# Sign languages in West Africa

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### I Introduction

Little is known about the sign languages used on the African continent. This chapter considers the distribution, use and history of sign languages in the western part of this continent. Studies pertaining to these topics are very rare, and for a number of countries information is completely lacking. For others only bits and pieces of information are available. A radical increase of research efforts in this area is necessary. At present, some basic information on the sign language situation and structure is available for Ghana, Mali and Nigeria. A typical feature of the sign language situation in these and other countries is the coexistence of local and imported sign languages. The most widespread sign language of foreign origin is beyond doubt American Sign Language (ASL), which was introduced in many countries together with deaf education in the past five decades.

The sign language situation in West Africa is as diverse as it is undocumented. A non-exhaustive list of sign languages used in West Africa is found in Table 18.1. Their places of use are indicated on the map in Figure 18.1. The list of sign languages is partly based on information in the Ethnologue (www.ethnologue.org), partly on Kamei (2006) and partly on my own information.

This chapter starts off with an inventory of basic facts about deafness in West Africa in section 2, followed by a short history of deaf education in the region in section 3. The impact of language policies in deaf education on the current sign language situation is considered, most notably visible in the extensive use of ASL-based varieties. An overview of sign languages reportedly found in West Africa is given in sections 4 and 5, including their vitality and origins. Also, factors contributing to variation in the social setting and transmission are discussed. Case studies of the sign language situation in three countries, Ghana, Nigeria and Mali, are presented in section 5.3.

The data presented here were in part observed during several periods of fieldwork in Ghana and Mali between 1999 and 2004 and travels through Burkina

Table 18.1 Sign languages used in West Africa

			771	TOTAL
English name	Acronym	Acronym Alternative names	Origin	Where used in West Africa
Adamorobe Sign Language American Sign Language	AdaSL ASL	Mumu kasa Ameslan, Langue des Signes Franco-Africaine	Local Foreign	Village of Adamorobe, Ghana Benin, Burkina Faso, Cote d'Ivoire, Ghana, Tiberio Marierie Marierie
Bura Sign Language	I		Local	Livelia, mauritania, mali, nigeria, 1 ogo Bura land in Nigeria
French Sign Language	LSF	Langue des Signes Française	Foreign	Togo
Gambian Sign Language	ı		Foreign, ASL based Gambia	Gambia
Ghanaian Sign Language	I	ſ	Foreign, ASL based	Ghana
Guinea-Bissau Sign Language	1	Língua Gestual Guineense		Guinea-Bissau
Guinean Sign Language	1	ľ	Foreign, ASL based	Foreign, ASL based Conakry, Guinea-Conakry
Hausa Sign Language	HSL	Maganar Hannu	Local	Kano state, Nigeria
Mali Sign Language	LaSiMa	Langue des Signes Malienne,	Local	Bamako, Mali
		Langue des Signes Bambara		
Mbour Sign Language	1	1	Local	Town of Mbour, Senegal
Burkina Faso Sign Language	1	Langue des Signes Mossi	Local	Ouagadougou, Burking Faso
Nanabin Sign Language	1	1	Local	Deaf family in village of Nanahin. Ghana
Nigerian Sign Language	1	1	Foreign, ASL based	
Portuguese Sign Language	LGP	Língua Gestual Portuguesa	Foreign	Cabo Verde
Sierra Leone Sign Language	1	1	Foreign, ASL based Sierra Leone	Sierra Leone
Tebul Ure Sign Language	I		Local	Village of Tebul Ure, Mali
				TOTAL STATE

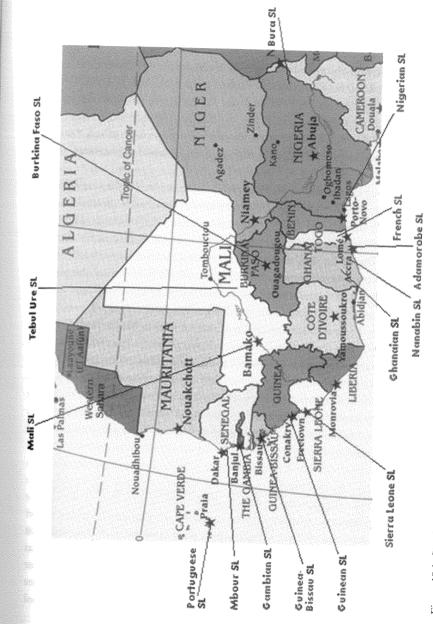


Figure 18.1 Sign language map of West Africa From University of Texas Libraries.

concerns the distinctive role of tone in many West African languages. Foster (1975) argued that differences in tone are very hard to perceive through speechreading.

In short, Reverend Andrew Foster played a key role in the establishment of deaf education in many West African nations from 1957 until his death in 1987. His missionary institution has continued his work after his death. Foster advocated for the use of Total Communication in deaf education and used ASL signs in his schools.

### 4 Foreign sign languages

The activities of the CMD in deaf education in West and Central Africa have had an enormous impact on the sign language ecology in these regions. The possibility of deaf education in the form of boarding schools brought together deaf individuals who would not have met otherwise. Boarding schools not only bring together deaf children, they also significantly reduce the contact of the deaf children with their home environment, which consists of hearing people in most cases. Little information is available on the presence of Deaf communities prior to the establishment of deaf education. It is likely that the continuous concentration of deaf children resulted in new Deaf communities in places where none existed prior to deaf education. In places where Deaf communities were already present, as, for example, in Northern Nigeria and Mali (see sections 5.3.2.1 and 5.3.4.1), these are likely to have grown and changed in character due to the establishment of deaf education. For example, Deaf communities that arose in the context of deaf education typically have a National Association of the Deaf and contacts with the World Federation of the Deaf.

In Foster's CMD schools, Total Communication was used, which entailed the use of a form of Signed English, using lexical items from ASL and artificial signs representing functional elements in English (Oteng 1997). It is likely that Foster was using forms of ASL less influenced by English as well in his daily interactions with teachers and pupils.

As a consequence, forms of ASL rapidly spread throughout the region. ASL-based sign languages are the first language of educated deaf adults in most countries. They are the sign language used and advocated for by the National Associations of the Deaf. They are typically considered the official sign language of a country and are referred to as such as well, e.g., Ghanaian Sign Language (GhSL), Nigerian Sign Language and so on. These sign languages figure in vocabularies, interpretation on television and sign language courses organized by the associations.

An interesting question is to what extent these ASL-based sign languages are similar to ASL. Forms of ASL were introduced to West Africa several decades ago

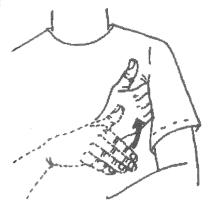


Figure 18.2 AKPETESHIE (GSL). Signs reprinted with the kind permission of the authors from GNAD (n.d.).

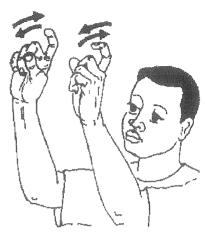


Figure 18.3 ODWIRA (GSL).

with limited access to native performance in this language. Thus, significant divergence can be expected.

Moreover, signs of local origin have been added to the lexicons of the languages. Foster (1975) encouraged the use of so-called "natural signs," conventional gestures or signs already used by deaf adults in a given country or region.

Such local or "natural" signs include signs for culture-specific notions, such as particular dishes and drinks, ceremonial activities and objects, names for places and ethnic groups. An example of a local sign included in the ASL-based sign language of Ghana, GhSL, is given in Figure 18.2. This is the sign for AKPETESHIE, a locally brewed alcoholic beverage. Another example from GSL is given in Figure 18.3. This is the sign for ODWIRA, a festival celebrated annually by some large ethnic groups in Ghana.

However, local signs are used not only when no ASL sign is available for a given concept. There seems to be a growing awareness of the value of a distinct national sign language and an acknowledgment of pre-existing local signs. As a result, local signs are also adopted or given a higher status even when a conventional ASL sign is available. Thus, in GhSL, the local signs, illustrated in Figures 18.4 and 18.5, respectively, are given for WICKED and BEAT in the dictionary for Ghanaian Sign Language (GNAD, n.d.).

No comparisons have been made between the lexicons of an African and an American ASL variety as far as I know, nor of two African varieties. Resources for a reliable comparison of African varieties are lacking at present. Only a very limited number of dictionaries of West African varieties of ASL has been published so far. The above-mentioned dictionary for GSL contains little over

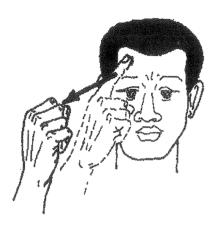




Figure 18.4 WICKED (GSL).

Figure 18.5 BEAT (GSL).

900 signs and was published in around 2001 by the Ghana National Association of the Deaf. This dictionary tends to render only one sign per concept and thus gives little information on variation. Other dictionaries on ASL-based sign languages are Ajavon (2003) for Nigerian Sign Language, GADHOH (2002) for Gambian Sign Language and Tamomo (1994) for ASL in francophone African countries, published in Benin. Avajon's dictionary for Nigerian Sign Language seems to be a prescriptive one, aiming at the inclusion of local signs in Nigerian Sign Language, but the criteria used for choosing or identifying local signs is not sufficiently clarified to use the dictionary as a reliable source of actual language use. I have not had the opportunity to lay hands on the other two dictionaries mentioned.

It would be interesting to assess the level of lexical similarity between African varieties of ASL and varieties of ASL used in the United States by using the lexicostatistical method as developed for sign languages (Woodward 1987, 1991, 1993, 1996; McKee & Kennedy 2000; but also Padden and Al-Fityani, this volume and Schembri *et al.*, also in this volume). Obviously, more – and more representative – data are needed for such a study to be reliable.

As for the structural level, it is harder to generate any expectations other than very general ones, which take into account the structural variation found in the sign languages studied so far. Whereas the signs introduced by Foster were tagged to a spoken language structure, following the Total Communication philosophy, this no longer seems to be case for the ASL-based sign languages I have seen in Ghana, the Ivory Coast and Burkina Faso. Nevertheless, there appear to be significant differences between ASL-based sign languages in anglophone and francophone countries. Kamei (2006) has made an extensive study of the ASL-based sign

languages in francophone countries in West and Central Africa. He notes considerable adaptations made to the ASL-based sign languages in francophone countries, reflecting the intensive contact with spoken and written French. Thus, initialized signs may be modified to reflect the corresponding French word, rather than the English equivalent. English mouthings are replaced by French ones. Finally, these sign languages use calques or loan translations from French, such as compounds and idiomatic expressions. The adaptations of ASL signs to reflect features from spoken French, as well as the integration of a considerable number of local signs, result in sign languages that are unique for the African, francophone context. Consequently, Kamei (2006) argues that they are African creoles of ASL. He coins the term "Langue des Signes Franco-Africaine" as a generic term to refer to the group of sign languages that have arisen in francophone countries in Africa, leaving open the possibility that the generic term may turn out to cover a group of distinct but related sign languages.

From Kamei's account, it seems clear that enough restructuring has happened to consider the ASL-based sign languages in francophone African countries to be distinct from standard ASL. However, the restructuring described only pertains to the lexical and the sub-lexical level and thus seems to concern relexification. Relexification is a process described in the literature on contact linguistics as the replacement of lexical items of one – usually low-prestige – language by the lexical items of another – usually high-prestige – language (cf. Arends, Muysken & Smith 1995). In this case, the relexification has not been brought about by a difference in prestige, but by a difference in the languages in contact. Relexification is a very useful notion in describing sign languages as it provides a useful perspective on sign-supported speech, signed forms of spoken language like Signed English, but also manifestations of language planning, in particular with respect to the lexicon, to which I will turn later.

Observations of GhSL indicate that African varieties of ASL may also differ from North American varieties of ASL at the phonetic level. The articulation of GhSL is notably more lax than standard ASL, particularly in the handshape parameter. As such, GSL shows interesting parallels with Adamorobe Sign Language, a Ghanaian sign language of local origin (Nyst 2007).

In addition to the ASL varieties introduced in West Africa several decades ago by the CMD, there is also continuous input of North American varieties of ASL at present in some places in West Africa. Notably the presence of ASL-signing teachers sent out by the American volunteer organization Peace Corps guarantees continuous contact between American and African varieties of ASL.

An interesting question that will remain unanswered here is the extent to which the African varieties of ASL differ from each other. Kamei (2006) speculates that the different varieties of ASL-based sign languages in francophone African countries may turn out to be different enough to be considered distinct languages. However, signers of ASL-based varieties can communicate without problems across national borders, suggesting a – unsurprisingly – considerable amount of lexical overlap. Vocabularies produced for an ASL-based variety in one country may be used in other countries as well, which raises the degree of lexical similarity between these varieties. Notably, the dictionary published by Tamomo (1994) in Benin seems to aim at an international public, as suggested by its title, *Le Langage des Signes du Sourd Africain Francophone*. Indeed, this vocabulary was found to be in use in Mali in 2000.

Clearly, the most influential foreign sign language in West Africa is ASL. Little documentation is available on the use of other sign languages of non-African origin. As noted in section 5.3.4, French Sign Language (LSF) has been used in Mali for some time but is now replaced by an ASL-based sign language. However, contacts with LSF signers remain. According to the Ethnologue: Languages of the World website (www.ethnologue.org), LSF is taught at one school for the deaf in Togo as well, but it is not clear whether this information is up to date. Interestingly, no other sign language is mentioned as in use in this country.

The position of ASL-based sign languages in individual countries and possibly the degree of similarity between these varieties is enforced by the strong international position of ASL in and outside West Africa. As in other places in the world, deaf people in West Africa, especially those who are active in Deaf associations, have active international contacts with each other at the regional, i.e., West African, level. One type of activity leading to international contacts is peddling, that is, going around selling cards with the manual alphabet or pretending to collect contributions for the Association of the Deaf. Peddling has its own dynamics in West Africa and brings together peddlers from diverse nationalities who may travel long distances together. They may pass through several countries, where they are lodged by local deaf people. Although peddling is an activity not judged positively by most deaf people, the contacts with international peddlers also brings news and entertainment from other countries. This facilitates their acceptance by and integration in the local Deaf communities. The exchange between peddlers and the local Deaf communities leads to contact between various ASL-based sign languages and possibly to convergence or to maintenance of existing similarities.

In short, African varieties of ASL are found to differ from North American varieties of ASL in their lexicons, the languages they are in contact with and the reflections thereof (i.e., mouthings, loan translations and initialization) and in

their articulation. Despite these differences, signers of North American ASL tend to immediately recognize these varieties as being ASL-based. To what extent the ASL-based varieties have diverged from each other remains to be determined.

### 5 Local sign languages

When one looks at the sign language situation in West Africa, focusing on language use in the National Associations of the Deaf and in education, it is dominated by foreign sign languages, most notably varieties of ASL.

This raises questions with regard to locally evolved sign languages. Have deaf people formed Deaf communities and consequently sign languages prior to or in the absence of deaf education? How do these local sign languages relate sociolinguistically to the ASL varieties? What are their linguistic features? Based on the available literature, these questions raised above will be discussed in the following three sections respectively.

## 5.1 Social settings

Sign languages have evolved in a variety of social settings in West Africa. At least in some urban areas, the number of deaf people interacting on a regular basis has been large and stable enough to give rise to the evolution of a conventional and expanded sign language. Examples of such urban sign language centers are the relatively large Deaf communities in Bamako, the capital of Mali (see section 5.3.4.1) and Kano, an old Hausa city in Northern Nigeria (Schmaling 2000; see section 5.3.2.1) and probably Mbour, a fishing town in Senegal (Jirou 2000). In other places a heightened incidence of deafness has resulted in the formation of stable signing communities with a conventional and expanded sign language, such as in Adamorobe, Ghana (Nyst 2007; see section 5.3.1.1). In rural areas, the majority of deaf people have no access to deaf education, nor to an urban Deaf community. As a consequence, they are likely to use "homesign" as their main means of communication.

However, the major part of signed communication in West Africa may turn out not to fit in the neatly formulated categories of "full-fledged sign language" and "homesign." In the Western world, these differences between the sign languages of the large national Deaf communities and the sign languages of deaf children not in contact with these Deaf communities are very large and the categories of full-fledged sign language and of homesign are quite straightforward. In West Africa, there seems to be more diversity in the settings in which deaf (and hearing)

people sign. The types of sign languages distinguished in the literature so far do not adequately reflect this diversity. In fact, local sign languages often seem to be used by small groups of deaf signers, who are part of the larger hearing community and who also sign with hearing community members, as e.g., in Tebul Ure in Mali (Blench, personal communication; see section 5.3.4), or in Bura, Eastern Nigeria (see section 5.3.2.2). The influence of hearing signers, considered minor in the case of the sign languages of large Deaf communities in the Western world, is likely to be significant in these smaller African communities. In other places, families with hereditary deafness in several generations may develop a sign language that is so expanded and stable, and used by such a large number of deaf people, that the label homesign no longer seems to be in place, as, e.g., in Nanabin, Ghana (Nyst 2007; see section 6.3.1.1), where a family with three generations of mainly deaf members has developed a stable and extensive family sign language.

The large grey area between the conventional and expanded sign languages of large Deaf communities on the one hand and the functionally more restricted homesign languages on the other has remained virtually unstudied, seemingly because we do not really know what to do with them. They do not represent a kind of "pure" or "native" sign language like the sign languages used by native signers of large Western sign languages, nor do they hypothetically offer answers to the question of how language emerges in the absence of linguistic input, as in the case of homesign in its strict sense. However, the diversity of sign language types and uses found in West Africa presents a complex, but realistic picture of how sign languages emerge and develop naturally, in the absence of artificial sign systems and language planning.

One of the factors that may turn out to be of significant influence in the formation of local sign languages in the gray area, is communication with hearing people. This influence may take at least two forms, in structure and in lexicon that is. First, the number of deaf signers of these sign languages in the gray area is typically limited and the lives of hearing and deaf people are integrated to a relatively large extent. As a result, a strong sense of Deafhood or a distinct Deaf community is generally lacking. Hearing people tend to have a relatively good command of signed communication. However, their signing is likely to be influenced by the structure of their spoken language. Since a strong sense of cultural Deafness is lacking, the deaf varieties of the signed communication are not perceived as being superior or a target for hearing signers. The high proportion of hearing signers, in combination with the equal status of hearing and deaf varieties of signed communication, facilitate the presence of contact-induced features in sign languages in the gray area.

Second, the use of conventional gesture in (West) Africa seems to be relatively extensive. A similar observation is noted in the chapter on sign languages in the Arab-speaking world (Al-Fitiyani and Padden, this volume). Quantitative studies are lacking, but descriptive studies as well as casual observation suggest that hearing people use conventional gestures relatively frequently and that the lexicon of these gestures is quite extensive. Describing the conventional gestures of hearing Mofu-Gudur people in Cameroon (Central Africa), Sorin-Barreteau (1996) has published an impressive collection of drawings of an estimated 1,500 conventional gestures. In a short newspaper article, Cheikh (2007) describes the initiation rites of young men in Mbour, Senegal. He mentions that in addition to learning about the flora, fauna and hunting, they learn "un certain nombre des langages et gestes importants pour eux" (Cheikh 2007:2). Jirou (2000), commenting on the surprising degree of similarity in the lexicons of isolated signers in Senegal finds that hearing people have a considerable command of gestures with abstract meanings, such as 'god,' 'refusal' or 'death.' Speculating, at least two factors can be thought of as motivating the greater use of conventional gestures in West Africa. As for its spoken languages, the area is highly heterogeneous, typically with a lot of contact between the various spoken languages. As a result, multilingualism is the standard, rather than the exception. Possibly, the high degree of multilingualism contributes to the use of (conventional) gestures. One of the environments where language contact is typical is trade. There is a centuries-old tradition of trans-Saharan trade, which survives till today, that brings into contact people from various linguistic backgrounds. Conventional gestures may play a significant role in the trans-Saharan trade (Ramada Alghamis, personal communication, December 2006; Frishberg 1987). The context of trade over long distances across West Africa indeed suggests that the conventional gestures used in it may show a certain degree of consistency throughout this region.

The presence of a relatively extensive lexicon of conventional gestures is likely to influence the formation of sign languages by isolated and less isolated deaf people in West Africa. Homesigners do not start from scratch when creating their language, as part of the lexicon can be acquired, rather than needing to be created. Moreover, the size of the user community is often claimed to influence the formation of a sign language. With a large set of conventional gestures in the wider hearing community, the size of the community sharing (part of) the homesign vocabulary is considerable.

Although local sign languages are found to be used by large Deaf communities as well as by isolated deaf homesigners, the majority of sign languages of West African origin may be used in settings that do not resemble the settings found in

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the Western world. Typically, local sign languages may be used by a small group of deaf signers with regular signed interaction with hearing people, which accounts for the significant influence of spoken language structures. As conventional gestures seem to have a relatively important place in the communication of hearing people, the gestures influence the lexicons of local sign languages as well.

## 5.2 Sign language endangerment

The rapid decrease in linguistic diversity worldwide has alarmed both linguists and non-linguists. Linguists have estimated that each week, one or two languages cease to exist. This implies that out of the estimated 6,000 languages spoken at present, only about 600 may still be spoken in 2061. Large-scale initiatives have been taken to counter this tendency or to at least document and preserve as much of the linguistic heritage of mankind as possible. So far, these initiatives have largely overlooked the diversity in sign languages and threats to their vitality.

In some respects, sign languages are exposed to the same threats as spoken languages. Thus, in West Africa and other parts of the continent, the difference in prestige between sign languages of local and foreign origin diminishes the vitality of local sign languages. At the same time, there are additional threats specific to sign languages. In technologically advanced countries, the decreasing incidence of deafness in combination with the widespread use of a the cochlear implant pose a threat. Across the globe, through the central role played by deaf schools in the formation of many signing communities, language policies in deaf education tend to have a relatively strong impact on sign language usage. Local sign languages are often compared to sign languages imported from abroad and discarded as being inferior. The attitudes toward sign languages of local and foreign origin largely parallel the attitudes toward spoken languages of local and foreign origin in West Africa. Speakers of West African languages may refer to the former colonial (spoken) languages as "languages" and to local languages, including their mother tongue, as "dialects." In the same vein, signers in West Africa tend to perceive ASLbased sign languages as being superior to sign languages of local origin. Asked for an explanation for this evaluation, signers may indicate that the lexicon of the local sign language is insufficient. Also, the iconic nature of some local signs is mentioned as being shameful, such as the sign for WOMAN, whereby the fist touches the chest twice. In places where the foreign sign language is the only sign language used in education, using the local sign language may be perceived as a sign of not having had formal education. Also, communities using a local sign language are often restricted in size. A higher status for foreign sign languages among deaf people (and hearing people in contact with deaf people) motivates educated and non-educated signers to shift to the foreign sign language. In short, foreign sign languages tend to have a higher prestige than local sign languages, threatening the vitality of the latter languages.

Kamei (2006) does not ascribe to the view that local sign languages are endangered due to the introduction of foreign sign languages, notably ASL-based sign languages. Stressing the African character of ASL-based sign languages in francophone countries, Kamei claims that they should not be considered "killer languages," arguing that they were not introduced in their entirety from a foreign country, but rather creolized in the respective African countries. He states (2006:4):

The spread of this sign language was not a process of oppression, but rather, a creative one, constructed by African Deaf educators and communities over a span of many years. Referring to it as "LSFA" and not "ASL" will provide new perspectives for researching this language and its relationship to African Deaf history.

Kamei claims a creole status for ASL-based sign languages in francophone African countries because of (1) the integration of French elements and (2) the integration of local or "natural" signs. It is an interesting perspective to look at the ASL-based sign languages in West Africa as African languages and not imported languages. This perspective seems to be supported and promoted by the Deaf communities in the various countries as reflected by the renaming of most ASL-based sign languages and by the presentation of the ASL-based sign language as the national sign language. Also, Deaf communities may strive to "purify" their national sign language, replacing ASL signs with signs of local origin, as happened in Uganda (Sam Lutalo, personal communication, March 2007). However, as the major part of the lexicon as well as the spoken language elements involved were imported, it is not clear whether the degree of restructuring is sufficient to consider these languages local languages. The ASL-based sign languages urgently need to be researched in order to get a clearer picture of these issues.

The origin of the ASL-based languages, however, is irrelevant with respect to the threat they pose to the vitality of (other) local sign languages. Indeed, the literature on language endangerment in Africa shows that "killer languages" in most cases are not imported from foreign countries but are local languages with a high prestige. In Tanzania, for example, large numbers of smaller languages are endangered because their speakers shift to the national and official language of the country, Swahili, a language that originated along the coast of East Africa (Brenzinger, Heine & Sommer 1991). So, despite Kamei's claim that ASL-based sign languages should be considered African sign languages, their relatively high

status weakens the position and development of sign languages without foreign elements.

Another facet of endangerment specific to sign languages results from the central role of education in the formation of Deaf communities. Sign language development depends on the presence of a Deaf community and Deaf communities often evolve around Deaf schools or receive a considerable impetus from it. Depending on methodological insights, educators and decision-makers in Deaf education may decide to offer various forms of signed communication to their pupils. Deaf children often have limited contacts with the adult Deaf communities. School policies therefore tend to affect the sign language ecology of the larger Deaf community on a relatively short term. As deaf children largely depend on their school environment for their linguistic input, language planning seems to have a much more pervasive effect in the education of deaf children than of hearing children. Ironically, the influence of deaf education in the oralist tradition on the existing sign language situation typically remains limited. In East Africa, oralist schools for the deaf have been established or supported on a larger scale by Catholic missionaries, notably by the White Fathers associated with the institute for the deaf in St. Michielsgestel in the Netherlands. In West Africa, the use of the oralist method has remained limited, probably as a result of the strong influence of Reverend Andrew Foster who propagated Total Communication in the education of deaf children in the region. The lack of academic information about the linguistic status of local sign languages or scientific information about sign languages in general leaves educators and policymakers in the dark about the directions to be taken in the language use in deaf education. The lack of resources in combination with the availability of teaching material in ASL and other foreign sign languages is an important motivation to use foreign sign languages in education (Manteau & Thivilliers-Goyard 2002). The use of Total Communication based on ASL in deaf education in West Africa has had a significant impact on the sign language situation, undermining the position of local sign languages in the region.

Issues of spoken language endangerment equally apply to sign languages. The lower prestige of local sign languages relative to imported sign languages, notably ASL-based sign languages, weakens the position of the former languages. This tendency is independent of whether or not ASL-based sign languages are to be considered foreign sign languages, as Kamei claims (2006). The history of deaf education has given a central place to ASL-based sign languages in West Africa, which hampers the development and emancipation of local sign languages. The lack of resources and linguistic know-how contributes to the marginal position of locally evolved sign languages.

### 5.3 Case studies

Studies on local (West) African sign languages are very rare. At present, only two local sign languages have been described in considerable detail, Hausa Sign Language (Schmaling 2000) and Adamorobe Sign Language (Nyst 2007). For others only very basic information is available. In several places, people involved in deaf education have compiled small vocabularies with local signs (Kafando 1990, in Ouagadougou, Burkina Faso; IDCS, n.d., Guinea-Bissau). In her Master's thesis, Jirou (2000) presents an analysis of the sign language used by a group of deaf fishermen in Mbour, Senegal. The case for most local sign languages however, is that even the basic information of their existence is lacking.

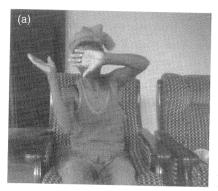
In this section, I will present a summary of the information available for Adamorobe Sign Language and Nanabin Sign Language (both used in Ghana), Magannar Hannu or Hausa Sign Language and Bura Sign Language (both used in Nigeria), and two sign languages from Mali; Langue des Signes Malienne and Tebul Ure Sign Language (Mali). The localities of these languages are indicated on the map in Figure 18.1.

### 5.3.1 Ghana

Ghana was the country where Reverend Andrew Foster established his first school for the deaf in 1957. GhSL is ASL-based but has come to include local signs as well (see Figures 18.2 and 18.3) (GNAD, n.d.). At least two, but likely more, local sign languages are used in the country. Adamorobe Sign Language is used in the village of Adamorobe, Nanabin Sign Language in the village of Nanabin.

5.3.1.1 Adamorobe One exceptional local sign language is Adamorobe Sign Language or AdaSL. AdaSL is used in a small village of about 1,400 inhabitants and has known a high incidence of hereditary deafness for many generations. Deaf and hearing use the locally evolved sign language, which is entirely unrelated to GhSL. Compared to the sign languages studied so far, AdaSL has a number of features that structurally sets it apart from other sign languages. The information here is based on Nyst (2007). Striking features of AdaSL are the absence of entity classifier handshapes in verbs of motion, an unusual system for the expression of size and shape, and language-specific features in the use of iconicity, notably in the types of spatial projections allowed. Some of these language-specific features seem to correlate with the relatively large number of hearing AdaSL signers.

Classifier constructions expressing motion and location have been reported for almost all large sign languages studied so far. Whereas handle classifier constructions typically express externally controlled motion, entity classifier constructions typically express internally controlled motion. A striking feature of AdaSL is that classifier handshapes in signs expressing motion are rare in general. AdaSL uses handle classifier constructions in verbs of motion infrequently. Moreover, AdaSL appears not to make use of a system of entity classifiers. Instead, the common way to express motion in AdaSL is by using "directionals," such as FROM, TOWARD, ABRUPT and ENTER. These motion signs (which can be spatially modified) each express a basic motion pattern, e.g., 'move towards a reference point' in the case of TOWARD or 'move into an enclosed space' in the case of ENTER (see Figures 18.6 and 18.7, respectively).



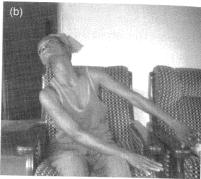


Figure 18.6 TOWARD - (AdaSL).



Figure 18.7 ENTER (AdaSL).

These directionals are not specified with respect to the cause of motion, which may be either internally (intransitive motion) or externally (transitive motion). In other words, FROM may mean 'to go away from location X' or 'to take something or somebody away from location X.' The transitivity of the directional sign or the lack of it can be specified by adding a separate sign. Signs expressing manipulation or manner of motion may precede the directional to specify the cause of the motion. Thus, adding the sign TAKE to a directional generates a transitive reading of the motion pattern expressed by the directional, as in (1). In that example, the directional FROM – neutral with respect to transivity – is preceded by the verbal sign TAKE, which expresses a particular type of manipulation. As a result, the movement expressed by FROM is interpreted as being externally motivated. In the example below, the relevant signs are printed in italic.

# (1) MAN SEARCH FINE MARRY *TAKE FROM*- right-up CHILD-rep TOWARD-left

'A man, looking for a nice (woman), marries her and takes her away, while her children stay.'

However, the sign FROM may also be preceded by a manner sign, showing the neutrality of this directional with respect to the cause of motion, i.e., internal or external. When FROM is preceded by WALK, which expresses a manner of motion, then the series of WALK FROM is interpreted as having no external cause of motion, i.e., as expressing an intransitive motion. The relevant signs refer to the motion of the first person singular.

# (2) WALK FROM SEE PATH-from-left-to-right 'I walked away and then I just saw (the bird) flying away.'

Where most sign languages studied so far typically use classifier predicates to express motion, AdaSL instead uses directionals that have no classifying handshapes, optionally preceded by manner or manipulation signs. This results in series of verbal signs (manner/manipulation sign + directional sign) that closely resemble verb series found in Akan (Niger-Congo, Kwa), the dominant spoken language in Adamorobe.

AdaSL also differs from the sign languages so far described in the expression of size and shape. To show the size and shape of objects, AdaSL may use so-called "measure stick" (MS) signs. This type of sign is used by deaf and hearing people both within Ghana and in neighbouring areas. Rather than outlining the length of an object in space, in these signs the length of an object is indicated on the arm or hand. Thus, the sign MS:ARM, illustrated in Figure 18.8, indicates a long and thin object



Figure 18.8 MS: ARM (AdaSL). Reprinted from Nyst 2007 with the kind permission of the publisher.



Figure 18.9 MS: HAND (AdaSL). Reprinted from Nyst 2007 with the kind permission of the publisher.

of about 70 centimeters. The sign MS:HAND, in Figure 18.9, illustrates an oblong object of about 20 centimeters. Whether the length indicated using this measure-stick technique is to be considered big or small for the object under discussion may be indicated by the mouthing superimposed on the sign. These are the mouthings

normally accompanying the fixed signs for relative size, i.e., BIG, SMALL, TALL and SHORT.

One way in which this size and shape system differs from equivalent systems in other sign languages is that it presents the size and shape of an object through entity depiction (Mandel 1977) and not through depiction of the outline. Thus, the arm or part of it represents the size and shape of the object directly, whereas systems indicating a size and shape in space generally do so by representing the outline of that size and shape. This difference in iconic strategy seems to be part of a wider tendency in the language to use entity depiction rather than outline depiction. Entity depiction was the most common depiction type (39 percent) in a database of about 500 AdaSL signs and tracing the least common (4 percent) (Nyst 2007:38).

AdaSL uses iconicity in a language-specific way in other contexts as well. Thus, it has a strong preference for "real-scale" spatial projections and hence the projection type typically associated with character perspective whereby the signer is part of the projection (McNeill 1992). Observer perspective, employing "reduced-scale" projections are not used in AdaSL. Also, the language appears to have strong restrictions on the use of simultaneous constructions.

AdaSL has evolved in the village of Adamorobe. There is some contact with deaf people in Aburi, the closest nearby town, which seems to have a slightly heightened incidence of deafness as well. To what extent AdaSL is similar to other local sign languages or, more generally, to other forms of gestural communication in Ghana is not clear. About 200 kilometers away from Adamorobe lies the Akan village of Nanabin.

5.3.1.2 Nanabin Sign Language A family with three generations of mainly deaf members lives in this village. The family consists of about twenty-five to thirty people of all ages. The family has developed its own sign language. Some of the deaf people of the second generation, now adults, have attended a school for the deaf. As a consequence, they are fully bilingual in the ASL-based Ghanaian Sign Language as well as in the family sign language. Nanabin Sign Language (NanaSL) is not mutually intelligible with AdaSL. However, comparing NanaSL and AdaSL reveals similarities in articulatory features, the lexicon and lexical strategies, and in the use of space. Like AdaSL, NanaSL has lax handshapes. Some lexical items are identical, like the sign for WATER. To some extent, similarities in lexicon result from similarities in the conventional gestures for these concepts in Akan culture. In other cases, the similarity may be driven by the iconic motivation of the sign. Also, similar lexical strategies are employed. Thus, the signs for the months of the year refer to typical activities associated with them, such as the Akan festivals. An interesting

similarity is the preference for character perspective of both NanaSL and AdaSL. Like AdaSL, NanaSL hardly seems to make any use of observer perspective.

# 5.3.2 Nigeria

5.3.2.1 Magannar Hannu Magannar Hannu or Hausa Sign Language (HSL) is used in Kano State, Northern Nigeria. Schmaling (2000) gives a detailed description of the sociolinguistic setting, phonology, morphology and lexicon of Maganar Hannu. In addition to deaf people, many hearing people have a basic competence in Maganar Hannu as well, which they learn informally from deaf people. Maganar Hannu is not the only sign language used in Kano State. In the school for the deaf, Nigerian Sign Language is used. This language is based on ASL but includes Maganar Hannu signs. Through bilingualism in Nigerian Sign Language and Maganar Hannu, ASL signs have been adopted in the latter language.

Schmaling (2000) proposes a set of thirty-five distinctive handshapes and describes their occurrence. In her description of the morphology of Maganar Hannu, Schmaling does not focus on the extent to which it patterns like the sign languages studied so far. The general impression, however, is that the degree of language-specific features is moderate, as compared to the sign languages studied so far, but this may be a result of the perspective of the study. One of the few remarks Schmaling makes concerns the use of the 1-handshape (index extended) as a person-classifier; this appears not to be a very productive classifier in HSL. However, no information is given on the productivity of other (entity) classifiers.

With regard to the lexicon, Schmaling devotes ample attention to the historical and cultural context and resulting links between form and meaning. She shows how the lexicon iconically reflects sociocultural habits and knowledge. Signs for food and drink, crafts and occupations, and religious concepts reflect visual or motoric elements associated with these concepts. As in many sign languages, name signs for prominent public people depict personal traits. Signs for places often iconically refer to events associated with these locations. Signs denoting ethnic groups refer to features of these groups typically associated with these groups, such as ethnic scarifications, hairdo and clothing. The signs used for traditional titles, politicians and ethnic groups depict prominent physical features or other characteristics associated with the referent(s). Thus, the sign for FULANI MAN is the same as the sign for whipping or flogging, which refers to the Fulani initiation rites which involve flogging. Schmaling discusses some iconic signs as being universal because they are similar to those in other sign languages, e.g., TREE, SEE, BICYCLE and CAR. Other signs are described as being iconic, but not universal, such as the signs for FATHER/MALE, MOTHER/FEMALE and WATER. This distinction may not be as clear-cut, however. The sign BICYCLE in Maganar Hannu is a

symmetrical sign with two alternating, circling fists in the neutral signing space in front of the body. In AdaSL, the signs for BICYCLE is similar, but has two B-handshapes (i.e., flat hands with all fingers extended and adducted). The sign for TREE in Maganar Hannu is like the ASL sign for TREE and consists of the elbow of the dominant hand, which has a 5-handshape with all fingers extended, placed on the back of the non-dominant hand. The AdaSL sign for TREE is a symmetrical sign with two 5-handshapes moving upward in a rotating, alternating movement. Thus, the Maganar Hannu signs for these concepts are not universal. Conversely, the signs for FATHER, MOTHER and WATER appear to be widely used in West Africa, by both deaf and hearing people.

Schmaling also discusses variation in the lexicon as a function of region, educational background, pattern of deafness and age. Variation in the lexicon pertains to lexical signs and the influence of spoken Hausa in the form of loan translations and mouthings.

At present, Maganar Hannu is one of the two local West African sign languages that have been studied to some extent, AdaSL being the other. Compared to the sign languages studied so far, AdaSL shows a number of language-specific features. From Schmaling's description, Maganar Hannu seems to pattern more like the sign languages described so far within the field of sign linguistics.

Maganar Hannu is in intensive contact with ASL at the school for the deaf in Kano, the Tudun Maliki school (Schmaling 2001). In this school, the teachers communicate with the pupils using Total Communicating. At the Tudun Maliki school, this involves using elements from Maganar Hannu, ASL, English and Hausa. Thus, signs from both ASL and Maganar Hannu have become part of the lexicon of these pupils. ASL signs are used not only for concepts for which no Maganar Hannu sign is available but also for basic vocabulary items like WORK, HOME and HELP. Some ASL signs have undergone modifications in form or meaning. For example, the sign OFFICE in standard ASL is made with an O-handshape (all fingers curved and forming a circle), but the Tudun Maliki form has an F-handshape (the index and thumb forming a circle, while the remaining fingers are extended). An example of semantic modification is the semantic extension of the sign RED to mean 'blood' in addition to 'red.' Coining new signs through initialization, using ASL letters, is also done at Tudun Maliki. Thus, signs for towns and places have been created, even though Maganar Hannu signs for these places already existed. Evaluating the threat the use of ASL at Tudun Maliki poses to the continued use of Maganar Hannu, Schamling (2001) finds that the use of ASL is mainly limited to the time deaf people spend at school. Once they finish school, they enter into the adult Deaf community, where the use of Maganar Hannu is the standard to which they



Figure 18.10 The AdaSL sign EUROPEAN. Reprinted from Nyst 2007 with the kind permission of the publisher.

quickly adapt. Schmaling thus concludes that ASL does not endanger the vitality of Maganar Hannu.

5.3.2.2 Bura Sign Language In the Bura-speaking area of Eastern Nigeria lives a small group of signing people, some of whom are deaf. Preliminary observations of their sign language indicate that it bears some resemblance to Hausa Sign Language, notably in some of its lexical strategies and that it bears resemblance to other local sign languages in that it has a very lax articulation and a large signing space. As for its lexicon, Bura Sign Language has signs for all bank notes. As in HSL, these signs iconically refer to the person depicted on the bank note. As in other local West African sign languages, signs for ethnic groups refer to physical properties typically associated with these groups. Thus the sign for MARGHI refers to the double tribal marks on each cheek. The sign for EUROPEAN consists of a "smooth hand over hair (suggesting combing), then stroke inside of right fingers against inside of left forearm (suggesting 'skin')" (Blench & Warren 2005:3). Interestingly, the first part of the sign for EUROPEAN is identical to the AdaSL sign for it, which is illustrated in Figure 18.10.

## 5.3.3 Senegal

5.3.3.1 Mbour Sign Language Jirou (2000) has investigated the sign language used by a group of deaf people in the fishing town of Mbour in Senegal. The analysis of Jirou takes a developmental perspective as developed by Cuxac (2000). Jirou focuses on the iconic strategies and the spatial projections used in this language. She finds that the projection of an event space on a limited plane in front of the signer, using observer perspective, is "rare or simplified" (Jirou 2000:5).

She did not witness the use of entity classifiers in observer perspective. In contrast, the use of referent projections (the enacting of a character) is used extensively. In this respect, Mbour Sign Language resembles AdaSL and Nanabin Sign Languages as discussed in sections 5.3.1.1 and 5.3.1.2 respectively.

#### 5.3.4 *Mali*

5.3.4.1 Langue des Signes Malienne Langue des Signes Malienne (LaSiMa) is used by the Deaf community in Bamako, Mali. The number of users is unknown. Like other local West African sign languages, it has arisen outside of a school context, as a result of regular interaction between deaf people in the streets of Bamako. As late as 1993, the first school for the deaf was established in Bamako. This school initially used Malian Sign Language, then switched to Langue de Signes Française and then to ASL at the end of the nineties. The second school for the deaf was established around 1995 by a Canadian linguist, Dominique Pinsonneault, who also published a vocabulary of about 570 LaSiMa signs (Pinsonneault 1999). The second school used the local sign language as the medium of instruction. The difference in the language of instruction prevented full cooperation between the schools. Around 2001, it was decided by the Ministry of Education that both schools should use a Total Communication approach based on ASL and elements of spoken and written French. To this end, the schools use a dictionary that was developed for this variety by Tamomo (1994).

A comparison of the lexical items in the dictionaries of Pinsonneault (1999) and Tamomo (1994) shows the embeddedness of LaSiMa in the Malian culture in contrast with the francophone African variety of ASL. For example, the sign for TOMATO in the former dictionary (see Figure 18.11) iconically reflects the



Figure 18.11 TOMATO in LaSiMa. Reprinted from Pinsonneault 1999 with the kind permission of the publisher.



Figure 18.12 TOMATO in francophone African ASL. Reprinted from Tamamo 1994 with the kind permission of the publisher.

processing of the tomato in the Malian kitchen, i.e., squeezing it by hand. The sign in the latter dictionary is initialized and has the ASL T-handshape as illustrated in Figure 18.12.

The decision to use ASL and French in deaf education may negatively impact the usage of LaSiMa. Deaf schools are a crucial factor in the transmission of a sign language. Although LaSiMa has arisen outside of an educational context, present and future deaf children in Bamako will grow up using an ASL-based variety Adult deaf signers too are eager to learn and use ASL and are often bilingual. Having virtually no child users and a lower status compared to ASL, it is likely that ASL will gradually replace LaSiMa in the Deaf community of Bamako. At present, it is not clear to what extent LaSiMa is used by Deaf communities outside of Bamako. It is more than likely that groups of LaSiMa signers are found in other parts of Mali. Indeed, Roger Blench (personal communication) has encountered a group of deaf and hearing signers in Tebul Ure, a village in the Dogon region of Mali and filmed their signing. His video recordings of this sign language again show features found in other local West African sign languages, including lax handshapes, a large signing space and similar signs in the lexicon, among others the signs for WATER, WORK and WOMAN. The degree of similarity of the local sign language of Bamako and Tebul Ure remains to be established.

The question of how local sign languages in Mali relate to each other can be extended for the whole of West Africa. In addition to the accounts of the sign languages above, I have had the chance to incidentally observe and record local signing in Cape Coast in Ghana, in Ouagadougou and Bobo Dioulasso in Burkina Faso and to view recordings of Bura Sign Language and Tebul Ure Sign Language. An exceptional documentary portraying a deaf magician from Ouagadougou communicating in a local sign language is *Adama*, the Fulani magician (Roselinni 1998). The general impression I gain from my own analysis of AdaSL and Langue

des Signes Malienne, the accounts of Hausa Sign Language and Mbour Sign Language, and the casual observation of other local signing in different parts of West Africa, is that there are similarities between local sign across West Africa that set them apart from the imported sign languages in this region as well as from the sign languages studied so far. That is, they have a quite uniform manner of articulation, with relatively lax handshapes and a relatively large signing space. Also they share lexical items, which probably reflects similarities in the conventional gestures used by hearing communities across the region. Thus, the same sign for the verb GO is found in AdaSL, Nanabin Sign Language and Bura Sign Language. The same sign GO is found as a co-verbal gesture with hearing Malians, Ghanaians and Nigerians. Other signs or gestures that are found in several places in West Africa in signers and non-signers include the signs/gestures for 'sweat' (with the meaning 'to work'), 'refuse,' 'woman,' 'man,' 'water' and 'dead.'

Similarities in strategies of word formation are also found, but these do not necessarily differ in the West African local sign languages as compared to other sign languages. Finally, at least some local sign languages appear to have a use of space that is quite different from what has been observed for non-African sign languages, as they display a strong preference for character perspective.

The similarity between the different types of signing and gesturing in parts of West Africa, and especially the similarities in lexicon, may point at the existence of a regional gesture system. This supports Frishberg (1987), who suggests that AdaSL may be related to the "gestural trade jargon used in the markets throughout West Africa." Although the existence of such a gestural trade language has been observed by Alghamis (personal communication), a linguist from Niger, studies confirming its use are not available at present.

In short, there seem to be particular similarities that are typical of local sign languages in West Africa at the levels of phonetics/phonology, the lexicon and the use of space. More research is needed to clarify the relation between the different sign languages found in West Africa, as well as their relationship to the hearing gestures they are in contact with.

### 6 Summary

Foreign sign language, most notably varieties of ASL, dominate in deaf education and Deaf associations in West Africa. This is the direct result of the immense effort made by Reverend Andrew Foster in the field of deaf education in West and Central Africa between 1957 and 1987. In addition to an ASL-based sign language, most countries in West Africa also have local sign languages that are used in less formal contexts. Both the foreign and the local sign languages in West Africa are heavily under-studied.

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The relative status of foreign and local sign languages parallels values attached to spoken languages of former colonial origin and of local origin, respectively. The relatively high status of foreign sign languages threatens the continued use of local sign languages, for example, in the case of HSL (Schmaling 2000) and Langue des Signes Malienne.

Descriptions and observations of local sign languages are scarce but show a certain amount of similarity. The similarities found pertain to phonetics/phonology, the lexicon and the use of space. Thus, most local sign languages seem to have relatively lax handshapes and a relatively large signing space. Also, at least some sign languages show a preference for character perspective. Similarities in the lexicon are likely to be due to similarities in the "lexicon" of conventional gestures of the surrounding hearing communities, possibly as a result of trade and/or extensive interaction in multilingual settings. However, these observations are all preliminary as very little information is available for a small number of sign languages, and for most sign languages no information is available at all at present. A large-scale survey is needed to inventory the signing communities and their languages in West Africa.

# Sign languages in the Arab world

Kinda Al-Fityani and Carol Padden

### Introduction

Every evening, the Al Jazeera satellite channel features a one-hour, comprehensive newscast of world events. Superimposed in the corner of the television screen is a box containing a sign language interpreter who translates the spoken Arabic of the newscaster. The interpreter is one of a team of Jordanian Sign Language (LIU)<sup>1</sup> interpreters who regularly interpret the newscast. However, the sign language they use is not strictly LIU. Heavily influenced by LIU, it is a newly devised sign language which uses vocabulary drawn from different Arab sign languages, including Egyptian Sign Language and Saudi Sign Language. The vocabulary was compiled in a dictionary by the Council of Arab Ministers of Social Affairs (CAMSA), a committee within the League of Arab States (LAS).

The effort by CAMSA to encourage a standard pan-Arab Sign Language (ArSL) has been met with wide resistance, in large part because deaf viewers say they cannot understand the language. In this paper, we describe the geography of sign languages in Arab countries. As we explain, there already exists a number of sign languages used by Arab deaf communities. Some are designated as nation-state sign languages and are used in the instruction of deaf students in their educational systems. The adoption of ArSL by Arab countries potentially threatens the future of these nation-state sign languages as well as an unknown number of smaller sign languages existing within this region. If ArSL were to substitute for any of these sign languages, it could potentially take on a colonial face and delimit the expression of the community's identity.

CAMSA's rationalization for the creation of the new ArSL is "to meet the needs of integration of deaf persons into society" (Council of Arab Ministers 2004). One way to achieve that goal according to CAMSA is to provide deaf people in the Arab world with a comparable language situation that exists for hearing people, namely a common language.

More than 200 million inhabitants of twenty-two countries across the Middle East and North Africa speak Arabic.<sup>2</sup> However, should a Yemeni and a Tunisian