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

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7.

IMPLICATIONS AND CONCLUSION

The principal aim of this book is to explore the GSL landscape and its relationships with ASL and other locally evolved sign languages in Ghana. The book's aim is inspired by a critical objective to investigate the susceptibility of an established sign language to the influences of gestural substratum from its surrounding environment. This chapter is organised as follows: Section 7.1 summarises the historical context of GSL within deaf education and deaf networks, synthesising the findings on lexical comparisons, productive SASS, and language ideologies explored in previous chapters. The remaining sections examine the broader implications of these findings. Section 7.2 discusses the multilingualism in the GSL landscape, subdivided into discussions on the interplay between ENGLISH, BROKEN, and LOCAL as signing varieties in the GSL landscape (Subsection 7.2.1) and the language practice of eclipsing some varieties within the GSL landscape (Subsection 7.2.2). Section 7.3 is on oralism's impact on Ghana's sign language landscape. Section 7.4 addresses the complex issue of GSL's susceptibility to gestural influence. Finally, Section 7.5 concludes the chapter by summarising the key insights and offering directions for future research.

7.1 Summary of the results

In the effort to comprehend GSL, Chapter 2 of this book explores the history of GSL. It begins by tracing the origins of GSL back to the introduction of ASL signs and Signed English in 1957 by Rev. Andrew Foster in the context of deaf education. The sign language used in deaf education was named GSL in the 1990s, reflecting a Ghanaian identity. The introduction of the name (GSL) was through the effort of GNAD leadership at that time, notably Mr. Francis Boison and Mr. Alexander D. Okyere. Before this renaming initiative, the national sign language used in deaf education was known as ASL. The label GSL gained attention after the production and dissemination of the GSL dictionary by GNAD in 2001, marking a formal endorsement for adopting the new name GSL within the deaf education landscape. The production of the dictionary was not accomplished in isolation but found support through collaborative efforts with the Ghana Community-Based Rehabilitation Programme, UNESCO, and other international entities. Historically, after the government took over the school from Rev. Foster in 1967, the use of sign language in deaf education was officially banned due to oralism for over two decades. Remarkably, Ghanaian gestures were allowed in deaf education during oralism. Chapter 2 highlights a significant turning point from 1988 to 1999 when Total Communication policies allowed ASL to resurface officially. This period also

witnessed the introduction of ASL dictionaries and the documentation of local signs. The chapter pays tribute to key individuals and deaf-led associations that have been instrumental in preserving and promoting deaf culture.

Chapter 3 focused on a lexical study examining the relationships between ASL, GSL (formal & informal), AdaSL and NanaSL. Comparing the relative distance between lexical signs of these sign languages, Chapter 3 finds that the informal variant of GSL is more closely aligned with AdaSL and NanaSL, whereas another variant (formal GSL) resembles ASL more closely. Handshape types emerged as the primary phonological feature distinguishing ENGLISH, BROKEN, and LOCAL from ASL, showing the susceptibility of this parameter to change over time.

Chapter 4 of this book analyses size and shape expressions within GSL and gestural communication in Ghana. At the heart of this study is the exploration of body-based SASS, a pivotal element in investigating the adaptability of established sign languages to the gestures of new environments. The primary focus centres on whether GSL exhibits susceptibility to gestural influences. Two noteworthy observations contribute to this exploration. First, GSL signers actively employ body-based SASS, akin to gesturers in Ghana. Secondly, adherence to the implicational hierarchy of body-based SASS concentration on the hand parts was discovered in GSL. The chapter focuses on two primary categories: shape depiction and size depiction. For shape depiction, handshapes, tracing, and handling handshapes were used. Gesturers apply similar handshapes like signers but with more flexibility in articulation locations. With similar Tracing handshapes, signers and gesturers employ different strategies for distinguishing 2D and 3D shapes. Handling handshapes exist in both systems but are minimally used. Regarding size depiction, GSL signers and gesturers employ diverse techniques, including hand and finger apertures, interactions with the ground, and interactions with the body, often incorporating movements and visual cues. Both systems share common strategies and techniques for conveying shapes and sizes. However, distinctions arise, particularly in the reliance of gesturers on visual comparisons and qualitative descriptions in speech. Gesturers also use nearby surfaces like tables, walls, and interlocutors' bodies, while signers are primarily constrained to their bodies or space.

The remainder of the chapters, focusing on language ideology, lead into Chapters 5 and 6, which discuss signers' judgments on body-based and space-based SASS and the broader signing situation in Ghana, respectively. These findings delve into the complex interplay of factors within the Ghanaian signing community, such as nativeness, education, age, familiarity, and prestige, and how they relate to language usage and perception. Relying on judgment experiment as a research method in Chapter 5, signers associated body-based SASS with indigenous Ghanaian attributes and iconicity, often labelling the sign as NATURAL, LOCAL, or GESTURE. On the other hand, space-based SASS is often considered foreign and associated with ASL, high prestige and educated individuals. Even though education

does not seem to restrict the use of either variant, space-based SASS is ideologically associated with educated signers.

Finally, Chapter 6 used focus group discussions, questionnaires, observations and informal elicitations, to explore the complex sociolinguistic landscape of signing in Ghana. Shedding light on the different perspectives, ideologies, and dynamics of a pluridimensional continuum encompassing triglossia with a double overlapping diglossia within the deaf community. The chapter reveals the tripartite signing practices that include ENGLISH, BROKEN, and LOCAL. The chapter also demonstrated that signers had their language naming or labelling for the signing systems in Ghana. The community's attitudes towards these signing practices are multifaceted. Signers favour ENGLISH due to its status and prestige, yet a strong connection to LOCAL persists due to identity and familiarity/efficiency.

7.2 Multilingualism in GSL Landscape

Prior to the commencement of this study, GSL was perceived as a singular entity. However, the discoveries presented in this book unveil a nuanced perspective, revealing multilingualism. At the personal level, signers exhibit the ability to seamlessly transition between different varieties in a triglossic manner. Conversely, in certain contexts only a single variant maybe observed. In the subsequent subsection, I delve into these discussions, offering a summary of the data that addresses these issues.

7.2.1 Exploring ENGLISH, BROKEN, and LOCAL Variants

Drawing from the historical, linguistic, and ideological insights presented in this work, I posit that what is commonly designated as GSL actually consists of three primary signing practices, namely ENGLISH, BROKEN and LOCAL. Prior to the commencement of this research, other researchers with different perceptions have also observed a local signing variant (Abudu, 2019; Addo, 1997; Edward & Akanlig-Pare, 2021; Nyst, 2010). With the recognition of local signing varieties, signers employ various terms to distinguish them. This recognition underscores the presence of a multilingual situation with substantial overlaps. Notably, many African societies have been identified as triglossic with the interplay of multilingualism and education. Upon thorough analysis of the data, it becomes apparent that the sign language landscape within the broader deaf community in Ghana is also characterized by triglossia (Chapter 6).

As noted in chapter 1, several studies address the existence of a local signing variety. Addo (1997) appears to be one of the earliest authors to employ the term "local sign language" in conjunction with an ASL-based sign language in Ghana. Edward and Akanlig-Pare (2021) identify it as home signs among deaf Ghanaians, framing it as gestural communication within domestic settings. Abudu

(2019) similarly characterised a variant of signing observed in deaf schools as a home sign used together with ASL, citing its iconic nature and resemblance to environmental gestures. Nyst (2010) also notably highlights the presence of local or natural signs in Ghana. Characterising GSL as an ASL-based sign language incorporating local or natural signs. According to Nyst, integrating local or natural signs into the ASL-based sign language serves a purpose beyond merely filling lexical gaps. Rather, it reflects a growing awareness of the significance of establishing a distinct national sign language while recognising the "pre-existing local signs." Consequently, due to some of the local signs appearing in the first GSL (GNAD, 2001) dictionary, Nyst (2010) noted that local signs are embraced and elevated in status.

Based on the preceding discussions, I am evidently not the initial discoverer of a local GSL variant, or the first to talk about the plausibility that multiple varieties may coexist. Nevertheless, the unique contribution of this book lies in delineating the distribution of these variants. The primary achievement of the study is illustrating a scenario characterized by a pluridimensional continuum that involves triglossia, featuring a double overlapping diglossia within the GSL landscape. I show that ENGLISH, BROKEN, and LOCAL coexist, with each variant fulfilling unique communicative roles. The observations made in this book, especially on the fact that some signs from LOCAL have been catalogued in the GNAD dictionary (GNAD, 2001), support the coexistence of the variants. However, it is essential to note that some LOCAL signs outside deaf space are rarely used or recognised by some deaf members. In chapter 6, for example, I show how some members of the deaf community disapprove of the existence of some local signs in the dictionary. This lack of acceptance may correlate with language prestige and stigmatisation tied to specific signs for some deaf educated signers.

In Chapter 1 (Subsection 1.1), I introduced ENGLISH, BROKEN, and LOCAL labels to distinguish these variants. Although further research and semantic discussion may refine these labels, this book recognises ENGLISH, LOCAL, and BROKEN as distinct signing varieties in the GSL landscape. These varieties share some features (e.g., Incorporation of ASL Signs, Formality, prestige) while retaining their unique characteristics:

Incorporation of ASL Signs: Within these varieties, namely ENGLISH and BROKEN, there is an extensive integration of ASL signs, with ENGLISH likely to exhibit a more pronounced influence due to its strong educational focus. ASL signs play a substantial role in the lexicon of ENGLISH and BROKEN, signifying their hybrid nature. In contrast, LOCAL distinguishes itself by abstaining from ASL signs as illustrated by lexical similarity rate of 24% and draws its influences mainly from local natural gestures.

Formality: ENGLISH and BROKEN can be effectively used in formal and informal situations, while LOCAL is primarily an informal signing variety. This flexibility allows all three varieties to adapt to various communication contexts.

Acquisition: All three varieties are attainable through interactions with other signers. ENGLISH is typically taught in formal educational environments, whereas LOCAL and BROKEN are often learned through informal interactions within the deaf community.

Prestige: While ENGLISH holds a prominent status within the signing community, it is important to note that both LOCAL and BROKEN enjoy respect and recognition as genuine and integral constituents of the broader GSL landscape. Their distinct characteristics and contributions are acknowledged and esteemed.

Signers have employed various labels to capture the diverse sign languages within the GSL landscape, each carrying its associated prestige and connotations (Chapter 6). Some variants have been linked to lower prestige and labelled as ILLITERATE, GESTURE, or VILLAGE. In comparison, some labels are associated with higher prestige, such as ENGLISH, GHANA, AMERICA or PRETEND. Positioned between these poles are neutral prestige labels like DEAF(-POSS), LOCAL, BROKEN, NATURAL, or SPONTANEOUS signing. These labels reflect various sociolinguistic aspects of the sign language landscape in Ghana and sometimes overlap in their usage (Chapter 6). For example, in other countries (e.g., India, Nepal, Papua New Guinea and Cambodia) it has been observed that signers could use a different variety of signing with hearing individuals or those with limited formal education with signing labels like GESTURE (Kusters & Sahasrabudhe, 2018) or NATURAL (Green, 2014) or CULTURE (Reed, 2020). These different varieties of signing may sometimes carry lower prestige, face negative attitudes, or even be excluded from being considered fully-fledged languages (Moriarty Harrelson, 2017).

Similarly, in the GSL community, signers often attach low prestige to AdaSL and NanaSL, labelling them as ILLITERATE, GESTURE, or VILLAGE. However, it is important to note that this book primarily focuses on the examination of ENGLISH, BROKEN, and LOCAL signing variants. As such, in-depth studies were not conducted on AdaSL, NanaSL, or the youth code mentioned in Chapter 6, used within deaf schools. These sign languages, such as AdaSL and NanaSL, have the potential to exert influence on GSL, particularly in LOCAL or BROKEN. For instance, Ghanaian gestures have been identified as integrated components of AdaSL, as noted by Kusters (2014a) and Nyst (2007). Similarly, in the case of LOCAL, this integration has been acknowledged by Abudu (2019). Furthermore, when comparing LOCAL with AdaSL and NanaSL, a similarity rate of 36% and 39%, respectively, was observed (Chapter 3). This implies a discernible connection between LOCAL and the village sign languages, although they remain distinct entities (Chapter 3), with AdaSL and NanaSL outside the GSL landscape.

On the other hand, ENGLISH and BROKEN share a significant portion of their lexicon, mostly derived from ASL signs. In contrast, both BROKEN and LOCAL exhibit distinct grammatical structures not found in ENGLISH. While the grammar of ENGLISH is traceable to English, the nature of the grammatical structure in BROKEN and LOCAL remains to be determined. However, insights gleaned from this study allow for some projections and considerations. Given the hypothetical nature of the conditions under which BROKEN emerged (as projected in Section 7.3), it is plausible that it shares a similar grammar with LOCAL. The outreach efforts detailed in Chapter 2, where groups of deaf leaders travelled to various deaf schools to teach and promote local signing instead of Signed English, may have influenced the likelihood of BROKEN and LOCAL sharing a common grammar. Alternatively, another option is how BROKEN may have acquired its grammar. One possibility is that it borrowed grammar from ASL, given the historical information that ASL was introduced to Ghana before the period of oralism. However, a counterclaim against this option suggests that the opportunities for language contact or exposure to acquire ASL grammar would have been limited in the past. A second potential option is to consider that signers may have adopted the grammar of neighbouring spoken languages. Although oralism primarily focused on the English language, historical records indicate that deaf students were also introduced to the predominant Ghanaian spoken language of their school's location. This was an attempt to enable students to communicate with family members who were not proficient in English. Several counterarguments can be made against this option as the source of grammar. Firstly, there may not have been sufficient time for students to fully acquire the grammar of a spoken language during the period of oralism due to its unsuccessful nature in deaf Ghanaian history. Additionally, it would be unusual for people who are deaf or hard of hearing to transition from the grammar of one spoken language (English) to another. Furthermore, Ghana's multilingual society offers various spoken languages, each with distinct grammar, making it challenging to pinpoint which language's grammar might have influenced BROKEN and LOCAL. Nevertheless, it is important to acknowledge that certain spoken languages in Ghana may exhibit pervasive areal similarities, such as the prevalence of serial verb construction or vowel harmony in Kwa languages. Such linguistic similarities have the potential to influence neighbouring sign languages, as exemplified in the case of AdaSL (Nyst, 2007). It is undeniable that spoken languages could impact sign language phonology, morphology, and syntax, as noted by various scholars (Bank et al., 2016; Crasborn et al., 2008; Nyst, 2007; Sutton-Spence, 1999). Oppong (2007:8) documented in his dictionary that, in addition to GSL's connection with ASL, the linguistic structure of GSL exhibits commonalities with Twi, Ewe, Dagbani, and other Ghanaian languages. This statement leads to a third potential option: considering BROKEN as a hybrid form with a fluid grammar.

The grammatical structure of LOCAL and BROKEN needs more research to understand, yet I hypothesise that it differs substantially from ENGLISH. The intricate dynamics within the GSL landscape suggest the existence of a triglossic situation with a double overlapping diglossia (ENGLISH & BROKEN; BROKEN & LOCAL) characterised by low and high-prestige variants, each serving distinct purposes (Chapters 5 & 6). The GSL landscape reflects a multilingual scenario characterised by the fluid use of different variants within the urban deaf community. Given the observed overlap in variant usage in the urban deaf community, translanguaging could be one of the frameworks to describe the signing practices in Ghana (cf. Reed, 2020). This framework conveys that signers may seamlessly transition between variants without distinct boundaries, particularly in deaf spaces. In the translanguaging approach, there is a shifting of focus away from named languages to concentrating on idiolect, representing an individual's complete linguistic repertoire (Otheguy et al., 2015). In the GSL landscape, depending on the context signers could fluidly employ LOCAL, ENGLISH, and BROKEN. Translanguaging seems to offer one of the possibilities that allows us to explore the idiolects of LOCAL, ENGLISH, and BROKEN within the same framework rather than categorising them as distinct languages (Reed, 2020). A translanguaging approach for the GSL landscape could explain a more fluid and gradient examination of individuals' varied modes of communication rather than rigidly separating communication into LOCAL, ENGLISH, and BROKEN. This approach underscores the importance of looking at the diversity of communication styles among individuals, as signers may employ different signing approaches based on various social factors or contexts (Green, 2014; Jepson, 1991; Kusters & Sahasrabudhe, 2018; Moriarty Harrelson, 2017; Reed, 2020). Nonetheless, translanguaging may not provide a comprehensive framework to comprehend the signing dynamics fully. For instance, there could exist a level where the individual idiolect takes precedence in meaning creation. However, when a signer seeks to convey that meaning in interaction with others, reliance on socio-cultural repertoires may become crucial, superseding individual repertoires. It is essential to note that while translanguaging finds support among many linguists, it remains a subject of debate. Scholars like MacSwan (2014, 2017) advocate for distinct grammatical systems for each language, whereas others, such as Otheguy et al. (2015), endorse a unified linguistic system. Nevertheless, criticisms persist despite its transformative potential, especially concerning its implications on ignoring linguistic boundaries (Flores, 2013, 2017; Kubota, 2015).

To summarise, GSL serves as an all-encompassing umbrella term for a diverse array of signing variants. Based on the observed signing practices within the GSL landscape, it could be aptly characterised as a triglossia (LOCAL, ENGLISH & BROKEN) with a double overlapping diglossia (high variety & low variety) coexisting with a low and high variety. Additionally, the framework of

translanguaging is suggested as a potential factor contributing to the observed overlap in variant usage within the broader deaf community.

7.2.2 Eclipse of Variants: Prestige and Sign Language Diversity in Ghana

In addition to the triglossia interpretation, a notable phenomenon challenges the triglossic framework and the concept of translanguaging within the GSL landscape. This phenomenon can be attributed to the significant prestige accorded to ENGLISH, which effectively overshadows BROKEN and LOCAL, leading to what can be aptly described as the "eclipse" of these variants.[126] This eclipse has important implications for recognising and understanding the full spectrum of signing diversity within the Ghanaian deaf community.

The influence of ENGLISH's prestige cannot be overstated. ENGLISH, a more formal and prestigious variant of the GSL landscape, holds a dominant position due to its strong associations with formal education, established norms, and linguistic conformity. This prestige is reinforced by its connection to ASL, an internationally recognised sign language. As a result, ENGLISH often becomes the default or standard reference point when considering the GSL landscape.

In this context, the eclipse of BROKEN and LOCAL occurs as a direct consequence of the perceived superiority of ENGLISH. Deaf users and external observers may predominantly encounter or be exposed to ENGLISH in formal educational settings, academic resources, and more structured interactions. The prevalence of ENGLISH creates an environment where other signing varieties like BROKEN and LOCAL appear marginalised and less visible. Consequently, this eclipsing effect can lead to a skewed perception of the signing landscape within the Ghanaian deaf community. BROKEN and LOCAL, while unique and valuable, might be overshadowed and inadvertently relegated to secondary status due to the dominance of ENGLISH.

To better understand and appreciate the signing practices in Ghana, it is essential to acknowledge and counteract the eclipse of BROKEN and LOCAL. Recognising the existence and importance of these variants, even in the shadow of ENGLISH'S prestige, is a crucial step towards an accurate and comprehensive understanding of the GSL landscape in its full complexity. The concept of multilingualism, which could acknowledge the fluid and dynamic interplay of multiple signing varieties, may provide a more nuanced and accurate lens through which one can view the GSL landscape.

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[126] I would like to express my gratitude to Victoria Nyst, for suggesting that the term "eclipse" aptly describes the phenomenon found in my study.

7.3 Impact of Oralism on the Sign Language Landscape in Ghana

The historical insights into the GSL within the context of deaf education in Ghana reveal two significant implications of the impact of oralism. The first implication relates to the potential development and use of local signing (LOCAL or school-lect) during the period of oralism, cf. Nyst, (2010:420) oralist schools as safe havens for local sign language in East Africa (V. Nyst, PC., 2024). The second implication pertains to the hunger for a previously forbidden sign language (i.e., ENGLISH) after the end of oralism.

Chapter 2 reveals that despite the historical prohibition of sign languages (i.e., ENGLISH), Ghanaian gestures, were permitted in deaf education. The leniency to use gestures was due to the ability of such gestures to facilitate communication between signers and the hearing community in Ghana during the era of oralism. Additionally, oralism prompted the establishment of several deaf schools, creating a conducive space for the emergence of school-lect, relatively free from the influence of ENGLISH or ASL. However, its development could have been shaped by the gestural context prevalent in both domestic and academic settings. Furthermore, the association of deaf education with boarding facilities further encouraged and supported the GSL community in the emergence of locally developed signs (Chapter 2). Consequently, I propose that these gestures bear resemblance to school-lect or LOCAL among deaf individuals (Chapter 4). This notion aligns with Abudu's (2019) postulation that some signers use home signs in deaf schools, originating from the influence of gestures in the family setting and immediate environment. The LOCAL variant may have therefore developed from the use of gesture among different cohorts of deaf students. The emergence of Nicaraguan Sign Language parallels the situation being described for LOCAL, where signers initiate communication through gestures and home sign, eventually giving rise to a new sign language (Coppola, 2002; Kocab, 2017; Senghas et al., 2005). As a result, I anticipate that these LOCAL signs in deaf schools may often go unnoticed by teachers and authorities as a prohibited sign language, allowing the coexistence of local signing with oralist approaches.[127]

Crucially, the language of instruction in deaf education underwent several phases, initially characterized by a decade of Signed English with ASL lexicon, followed by a prolonged 21-year period of oralism. The resilience of signing during this extended oralist era, as discussed in Chapter 2, strongly indicates the eagerness of deaf students to embrace the once-forbidden sign language (i.e., ENGLISH) after the ban was lifted. The impact of this oralist period in this regard, manifests both positive and negative effects on the GSL landscape, as observed in this book.

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[127] Note: However, it is important to acknowledge that not all oralist approaches in deaf education promoted the use of gesturing (cf. Senghas et al., 2005).

On the negative side, the emergence of LOCAL during the oralist era cast a shadow over the variety, causing LOCAL to lack prestige and unable to be considered a genuine sign language for deaf Ghanaians. I postulate that, in the perception of signers, the mere allowance of LOCAL in deaf schools by authorities (e.g., oralist teachers) may have conveyed the message that it was not a legitimate language. Additionally, the absence of obvious corresponding signs for English words could have undermined its recognition as a legitimate language. Consequently, a strong desire to adopt ENGLISH became evident, driven by academic purposes and the perception that it was the authentic sign language denied to deaf students for over two decades during oralism. This desire was articulated by some participants in Chapter 6 and aligns with observations made by Green (2014), emphasizing the significance placed on a formal variant by signers who view it as essential for communication.

On a positive side, the 21-year ban on ENGLISH, followed by the subsequent 11-year reintroduction of ASL signs, coupled with the oral approach, also created an environment conducive to the coexistence of LOCAL and ENGLISH. This situation encouraged the use of gesture and home sign, feeding into LOCAL development, while the use of ASL signs and English contributed to the development of the ENGLISH. Consequently, the coexistence of both LOCAL and ENGLISH, contributed to the emergence of BROKEN as an intermediary form.

From the account of this book, I argue that this coexistence of the three identified signing varieties (ENGLISH, BROKEN, & LOCAL) within deaf education presented a triglossia situation, detailed in Section 6.5.3 of Chapter 6. In this triglossia, ENGLISH operated as a highly developed language, primarily used in official settings (e.g., classroom), and holds the distinction of being the most prestigious variety. BROKEN, functioning as a lingua franca, found its place in social settings and, while considered a lower-prestige variety in its relationship with ENGLISH, held a higher status when compared to its relationship with LOCAL. LOCAL, serving a more specialized role, was employed for limited communication within deaf spaces, domestic interactions, and cultural expressions. LOCAL is regarded as a lower-prestige variety in its relationships with both ENGLISH and LOCAL, resulting in fewer users, typically prevalent among individuals with limited exposure to ENGLISH and BROKEN. In summary, the historical context of oralism provides valuable insights into the GSL landscape, reflecting both negative and positive contributions.

7.4 The Influence of Gestural Environment on an Established Sign Language: A Case Study of GSL

This section addresses the core research question: Do already established sign languages remain susceptible to the influences of their gestural environment? Does the transition of an established sign language to a different gestural environment

alter its structural characteristics? By examining GSL, I aim to determine whether sign languages are open to gestural influences solely during their developmental stages or throughout their lifespan.

The book reveals that the lexicon of BROKEN and ENGLISH can be considered as primarily from an established Sign Language. Chapter 4 unveils the strategies employed for size and shape depiction in the GSL landscape, using an extensive dataset comprising 226 instances of gestures and 820 signs related to SASS. An understanding of patterns emerges, aligning with Nyst's (2016) observations on West African sign languages. While certain regions predominantly use a single strategy, Ghana's broader deaf community use two strategies (i.e., body-based & space-based SASS) in tandem with their gestural environment. In contrast, in the Netherlands, signers and gesturers predominantly adhere to using only space-based SASS (Nyst, 2016b).

The ensuing discussion accentuates the unique occurrence of body-based SASS among signers and gesturers in the Ghanaian context (Chapter 4). This construction is remarkably less preferred or uncommon in non-African sign languages (Nyst, 2018; Nyst, 2007). For instance, the literature on SASS in ASL has no documented instances of body-based SASS among signers and gesturers in North America. Studies by Kubus (2008), Schick (1987), Slobin et al. (2003), and Supalla (1982), present extensive description of SASS in ASL, yet none of them present the description of body-based SASS in ASL. Indicating the absence of this specific construction in the existing ASL or American gesture literature. This assertion gains further validation from a pilot study I conducted between January and June 2022, involving five American gesturers, including one Black American, and informal discussions with two signers, one of whom was Black American. My findings confirmed the absence of body-based SASS among American signers and gesturers. The exclusive preference for body-based SASS in Ghana, employing both lower and upper limbs or other body parts, renders it a captivating subject for the sign languages used in the country.

Throughout the research, complexities surfaced in unravelling the nature of the GSL landscape, particularly in uncovering the coexistence of LOCAL, BROKEN and ENGLISH variants. The intricacies complicate the assessment of gesture influence within the GSL landscape, as this influence may be linked to a specific variant and not uniformly across all variants. The tripartite nature of the GSL landscape and the particular focus on SASS impedes a holistic answer to the timing of environmental gesture integration into an established sign language in a new environment. However, the data collected has led to the development of a hypothesis: Through lexical similarity, historical, linguistic, and ideological data, this study establishes a relationship between BROKEN and ENGLISH's signs and ASL. Despite the complex nature of the GSL landscape necessitating caution, the study confirms the

integration of body-based SASS into BROKEN and ENGLISH, recognising the SASS as a locally evolved sign.

7.4.1 Integration Pathways of Body-Based SASS into ENGLISH and BROKEN

In this section, I hypothesise the potential integration mechanisms for body-based SASS into the GSL landscape. An area of specific interest in this book is the incorporation of Ghanaian body-based gestures for size and shape into BROKEN and ENGLISH. Two hypotheses are presented: Hypothesis 1 posits that a full-fledged sign language may be susceptible to influences in a new gestural environment if expressional gaps are present, and Hypothesis 2 suggests that in Ghana, body-based SASS is integrated into the BROKEN and ENGLISH through either direct incorporation from gestures or indirect assimilation via LOCAL. These hypotheses are summarised below:

- **Hypothesis 1:** A full-fledged sign language may be susceptible to influences in a new gestural environment.
- **Hypothesis 2:** In Ghana, body-based SASS is integrated into BROKEN and ENGLISH through two specific routes:
    - Direct incorporation from gestures
    - Indirect via LOCAL

The integration of body-based gestures for size and shape into the GSL landscape unveils a complex process that merits closer examination. As outlined in Example 1, I posit three distinctive routes through which these gestures become part of GSL expression. Each route delineates a unique trajectory, shedding light on the intricate dynamics at play in the incorporation of size and shape gestures into the GSL lexicon. In this context, the term "gesture" encompasses expressions employed by gesturers in everyday communication. The subsequent routes delineate the transformative journey of these gestures into productive elements within GSL, contributing to the language's dynamic and evolving lexicon. Understanding these integration routes becomes imperative to interpret the interplay between GSL and the surrounding linguistic and gestural influences. The historical context of GSL evolution (Chapter 2) serves as a backdrop to the intricate process of borrowing, adapting, and incorporating size and shape gestures into the framework of this unique sign language.

The following summary (see Example 1) outlines the routes that this study posits on how Ghana's body-based gestures for size and shape are integrated into the GSL landscape:

1)

Route 1: Gesture → productive size and shape constructions (S&SCs) in BROKEN and ENGLISH

Route 2: Gesture → productive S&SCs in LOCAL → productive S&SCs in BROKEN and ENGLISH
Route 3: Via both Route 1 and 2.

Example 1 outlines three pathways through which size and shape gestures may integrate into the GSL landscape. Initially (route 1), a gesture may directly transition into a lexical element in BROKEN and ENGLISH because they share the same lexicon. Alternatively, in route 2, a gesture can first evolve into LOCAL and then find its way into BROKEN or ENGLISH due to their association with LOCAL. Alternatively, with Route 3, routes 1 and 2 are both the pathways through which size and shape gestures evolve into the GSL landscape.

The history of the sign language landscape in Ghana demonstrates this process, revealing that BROKEN and ENGLISH have adapted to the local environment, incorporating signs for culturally specific items like food, games, festivals, and place names. Although sign languages borrowing from surrounding gestures is well-documented, incorporating these gestures (body-based SASS) into BROKEN and ENGLISH, especially when their lexifier or donor language (i.e., ASL) already has SASS signs for specific size and shape depiction, is intriguing. In other words, there is no SASS gap as a motivating factor for size and shape depiction, as ASL lexicon already had signs for these.

One hypothesis suggests that LOCAL, which likely emerged from Ghanaian gestures and local spoken languages, may have played a role in introducing body-based SASS into the BROKEN and ENGLISH. The presence of SASS in LOCAL bears similarity to environmental gestures, indicative of a contact-induced emergence (Matras, 2020). This emergence may be likened to other locally evolved sign languages in Ghana, such as AdaSL (see Nyst, 2007), where the study suggests that local signing has arisen from significant interaction with Ghanaian gestures and the languages spoken nearby. Consequently, variations in LOCAL that parallel regional variations in surrounding spoken languages should not be surprising (Hadjah, 2016, 2015; Peprah, 2021). The exposure to signing as the medium of instruction in deaf schools across various geographical locations throughout Ghana could account for the distinct regional variations in GSL communities. This observation mirrors the findings in British Sign Language, as Quinn (2010) documented. Nevertheless, the educational setting in Ghana, where deaf students converge during their senior high education, tends to create a levelling effect on the sign language landscape in Ghana. This convergence, particularly evident at the Mampong Senior High School, exposes BROKEN and ENGLISH to influences from the signs used in LOCAL as the youth are the agents of change.

Further, the historical introduction of gestures into deaf education during the era of oralism has possibly led to deaf signers becoming less resistant to natural gestures. In the highly sociable environment of Ghana, gestures are commonly

employed in communication between deaf and hearing individuals. However, such gestural forms are used less frequently among deaf interlocutors, as detailed in Chapter 6. BROKEN, ENGLISH and LOCAL signers' continuous contact with gestures in contemporary settings, such as family, work, religious, hospital or legal environments and daily life, facilitates this integration, especially when interpreters are unavailable (Fobi et al., 2022). Such ongoing exposure or contact facilitates the direct influence of gestures on the GSL landscape.

Thus, the section has explored the integration pathways of body-based SASS into BROKEN and ENGLISH. Building upon Wilcox's proposed integration routes (2004, 2007, 2009, 2014), GSL, as a full-fledged sign language, can be influenced by the gestural environment in which it operates. Two main hypotheses were proposed: Hypothesis 1 suggests that mature sign languages can incorporate gestural influences to address expressional gaps. In contrast, Hypothesis 2 proposes that body-based SASS integrates into the GSL landscape through direct gesture incorporation or/and indirectly via LOCAL.[128] The sign language landscape in Ghana's adaptability is evident, incorporating signs for culturally specific concepts. Even with existing ASL-based signs for size and shape in BROKEN and ENGLISH, body-based SASS finds its way into the GSL landscape, indicating that expressional gaps are not the sole driving force. LOCAL, rooted in Ghanaian gestures and local spoken languages, suggests contact-induced development akin to other locally evolved sign languages in Ghana. Regional variations in the GSL landscape correspond to the geographical diversity of deaf schools, while a common education system promotes ENGLISH. Historical gestures' introduction during oralism and continuous interaction with gestures in the general society heighten deaf signers' receptivity to natural gestures. The social context of Ghana, with frequent gesture use among deaf and hearing individuals (but limited among deaf interlocutors), amplifies gestures' role in communication. Overall, this section underscores the integration paths of body-based SASS into the GSL landscape, driven by historical and ongoing influences. The sign language landscape in Ghana's dynamic interaction with its gestural environment showcases its adaptability and evolution, enriching its language structure and vocabulary through a blend of formal education and continuous exposure to natural gestures.

7.4.2 Identity construction and Prestige within the GSL landscape

Prestige plays a key role in the sign language landscape in Ghana. A complex interplay of body- and space-based SASS influenced by identity construction results in several intriguing contradictions. The analysis presented in Chapter 5 highlights the preference of younger individuals for body-based SASS, yet this preference was

[128] These hypotheses form the foundation for a deeper exploration of how body-based gestures for size and shape find their way into BROKEN and ENGLISH.

not reflected in the data regarding productive SASS (Chapter 4). Additionally, there was a discrepancy in the perception that signers with no formal education would be more inclined to use body-based SASS. This inclination was observed in the perceptions of signers (Chapter 5) but was not supported by the data on productive SASS (Chapter 4). Furthermore, there is a notable difference between the participants' assertions in Chapter 5, which suggests that body-based SASS is commonly used in Ghana to represent size and shape, yet the production data, indicates a lower frequency of body-based SASS production among signers, compared to a higher prevalence of space-based SASS.

The study observed that signers intentionally distanced themselves from body-based SASS during data collection, favouring the more prestigious variant: space-based SASS. This preference reflects a broader association with literacy and ENGLISH, qualities tied to higher social standing. Participants in a formal context, such as camera recording, overwhelmingly preferred space-based SASS despite acknowledging that body-based signs are more commonly used. In this case, signers might have been conscious of avoiding sign variants that were associated with stigmatisation.

The discrepancy between the participants' ideological stances and behaviour during the study uncovers an understanding of identity construction or prestige in the signing community. During the study, the prevalent use of body-based SASS in informal or daily communication juxtaposed against its deliberate avoidance in favour of space-based SASS underlines a concerted effort to align with a more prestigious linguistic identity.

Furthermore, the perception exists that LOCAL lacks vocabulary and adheres to signs not conforming to conventionalised phonological parameters in sign language linguistics. This contributes to the low prestige associated with LOCAL, with signers actively avoiding association with this variety to maintain their identity. The community also values those who creatively mix varieties (LOCAL, BROKEN, & ENGLISH) in communication, allowing some signers to demonstrate their proficiency in the GSL landscape.

This signing landscape illustrates a collective judgment within the community about which signs are appropriate or inappropriate. Even signs not violating conventional parameters may be ridiculed, illustrating that educated signers' preferences for ENGLISH may be guided by an instinctual understanding of what should be embraced or dismissed. Such responses are aligned with broader language ideologies within the deaf community (Kusters, 2014a; 2019). My observations within the deaf community also suggest that ridiculing certain signs serves as a gentle deterrent against their use.[129]

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[129] A deaf informant revealed that Junior High School students in the Northern region become annoyed with teachers who do not use regionally specific signs.

These findings reveal the importance of identity construction within the GSL landscape, emphasising the complex interplay between prestige and linguistic preferences and choice. As discovered, personal perceptions and linguistic practices sometimes diverge, potentially influenced by the context of observation and the inherent desire to align with perceived prestigious linguistic norms. Such complexities emphasise the need for careful consideration and a more holistic understanding of the dynamics at play, recognising the factors that shape linguistic behaviours within the GSL landscape.

7.5 Conclusion and Further Research

In our quest to unravel the intricacies of 'GSL', this book has led to a profound understanding of the diversity within the GSL landscape, where high and low varieties, such as LOCAL, BROKEN, and ENGLISH, coexist. These findings have shed light on the complex sociolinguistic landscape of GSL and, by extension, the broader sign language landscape in Ghana.

The history of GSL traces its roots back to the introduction of Signed English, built on ASL signs, in the realm of deaf education. It vividly illustrates an era of official sign language banishment during the dominance of oralism, a period spanning over two decades, which encouraged the development of a local signing system now known as LOCAL. The reintroduction of sign language in the late 1980s saw the resurgence of Signed English, currently labelled as ENGLISH. This book posits the hypothesis that the coexistence of both ENGLISH and LOCAL gave birth to the signing variety known as BROKEN. The book pays tribute to the key individuals and deaf-led associations whose resilience played pivotal roles in preserving and promoting deaf culture throughout Ghana's history.

The exploration of the lexical landscape, which investigates the relationships between signs in ENGLISH and BROKEN, LOCAL, ASL, AdaSL, and NanaSL, yielded intriguing results. It highlighted the close relationship between ENGLISH and BROKEN signs with ASL signs, while LOCAL signs were found to be closely related to AdaSL and NanaSL signs. This suggests that environmental gestures have significantly influenced Ghana's locally evolved sign languages. Examining how an established signing system like ENGLISH could be influenced by a new gestural environment, this book attributes the integration of size and shape gestures to be a result of direct influence through gestures and, alternatively, indirect influence through the LOCAL signing system.

However, in Mampong Senior High School, it is noted that instead of being annoyed, students would laugh at certain variants. The underlying reasons for this change in response to linguistic diversity are unclear, highlighting an area for potential further study within the context of deaf education and community dynamics.

Examining language ideology towards SASS and signing in general within Ghana's sign language landscape revealed a diversity of perspectives. These ideologies revolve around identity construction and prestige within the deaf community. The signing practices within different settings could be fluid. They may be influenced by identity and prestige, making it challenging to fully understand the GSL landscape without insight into the dynamics of multilingualism and triglossia, particularly when prestigious variants like ENGLISH eclipse other signing varieties, such as LOCAL. This book sets the groundwork for further linguistic exploration of the sign language landscape within the urban deaf community, acknowledging the complex web of attitudes and practices that shape it.

Future Research:

The coexistence of high and low varieties within GSL and the historical, sociolinguistic, and ideological dimensions explored have painted a rich and multifaceted picture of the Ghanaian deaf community. As we (linguists) continue to unravel the complexities of the GSL landscape, we are reminded that there is much more to discover, both linguistically and socioculturally, in this vibrant and ever-evolving linguistic landscape.

Substantial further research is needed, focusing on:

- **Morphosyntactic Comparison:** An investigation into the relationships between LOCAL, BROKEN, and ENGLISH and the connections between ASL and other locally evolved sign languages (e.g., AdaSL & NanaSL) through a detailed morphosyntactic comparison. Such an analysis would help to establish clear and definitive relationships between these different sign languages.
- **National and Continental Perspectives:** This book enriches the understanding of ASL-based SLs in Africa, spotlighting how contact and deaf education have fostered sign language diversity in Ghana. Offering perspective on Ghana's national sign language and ASL's unique manifestation in Africa opens avenues for exploring linguistic similarities between the GSL landscape and other ASL-based SLs across African countries with parallel deaf education histories. Such exploration might require extensive corpus data and could uncover whether Ghana’s sign language landscape scenario applies to other ASL-based SLs in Africa, including assessing susceptibility to body-based SASS.
- **Cross-Linguistic Gestural Practices:** This book uncovers an unexplored dimension of communication in Ghana by highlighting the prevalent but understudied use of co-speech gestures. It emphasises the need to investigate and document these gestural forms, functions, and variations, especially among ethnic groups. This study paves the way for understanding modality influences between contact with sign and spoken

languages and the possible regional variations within the gestural landscape. It also underscores the necessity of further work on regional variations, such as assessing if co-speech gestures share the same forms and functions as those used for size and shape depiction by signers. By providing a foundation for future inquiry, the book calls for a more profound exploration of cross-linguistic gestural practices within Ghana, enhancing our comprehension of language, culture, and expression.

This book offers a pioneering view of GSL, illuminating its susceptibility to the gestural environment, the complex interaction between language, identity, and environment, and the influence of the gestural environment on established sign languages. It reveals the significant gaps in our understanding of sign language and the deaf community in Ghana, inviting new perspectives for future research. By taking a holistic, rigorous approach, future studies can enhance our understanding of language evolution, adaptation, and the complex dynamics in sign languages in Ghana and across the African continent.