Etude d'une langue des signes émergente de Côte d'Ivoire: l'exemple de la Langue des Signes de Bouakako (LaSiBo)

[Study of an emerging sign language in Ivory Coast: the example of Bouakako Sign Language (LaSiBo)

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Bouakako Sign Language (also known as LaSiBo) is used in the Dida village of Bouakako in Ivory Coast (Côte d'Ivoire). In this village of about 1,300 inhabitants, nine are deaf – eight of them with some genetic co-affiliation. The genealogical tree produced in this study shows that hearing impairment is hereditary. The language developed in this context can also be considered a family sign language. The deaf population does not form a Deaf community in the sense that there are no activities or events reserved to hearing-impaired community members. In Bouakako, deaf people seem well integrated within the rest of the community. However, closer examination reveals that their integration is only superficial. In particular, it is very difficult for hearing-impaired males to find a spouse, and the spouses of hearing-impaired females are subject to teasing and mocking.

The aim of this thesis was to describe some aspects of this sign language that emerged in a small, predominantly hearing community, where most people can sign, as is the case with other emerging sign languages. The LaSiBo data are organized according to the role played in its formation by four parameters: the small size of the language community, the novelty of the language, the influence of spoken language, and the absence of education. We compared two sign languages that have both developed in two small communities relatively close to each other

geographically and offering comparable linguistic and cultural contexts, but where one of the languages (Adamorobe Sign Language (AdaSL), Nyst 2007) is older than the other (LaSiBo). AdaSL is probably more than 200 years old, and Adamorobe is therefore the only known village with a sign language that is no longer 'emerging'. Comparing LaSiBo and AdaSL thus offers a unique opportunity to measure the impact of age upon the structure of emerging sign languages.

Four lexical domains have been studied. These are kin terms, color terms, the numeral and monetary system, and the expression of time, largely because these domains have been described for AdaSL, but also because the knowledge of lexical terms is an important aspect of the acquisition of a new language.

The analysis of the formal characteristics of LaSiBo in Chapter 3 revealed a large number of phonetic handshapes, contrary to what had been described for other emerging sign languages. In addition, several places and channels of articulation are available to express a sign - for instance the arm, the head, the foot, or even a movement from the entire body. When expressing a sign, the handshape follows articulatory constraints. The symmetry condition displays a preference for using hands with the same shapes and the same movement. Furthermore, even in the dominance condition, in most cases the weak hand adopts the same shape as the dominant hand. If not, the weak hand uses the unmarked forms described for sign languages in general. A few minimal pairs have been observed in LaSiBo, and a remarkable one is the distinction between two signs that can be realized uniquely via facial expression, with or without a contribution of the hand. A detailed comparative study has been carried out between LaSiBo and AdaSL, for which quantitative data are available. For each of these languages, we considered the space of sign realization, the use of articulators other than the hands, the place of articulation, and unmarked handshapes. In both languages, the space where signs are realized is relatively large. In addition, other articulators are found, such as the head or the feet (FOOTBALL, WALK, SEWING MACHINE in LaSiBo), as well as the arm (BOTTLE, FUNERALS, DANCE in AdaSL, BOTTLE, BABY in LaSiBo). The proliferation of places of articulation is a shared characteristic of both LaSiBo and AdaSL. In both languages, some signs are realized below the waist, for instance URINATE in AdaSL and DRAIN in LaSiBo, realized on the legs and buttocks, respectively. As indicated above, in the absence of a detailed phonological study, it is difficult to draw conclusions from the phonetic forms alone.

The lexical corpus displays a lot of variation in the way each speaker realizes each concept. This level of variation can be explained given the social proximity of signers, resulting in a great deal of shared information. LaSiBo signers do not appear to group into subsets of signers. That is, some signers share identical signs although they do not belong to the same family or friendship network – contrary to Al-Sayyid Bedouin Sign Language (ABSL), where standardization processes have been reported within family groups.

Observations on the properties of LaSiBo kin terminology presented in Chapter 4 can be grouped as follows. Firstly, there exists a compositional process, for instance where the signs MAN/WOMAN^GIVE-BIRTH mean 'father' and 'mother', respectively (see Figure 1 for the sign of 'mother').



Figure 1. MOTHER (WOMAN^GIVE-BIRTH)

The meaning of these compounds projects exclusively to the kinship domain. Secondly, there are non-compositional signs - which are actually more frequent than the compounds. Non-compositional signs are polysemous and may denote concepts that do not pertain to the kinship domain. This is the case for instance of MAN/WOMAN and SAME, which can mean 'male/female human being' and 'friend', but in the kinship domain mean 'father', 'mother', and 'brother'. Finally, among non-compositional forms, some are primarily devoted to kinship, for instance the signs GIVE-BIRTH, TALL/SHORT for 'child' as in offspring, and first/last born – while others are not. The number of signs used with respect to kinship is limited, and there appears to be no need to create more given that community members know each other and can easily refer to each other using personal names or pointing gestures. The main conclusion of the comparison between the LaSiBo and AdaSL data is that both languages recruit macro-functionality to describe kinship. There are, however, a few differences. Indeed, AdaSL has two signs that can only be interpreted as kin terms. These are YOUNGER SIBLING, which specifies the relative age of children born from the same parents (Nyst 2007: 100), as well as a variation with the eroded hand configuration of the sign woman which then specifically means 'mother'. In addition, the hand configuration for the signs 'offspring' and 'child' is evocative of a human head. Contrary to AdaSL, in LaSiBo all the signs are multifunctional, and therefore not stable. In this language, kin terms are obtained by means of composition strategies, for instance MAN^GIVE-BIRTH for 'father' and WOMAN^GIVE-BIRTH for 'mother'.

Colors are dealt with in Chapter 5, which shows that they are expressed in different ways depending on the type of data. In an elicitation task where 10 colors were presented, signs such as PAINT (verb), SUNRISE, SUNSET, were used to express 'yellow' or 'green', and 'white' and 'black', respectively. In spontaneous speech, concurring with my personal observation, non-lexicalized strategies have been observed, mainly where a color is pointed at in the signer's immediate environment. However, two lexical signs for colors should be considered. These are RUBBINGpalm and RUBBING-arm, respectively denoting 'white' and 'red'. A notable difference between LaSiBo and AdaSL regarding colors is that the latter has lexicalized terms for five colors. There is some variation across signers with respect to the signs for two colors, 'green' and 'yellow', but the conventionalization of the first three colors is well-attested. By contrast, the LaSiBo language has no fully lexicalized item for any color. Instead, speakers usually rub a surface to refer to the corresponding color. Two colors seem to be on their way to conventionalization via this strategy, namely 'white' and 'red', realized respectively by RUBBING-palm (Figure 2) and RUBBING-arm (Figure 3).



Figure 2.

RUBBING-palm for 'white'



Figure 3.

RUBBING-arm for 'red'

These differences may reflect the age of the languages, given that time is a factor in the development of a language. Time could have played a role in the phase of conventionalization, with the higher time-depth of AdaSL offering enough time for speakers to progress along stages and finally afford signs to express colors.

Chapter 6 studies the numeral and monetary system. The study revealed some variation in the expression of numbers from 'one' to 'five', but also in the numbers 'ten' and 'twenty'. We note however that from 'twenty' onwards, numbers can be specified by combining the hands and the feet. As for the monetary system, there exists a macro-functionality in signs that designate amounts in coins, contrary to amounts in notes, which are indicated by corresponding signs. The numeral system is very similar in LaSiBo and AdaSL with respect to variation between numbers, the use of hands and feet for numbers above 'twenty', and the absence of large numbers. Differences have been observed with respect to the monetary system. While AdaSL has lexical signs for specific amounts, LaSiBo uses a strategy consisting in the sign NOTE, which is the sign for 1,000 CFA, to which the adequate number is added. As has been noted in the domain of time, the reference to a former currency, namely *Kotoku*, confirms the older age of AdaSL.

Chapter 7 deals with time, where LaSiBo offers a range of strategies. First, there are references to the sky. The relative shape of the moon sketched against the sky allows to refer to the month. In addition, various times of the day are obtained by showing the position of the sun. For instance, the hand pointed above the head to the sky means 'midday', which is the time when the sun is at its highest. Apart from two days that are represented by lexical signs, other days are designated by means of a numeral strategy with 'Sunday' as a starting point. One of the particularities of LaSiBo is the distribution of time over two axes, present and non-present, realized by an identical sign (see Figure 4).



Figure 4. Sign for PAST and FUTURE

The expression of time is one of the domains in which LaSiBo and Dida share several properties. We can cite numerals for the days of the week, and the use of the term 'day of prayer' for 'Sunday', which is also used as a generic term of 'week'. Unlike

AdaSL, the LaSiBo language uses numeral strategies to encode the days of the week, but also the months of the year. In addition, the older age of AdaSL relative to LaSiBo is evident in the signs for temporal notions that relate to former practices.

Chapter 8 discusses and summarizes the comparisons between LaSiBo and AdaSL. Overall, similarities are observed between the two languages in all of the chapters. The widespread use of macro-functionalities plays an important role in AdaSL as well as in LaSiBo, since both languages seem to have more signs that relate to several concepts than well-established sign languages.

The description of LaSiBo in comparison with AdaSL, two sign languages that have evolved in identical socio-cultural environments, but with an age difference, has allowed to refine our initial hypothesis. We postulated that the reasons for the limited number of signs in emerging sign languages may result from the following factors: a high level of macro-functionality, the use of morphological paradigms at the level of (morphologically independent) lexical items, the relatively high level of variation across signers, and the influence of gestures encountered in their cultural environments. These variables were tested across the eight chapters of this thesis. From macro-functionality to variation, via the absence of lexicalization or the lack of standardization, comparable phenomena are also observed in other emerging sign languages. Washabaugh (1986) has observed that in Providence Island Sign Language (PISL), only two signs have a conventional realization out of 63 signs studied with five signers. The case of ABSL, which we describe at length, is telling. We believe that indeed, language age is an important factor that should be taken into account to analyse how structures such as the lexicon of the language are being created. This is at least what was observed when comparing LaSiBo and AdaSL across the semantic domains studied here. The comparison demonstrates that conventionalization precedes lexical proliferation. In other words, with time, the signers in a given language will be able to pass stages and eventually agree upon a sign that defines a specific concept. This is what has happened for AdaSL, which is 200 years old and has lexicalized signs for a number of concepts where LaSiBo, which is about 48 years old, relies on various other strategies to encode the same concepts.

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