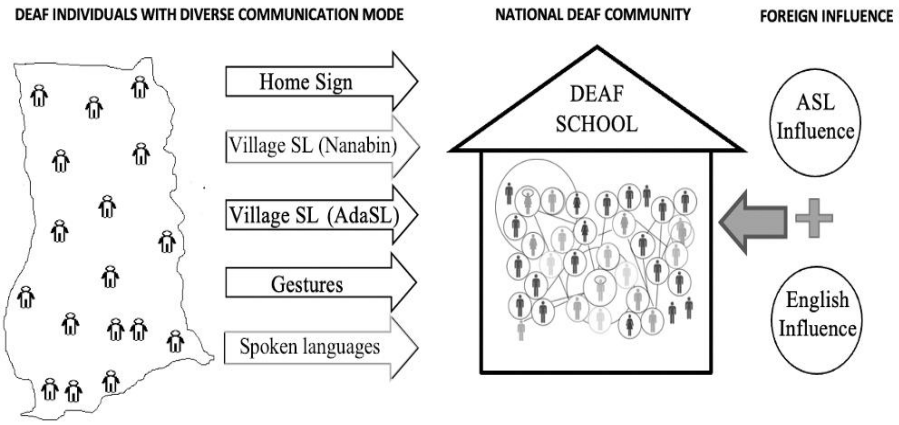


Figure 1: Visual representation of GSL emergence (adopted and modified from Hadjah, 2016:7)

The literature on the history of deaf education in Ghana does not elaborate on the language of instruction employed. Some mention that ASL was used, and others mention that Signed English or speech was introduced (Nyst, 2007; Oppong, 2007). Of course, this has major implications for our understanding of the linguistic starting point of the GSL (see chapter 2 for the history of GSL).

### 1.4.2 Linguistic studies on GSL

While the field of sign linguistics has seen more extensive research on AdaSL, notable contributions to GSL studies come from researchers like Peprah (2021), Edward (2021b), Groen (2021), Abudu (2019), Tagoe (2018), Hadjah (2018), and Akanlig-Pare (2013, 2014), to name a few. However, despite these valuable insights, vast areas of GSL remain unexplored. Existing research predominantly focuses on GSL lexicon, with a review of its relevance covered in Chapter 3. Studies also address other linguistic aspects, such as iconicity (Edward, 2021b) and number marking in GSL (Hadjah, 2016). Furthermore, the work of Edward (2014) and

Akanlig-Pare (2013, 2014) delves into the phonology and morphosyntax of GSL, establishing its status as a fully developed language.

Nevertheless, numerous topics in GSL need further exploration. For instance, while language ideology studies on AdaSL exist, GSL remains unexplored in this context. Similarly, while there are investigations into Size and Shape Specifiers in AdaSL, GSL awaits such examination (Chapter 4). I will delve into a more detailed discussion of the relevant literature on GSL in each of the upcoming chapters.

### 1.4.3 Language ideologies regarding sign languages in Ghana

While extensive research has explored the language ideology of deaf signers in Adamorobe (Kusters, 2014a; 2019), there is a need for increased attention to deaf signers in the urban deaf community. This review primarily focuses on the existing literature regarding the perception and attitude towards AdaSL, Akan (a spoken language), GSL, and other signing varieties. To gain more insight into the language ideology of spoken languages in Ghana, see Chapter 6, Section 6.1.1.

Kusters (2014a) conducted a study in Adamorobe and found that hearing participants described AdaSL as "natural" and closely tied to the local gestures and traditions of the Akan people. In contrast, deaf signers considered AdaSL as " HARD," a term viewed positively as a unique aspect of their identity and community. AdaSL signers also referred to GSL as " SOFT," although the precise meaning of "soft" concerning GSL remains unclear. Nonetheless, in the context of SOFT, they consider GSL signers to display a more relaxed and lax manner style of signing, whereas HARD signifies the perception of AdaSL as pleasant and with the understanding that it is better than GSL and Akan (Kusters 2014a:151).

Kusters' (2019) work also highlights how social factors can influence signers' conceptualisation of a language. While the youth prefer to describe AdaSL as "SWEET," the older generation uses the sign for "HARD." In other words, the younger generation associated AdaSL with cultural delight, while the older generation emphasised its "hardness" (Kusters, 2019). Each description carries a positive connotation and reflects their respective motivations to value AdaSL. "The reason for deaf youths and deaf elders' differences in emphases on AdaSL as 'HARD' or 'SWEET' is because AdaSL plays a different role in their respective linguistic repertoires, even though they use it in the same or similar contexts in Adamorobe" (Kusters, 2019:15).

What remains unclear from Kusters' (2014a) report is whether the younger generation, who are bilingual in both GSL and AdaSL, share the same language ideology as the older generation. Kusters demonstrated the presence of shared

ideologies between the generations, [10] but it is uncertain if this represents a holistic perspective. For example, when the older generation describes AdaSL as "hard" and GSL as "soft," would the younger generation have the same understanding? This curiosity arises from the observation in Kusters' (2014a:154) work, where the older generation criticises the younger generation for their inclination towards GSL, while the younger generation also criticises the older generation for their lack of knowledge in GSL. Kusters (2019) addressed the question of the views held by the younger generation, noting that they are more inclined to use GSL but do not value GSL over AdaSL. For instance, in Kusters' (2019:15) work, they describe AdaSL as delightful due to its association with the culture in Adamorobe, while GSL is sometimes associated with initialisation (e.g., using initialisation for days of the week).

As AdaSL signers indicated that their language is "HARD", they do not belittle GSL with this description. Knowledge of GSL is associated with prestige within the community. Deaf signers in Adamorobe consider GSL distinct from AdaSL and do not consider one superior or inferior. Nonetheless, they perceive their language to be more "pleasant" and "expressive" to use compared to GSL (Kusters 2014a:139). As noted by Kusters, GSL is highly appreciated in the deaf community in Adamorobe. Signers in Adamorobe view GSL as a form of Signed English or ASL, introduced into Ghana through Deaf education (ibid). Consequently, they label GSL as "FINGERSPELLING," "ENGLISH," or "AMERICAN." They also perceive GSL as the national sign language used in schools, churches, or anywhere outside their village (Kusters 2014a,b). According to Kusters (2014a:152), their language ideology leads them to prefer using GSL when interacting with visitors or foreigners (ibid:152). Therefore, AdaSL signers consider GSL prestigious beyond the boundaries of Adamorobe.

Within the urban deaf community in Ghana, Gillen et al. (2020) observed the practice of shifting between signing systems among Ghanaian signers, particularly towards a more English-like communication style (Signed English). This shift is driven by the desire for English literacy skills, perceived as crucial for socioeconomic development. Abudu (2019) identified a possible distinction in perceived prestige and indigenous status within the signing community, where signs influenced by ASL or English are often seen as prestigious, while those influenced by iconicity or closely mirroring hearing gestures may be regarded as indigenous and linked to lower status in certain contexts.

Nyst (2010) noted that deaf signers in West Africa sometimes consider locally evolved sign languages as inferior to foreign sign languages, which they view as superior. Schmaling (2003: 307) highlighted a similar phenomenon in Nigeria, where many deaf students underestimate the value of their native sign

[10] For example, they both value the efficient use of AdaSL in the community.

language in favour of foreign signs like ASL. Although Kusters (2014a:152ff) did not extensively study the language ideology of signers outside Adamorobe, she noted, based on her encounters with signers from other regions, that they did not consider AdaSL to be a language, unlike GSL. She observed that "the use of local sign languages … had a low status and was associated with gesturing and illiteracy, … [and] residence in villages." (Kusters, 2014a:153).

Kusters (2014) challenges widely accepted views on the status and prestige of AdaSL within the field of sign languages. Kusters (2014a) explains that many minority languages are often regarded as having low status and prestige, though they can be attributed to positive connotations (e.g., identity). In Adamorobe, Kusters (2014a) discovered that AdaSL despite being a minority language, was not associated with low prestige and status. AdaSL was demonstrated by Kusters to have positive connotations as well as high status and prestige. Moreover, Kusters' research challenges the persistent misconception that sign languages, due to their visual modality, are not considered "real languages" within the hearing community. Significantly, her work asserts that AdaSL in the Adamorobe village is not only recognized as a 'real language' but also holds higher prestige compared to the national sign language (GSL). However, it is important to highlight that in the urban deaf community, AdaSL is not universally regarded as a 'real language', in contrast to how AdaSL users perceive their language and other sign languages in Ghana. This observation suggests that the language ideologies within Ghanaian deaf communities are multifaceted, with no research conducted on how deaf signers in the broader deaf community perceive GSL relationship with ASL and other sign languages in Ghana.

## 1.5 Positionality

Reflecting on my positionality, I realise how my background, experiences, and interactions have shaped my research on the deaf community in Ghana. As a hearing Ghanaian raised in Koforidua, Eastern Region, I was oriented with GSL, particularly through inclusive education efforts. This experience deeply rooted me within the deaf community. During fieldwork, a deaf colleague often introduced me to members of the deaf community by highlighting my history of attending basic education with deaf students. This shared background immediately established a sense of familiarity and trust among those who knew me, leading to more open and welcoming interactions. Even among those unfamiliar with me, there was a quick recognition of my ability to sign, with compliments about my proficiency. For instance, after the conversation, individuals often said to others nearby, "He's good; he can sign." This shared educational background was instrumental in fostering trust and rapport, which were essential for my research.

My linguistic skills, including fluency in Akan, English, GSL and Ghanaian Pidgin English, also facilitated my role as an interpreter within the deaf community. However, I am mindful of the complexity of my positionality. While I share some cultural bonds, my identity as a researcher, not a deaf signer, impacts communication dynamics, influencing signers' code choices. During my involvement in focus group discussions, I observed instances where participants' language choices differed from what they typically used with me. These moments offered valuable insights into the intricate dynamics of communication within the deaf community. Reflecting on these observations prompted me to assess and adjust my research approach.

Additionally, my position made it easier to work with a deaf assistant for fieldwork and engage with deaf and hearing communities. My position as a Ghanaian, knowledge of GSL, and educational background with signers allowed me to share their spaces and participate in their everyday lives. Spending significant time with the deaf community beyond academia enriched my understanding and fostered genuine connections essential for my research.

My unique background positions me as both an outsider and an insider in certain contexts, providing a critical lens through which I examine the nuances of my research. This perspective, far from justifying my involvement, is about understanding the complexities inherent in my role, and it adds a distinct and valuable dimension to my research.

## 1.6 Fieldwork and participants

The fieldwork locations highlighted in section 1.6.1 and the participants presented under section 1.6.2 aim to provide background information on the primary data source, addressing the central inquiry on susceptibility that underlies this book. It's crucial to emphasize that the fieldwork locations and participants discussed in this chapter are primarily relevant to the results presented in Chapter 4, 5 and 6. Specific methodologies used in each chapter (2, 3, 4, 5 & 6) are detailed within their respective chapters.

### 1.6.1 Fieldwork locations

Data for this study were collected from two regions in Ghana: The Greater Accra Region and the Eastern Region. In the Greater Accra Region, the study was conducted in the city of Accra. In the Eastern Region, several localities were visited, including Koforidua (city), Tei Nkwanta (village), Akropong-Akuapem (town), and Apirede (town). These sites were selected for their significant historical landmarks related to deaf history and their historical connection with deaf signers.

The Eastern Region is home to the first and only deaf school, the Mampong-Akwapim Senior High/Technical School, providing secondary-level

education exclusively for deaf citizens. Additionally, the region is proud to have three primary government schools, namely the Demonstration School for the Deaf-Mampong, Koforidua School for the Deaf, and Kibi School for the Deaf, all equipped with boarding facilities. The Eastern Region is also recognised as the location of Adamorobe village, the birthplace of AdaSL, known as the first and oldest natural sign language to emerge in Africa (Miles, 2004). However, the usage of AdaSL remains geographically limited within the village, while deaf signers in the region and beyond use GSL as the national sign language. Therefore, the Eastern Region is a special hub for deaf Ghanaians.

Most of the participants for this study were situated in Koforidua, the capital city of the Eastern Region in New-Juaben Municipal District. Other participants were met and interviewed in the village of Tei Nkwanta and the townships of Akropong-Akuapem and Apirede, all within the Akuapim North Municipal District of the Eastern Region. Tei Nkwanta and Akropong-Akuapem[11] were specifically chosen for hearing participants due to their proximity to Koforidua and the absence of known deaf individuals within the speaking community. Data recording in the Eastern Region took place in participants' homes, the researcher's house, public buildings chosen by participants, and occasionally at participants' workplaces, often located close to roadways.

The Eastern Region is predominantly inhabited by Akans, and their native language is Akan (with Kwuapem Twi being the primary dialect in the Region), which belongs to the Niger-Congo, West Kwa branch. Akan is the most widely spoken language in Ghana and serves as a lingua franca in Ghana[12] due to its large ethnic group, comprising 45.7%[13] of the country's population, as well as a significant number of L2 speakers. Another reason for choosing this location for the study was the researcher's upbringing in this region (Koforidua township), which facilitated easier access to both deaf signers and hearing gesturers in the region.

The Greater Accra Region shares a southern border with the Eastern Region. As the region housing the capital city, Accra, it is one of the most populated

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[11] Note that the town houses a teacher training college known as Presbyterian College of Education, formally as Presbyterian Training College, where services have been made to admit students with special needs (e.g., deaf & blind students)

[12] Ghana has no official national language since its independence from British rule in 1957.

[13] Source: Ghana Statistical Service (2021c). Ghana 2021 Population and Housing Census: General Report. Volume 3: General Report Highlights. Ghana Statistical Service https://census2021.statsghana.gov.gh/gssmain/fileUpload/reportthemelist/Volume%203%20Highlights.pdf

and urbanized among Ghana's sixteen administrative regions. Accra is highly cosmopolitan and served as a unique location to engage deaf participants with international exposure. In Accra, deaf participants were located and interviewed at the premises of GNAD.

Both the Eastern Region and the Greater Accra Region are situated in the southern part of Ghana (see Figure 2). According to the Ghana Statistical Service (2021b), the 2021 Population and Housing Census recorded a population of 2.9 million for the Eastern Region and 5.4 million for the Greater Accra Region, out of the total national population of 30,832,019. The Eastern Region reported 53,240 persons with "hearing difficulty", while the Greater Accra Region had 48,930 (Ghana Statistical Service, 2021a).

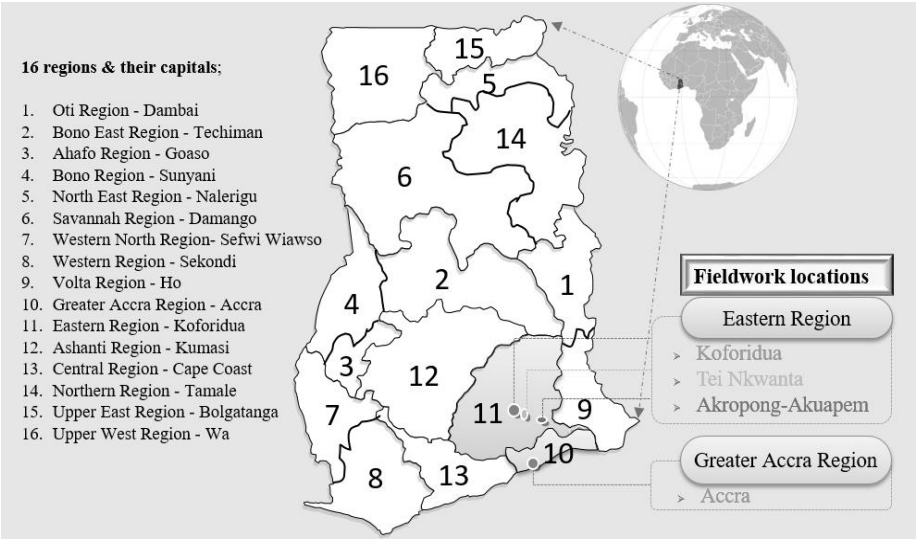

Figure 2: Map of Ghana showing the fieldwork locations in ER & GAR

### 1.6.2 The participants

Forty (40) participants were sampled for certain tests using a combination of snowballing, convenience/purposive, and quota sampling techniques. According to Napier et al. (2018), these sampling techniques are justified and commonly employed in sign language research. The participants were selected to provide a diverse range of backgrounds regarding age, gender, education, ethnic group, and demographic status relevant to the study. The selection criteria excluded deaf individuals who reported learning sign language at a late stage in life and gesturers below eighteen years.

Twenty of the forty participants were deaf individuals, while the remaining twenty were gesturers. Table 1 provides a summary of the demographic characteristics of the participants relevant to the study.

Table 1: Demographic Characteristics of Ghanaian participants

| | DEAF | | GESTURERS | |
|---|---|---|---|---|
| **Characteristics and social variables** | **Number (n=20)** | **Percentage (%=100)** | **Number (n=20)** | **Percentage (% =100)** |
| **Age** | | | | |
| 18 - 20 | - | - | 3 | 15% |
| *21 – 30* | 7 | 35% | 6 | 30% |
| *31 – 40* | 5 | 25% | 3 | 15% |
| *41 – 50* | 5 | 25% | - | - |
| *51 – 60* | 2 | 10% | 2 | 10% |
| *60 & above* | 1 | 5% | 6 | 30% |
| **Gender** | | | | |
| *Male* | 10 | 50% | 10 | 50% |
| *Female* | 10 | 50% | 10 | 50% |
| **Education** | | | | |
| *No formal education* | 2 | 10% | 2 | 10% |
| *Primary School* | 1 | 5% | 4 | 20% |
| *Junior High School* | 6 | 30% | 1 | 5% |
| *Senior High School* | 5 | 25% | 6 | 30% |
| *Tertiary* | 6 | 30% | 7 | 35% |
| **Ethnic Group** | | | | |
| *Akans* | 15 | 75% | 20 | 100% |
| *Other* | 5[14] | 25% | - | - |
| **Occupation** | | | | |
| *Student* | 3 | 15% | 6 | 30% |
| *Farmer* | 2 | 10% | 1 | 5% |
| *Employee* | 3 | 15% | 5 | 25% |
| *Self-Employed* | 11 | 55% | 5 | 25% |
| *Freelance* | 1 | 5% | - | - |
| *Retired* | - | - | 1 | 5% |
| Unable to work | - | - | 2 | 10% |
| **Handedness** | | | | |
| *Right handed.* | 16 | 80% | 19 | 95% |
| *Left handed.* | 3 | 15% | - | - |
| *Ambidextrous* | 1 | 5% | 1 | 5% |
| **Parents' hearing status** | | | | |
| *Hearing* | 19 | 95% | 20 | 100% |
| *Deaf* | 1 | 5% | - | - |
| **Primary means of** | | | | |

[14] They included 3 Ewe (15%), 1 Talensi (5%) and 1 Mole-Dangbon (5%)

| | | | | |
|---|---|---|---|---|
| **communication at home** | | | | |
| *Oral (English/ Akan)* | - | - | 20 | 100% |
| *Oral and writing* | 1 | 5% | - | - |
| *Oral and sign* | 1 | 5% | - | - |
| *Oral and Gesture* | 2 | 10% | - | - |
| *Sign language* | 6 | 30% | - | - |
| *Sign and gesture* | 1 | 5% | - | - |
| *Gestures* | 7 | 35% | - | - |
| *Gesture and writing* | 1 | 5% | - | - |
| *Writing* | 1 | 5% | - | - |
| **Current place of residence** | | | | |
| *City* (Koforidua & Accra) | 18 | 90% | 4 | 20% |
| *Town* (Akropong, Adukrom, Suhum, Tafo & Mampong) | 2 | 10% | 14 | 70% |
| *Village* (Tei Nkwanta) | - | - | 2 | 10% |

The demographic characteristics presented in Table 1 demonstrate a balanced representation of deaf individuals and gesturers, as well as gender balance. Other social variables, such as education, occupation, and age, also exhibit fair representation. For comparative purposes, two deaf participants with international exposure to western countries (specifically the UK and the US) were also included.

### 1.6.3 Ethical considerations

Ensuring the ethical treatment of participants in this study was of paramount importance, with particular attention given to the privacy and consent of the participants. Participants were provided with detailed information about the study's objectives, the intended use and storage of data. Prior consent was obtained from participants in various forms, including signed, recorded, or written consent.

In cases where participants' names were mentioned in the chapters, either as informants or participants, additional measures were taken to ensure their informed consent. Specifically, participants were contacted to be provided with detailed information regarding their inclusion. This communication aimed to ensure that participants were fully aware of their involvement and had the opportunity to raise any concerns or provide further consent if needed. By actively involving participants in the decision-making process and seeking their consent for the inclusion of their names, the study upheld their rights to privacy and autonomy.

All participants were informed that their involvement was entirely optional. They were presented with an informed consent document, which was presented in their preferred language (Akan, English, or GSL) to ensure clear comprehension. The information document covered essential aspects of the study, including the

procedures involved, compensation for their participation, the voluntary nature of their involvement, the confidentiality of their information, and the available channels for lodging complaints if they felt that they had been inadequately informed or treated during their participation.

As a token of appreciation for their time and contribution, all participants were compensated monetarily for their participation and any associated expenses, such as transportation costs. This compensation was provided to acknowledge their valuable contributions to the study and to express gratitude for their involvement.

## 1.7 Outline of the book

This book provides a comprehensive analysis of the GSL, which is significant for sign language linguistics in Ghana. In this introductory chapter (1), the significance of studying GSL in the Ghanaian context was highlighted, setting the stage for the subsequent chapters. The research questions of the book were presented, along with an overview of the book's structure and organisation. Chapter 2 traces the historical development of GSL and its connection to ASL. It explores the factors that contributed to the emergence and evolution of GSL, shedding light on the role played by oralism in the history of the GSL community. The chapter also recognises the contributions of key individuals in developing GSL. Chapter 3 contains a comparison of lexical similarities among different sign languages in Ghana. Apart from the two well-known village sign languages (AdaSL & NanaSL) used in Ghana, the chapter uses two lexical sources from GSL: one influenced by ASL, typically employed in formal contexts, and another unaffected by ASL, commonly used in informal settings.[15] The lexical analysis considered GSL lexical varieties, the two village sign languages and ASL. The chapter offers a phonological comparison of signs found in all the languages to assess the relationship. Chapter 4 provides a detailed description of Size and Shape Specifiers in GSL. It examines the relationship between Size and Shape Specifiers produced by deaf signers and the gestures employed by individuals within the hearing society. The chapter delves into the two types of size depiction (in space and on the body) and shape depiction (handling, tracing, and entity handshape) within GSL. The goal is to identify similarities and influences between GSL and the gestural environment. Chapter 5 examines the language ideologies surrounding Size and Shape Specifiers. Building upon the previous chapter, this chapter investigates the beliefs and attitudes of Ghanaian deaf signers towards body-based and space-based Size and Shape Specifiers. Sociolinguistic profiles and perceptions of Size and Shape Specifiers

[15] Note: At the time of conducting the study in Chapter 3, the triglossic nature of GSL with a doubly overlapping diglossia, as outlined in Chapter 7, was not fully apparent to me. Therefore, in Chapter 3, I perceived GSL as having a formal variety (e.g., ENGLISH) and an informal variety (e.g., LOCAL).

usage are explored, shedding light on the social factors that shape its use and interpretation. Chapter 6 explores the multifaceted aspects of GSL, such as identity, power relations, and language variation, and how they intersect with language ideologies. Chapter 7 summarises and discusses the findings presented throughout the book. This chapter analyses the results and their implications, offering a deeper understanding of the complex relationship between sign languages and their surrounding linguistic contexts.