Documenting an Endangered Sign Language: Constructing a Corpus of Langue des Signes Malienne (CLaSiMa)

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Abstract

Langue des Signes Malienne (LaSiMa) is the native language of non-educated adult, mostly male Deaf signers in Bamako, Mali. It is currently endangered as the Deaf community in Bamako shifts to American Sign Language. The *Projet LaSiMa* aims at documenting and describing this language. One of the aims is to construct a corpus of LaSiMa discourse. This paper describes the methodology used so far to collect data. Methods developed for collecting data on Western sign languages appear to require adjustments at various points. Thus, filming signers in an unknown setting appears to hamper spontaneous language production with some signers. Also, some of the materials used in other sign language research appear to be too culture-specific. Criteria used to select signers need adjustment as well. The concept of *native signer* is less straightforward in the case of LaSiMa, due to its endangered status, the multilingual setting among hearing people in Bamako, and the influence of home signers. Methods for data annotation appear to need adjustment to the LaSiMa context as well.

1. Introduction

This paper discusses the construction of a discourse corpus of Langue des Signes Malienne (LaSiMa). In §2, I present this language, including its spontaneous evolution outside of the context of Deaf education, the influence of culture on gender differences, and lastly its endangered status. In §3, the Projet LaSiMa is presented, which aims at the documentation and description of LaSiMa. One of the aims of the project is the construction of the Corpus of Langue des Signes Malienne, CLaSiMa. In §4, the aims and methodology of the corpus project are presented. Most of the sign language corpora having been or being constructed concern (often Western) sign languages that have evolved in the context of Deaf education. The particular setting of LaSiMa creates circumstances that do not allow the direct transfer of methodologies developed for earlier sign language corpora projects. In §5, I discuss the particular features of the social context of LaSiMa that required the adjustment of methodologies used in corpus projects of other sign languages. These adjustments pertain to the gendered use of LaSiMa, cultural specificity of stimuli, lack of literate Deaf LaSiMa signers and the endangered status of the LaSiMa.

2. Langue des Signes Malienne

Langue des Signes Malienne (LaSiMa) is used by the adult Deaf community in Bamako, Mali. The exact number of users is unknown. However, given the UNICEF (1985) estimate of 0,5% for the incidence of moderate-severe hearing loss in developing countries, about 5000 Deaf people may be found to live in Bamako. Research is needed to establish to what extent LaSiMa is used outside of Bamako.

Unlike most sign languages studied so far, LaSiMa has arisen outside of a school context, as a result of regular interaction between Deaf people in the streets of Bamako. Particularly the Malian *grins*; meeting places where men gather in the afternoon to chat and drink tea seem to be the cradle of this language. These tea meetings usually take place outside, in front of the building where one or more Deaf people work. Women rarely participate on a regular basis in these tea meetings and tend to spend most of the day in the more private sphere of a family compound. As such, men seem to have had a predominant role in the development of LaSiMa (cf. Pinsonneault, 1999).

As late as 1994, the first school for the Deaf was established in Bamako. This school initially used Langue de Signes Française, but switched to ASL at the end of the nineties. Soon after that, the second school for the deaf was established by a Canadian linguist, Dominique Pinsonneault, who also published a vocabulary of about 570 LaSiMa signs (Pinsonneault, 1999). The second school used LaSiMa as the medium of instruction. The difference in the language of instruction was deemed as impeding cooperation between the schools and in 2001 the second school replaced LaSiMa by a variety of ASL that is also used in other Francophone countries in Africa (Tamomo, 1994).

The decision to use ASL negatively impacts the usage of LaSiMa. World-wide an estimated 95% of deaf children are born to hearing, non-signing parents so that 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 grow up using ASL. Within the Deaf community, LaSiMa has a low status and is considered the language of the uneducated and illiterate. Several Deaf adults complain about being put under pressure to shift to ASL; they are urged to drop their LaSiMa style name signs (often depicting personal characteristics) and to take on new initialized, ASL-style name signs. LaSiMa signers are being mocked because of their signing. As a result, adult Deaf, native LaSiMa signers too are eager to learn and use ASL and most of them use a mix of LaSiMa and ASL at present. Thus, the Deaf community in Bamako is shifting to a variety of ASL at a considerable speed. Having virtually no child users and a lower status compared to ASL, LaSiMa should be considered a seriously endangered language (Cf. Wurm, 1998).

In view of its "natural" emergence outside of Deaf education, its endangered position, together with the lack of knowledge on African sign languages in general, LaSiMa needs to be documented and described before this is no longer possible. To this end, the Projet LaSiMa has been initiated.

3.   Projet LaSiMa

The Projet LaSiMa aims at the documentation and description of LaSiMa as used in Bamako. In addition the project hopes that the research activities will lead to an increased interest for LaSiMa within the Malian Deaf community as well as in the wider hearing Malian society.

The main results we hope to produce are

- a corpus of LaSiMa discourse, using the ELAN software developed at the Max Planck Institute for Psycholinguistics, Nijmegen
- a lexical database of LaSiMa, using the LEXUS software, also developed at the Max Planck Institute for Psycholinguistics, Nijmegen
- articles on selected features of LaSiMa

4.   The Corpus of LaSiMa

Thus, the aim is to collect diverse types of texts, i.e. spontaneous monologues and conversations. These texts should include different registers, such as informal and formal discourse, instructive discourse, joking stories, etcetera. Also, the topics of the discourse should be diverse to some extent including personal narratives, views on deafness and the sign language situation in Bamako, professional skills, etcetera. In addition to spontaneous discourse, data elicited with the aid of stimuli material should be part of the corpus, to facilitate cross-signer and cross-linguistic comparisons.

Not only the discourse types are to display a balanced variety, the signers to be filmed should show a representative variety with respect to age, gender, education, hearing status, age of onset of language acquisition and degree of multilingualism.

The recordings should be of good quality, both technically and with respect to its data. The data will be stored in several archives, among which at least one that is accessible through internet. We hope the CLaSiMa will be useful for sign linguists wanting to study LaSiMa, for other academics such as ethnologists and historians wanting to study the topics discussed in the discourse of the corpus, for professionals wanting to develop materials in LaSiMa and last but not least for the Deaf community who may want to use the corpus for several purposes.

4.1   Data collection

The current corpus project is building on earlier work done in the construction of signed language corpora. This work mostly entails national sign languages, such as Sign Language of the Netherlands (Crasborn & Zwitserlood, 2007), Australian Sign Language (Johnston & Schembri, 2005) and Irish Sign Language (Leeson & Saeed, 2007). One of the advantages of sharing the approaches used in other sign language corpora is that it is likely to facilitate the comparative analysis of the data across corpora. The Dutch and the Australian corpora both have used a standard format to ensure a representative balance in discourse type and signers. Thus, a preset number of signers in a preset number of locations were asked to participate in a data collection session with a more or less fixed program of linguistic tasks. In the case of the Dutch corpus, pairs of signers were invited to a filming location where they discuss statements and responds to tasks involving stimuli that have been used in research on other sign languages as well.

As the construction of a corpus of an endangered sign language of a Deaf community with no formal education in a non-Western culture brings about specific circumstances, that may significantly differ from circumstances in the corpus work done so far on national sign languages, I will discuss in some detail the approach taken so far in the building of the LaSiMa corpus.

Data collection was initiated during my visit to Bamako from November 2007 till January 2008. Prerequisite for the data collection was the formation of a team of Deaf signers of LaSiMa who would lead the interviews. Identifying talented co-workers was facilitated by the linguistic research done on LaSiMa before by Dominique Pinsonneault. As a result of her

research, there were a handful of Deaf signers with some experience in participating in linguistic research. However, most of them were now predominantly using ASL or a mix of LaSiMa and ASL. Only one relatively younger signer (in his thirties), Siaka Keita, was found to be predominantly using LaSiMa, having made the decision not to give in to the pressure put on him to stop using LaSiMa and instead switch to the use of ASL. A second co-worker was found in the person of Moustapha Magassouba, who became deaf around the age of seven. He developed a home sign language until the age of fifteen, when he joined the Deaf school where LaSiMa was used. He is now bilingual in ASL and LaSiMa. Despite my efforts, I have not been able to find a female signer with a good command of LaSiMa and the time/possibility to join the project. Being Dutch and hearing myself, the first step towards any research activity was Siaka and Moustapha teaching me to communicate at a basic level in LaSiMa. During these LaSiMa classes, we managed to establish common ground with respect to the aims and methods of the project.

Initially, an approach was designed for the data collection of the LaSiMa corpus that was more or less similar to the approaches taken in the corpus projects for the sign languages of the Netherlands and Australia. That is, we formed a small studio outside of the building where I was staying using mats to provide an even background and to prevent people passing by from entering in the recordings. Our idea was that Moustapha would be filming, while Siaka would be interviewing two signers. Due to the advanced shift to ASL in the Bamako Deaf community, one of our main concerns was to find signers who would still be highly proficient in LaSiMa, be they monolingual or bilingual in ASL in addition to LaSiMa. As Siaka is renowned for his LaSiMa skills and his monolingualism in this language, we assumed that his role as an interviewer would motivate signers to use LaSiMa rather than ASL.

The standard format I had designed for the first try-out sessions included retelling the Canary row cartoon fragments used in earlier sign language and gesture research and free conversation on several topics including the onset of deafness, the attitude of the family and marriage. Interestingly, Siaka and Moustapha thought that the signers we wanted to film would not be very interested in talking about the sign language situation in Bamako.

However, this approach was challenged in several ways. As in earlier research in West Africa with signers without formal education (Nyst, 2007), monolingual signers appeared to be uncomfortable

retelling the canary row cartoon fragments shown to them. The "studio" set up of the recording sessions appeared to hamper monolingual signers in their spontaneous language production to such an extent that it was deemed favorable to displace the recording to the place where LaSiMa is naturally used: the *grins*, or tea groups of Deaf adults (see §2). We decided that interviews should be held in or close to the *grins*, in my absence. To this end, Moustapha and Siaka were trained in filming techniques. The interviews however were mostly held by Moustapha, due to the limited availability of Siaka. These interviews concentrate mostly on the topics mentioned above, i.e. the personal experiences of Deafness. In my absence, and in a familiar setting, there was no problem in capturing spontaneous sign production.

Obviously, this approach has advantages as well as disadvantages. The circumstances in terms of light and camera location can be manipulated less easily in the *grins*. Also, the fact that filming was a newly acquired skill for the filmers has influenced the recordings. This all led to lesser quality in the recorded images than originally aimed for. These disadvantages were counterbalanced by the advantages mentioned of more natural data. Moreover, the central role of Moustapha and Siaka is crucial for embedding the project in the community.

Issues requiring a modification of the initial approach for data collection included the age and gender balance, the "nativeness" of signers as well as the cultural appropriateness of the material and the tasks, and the spontaneity of the signers.

4.2 Variation in signers and in language use

Sign language researchers working on national sign languages of countries with Deaf education are faced with the struggle to distinguish whether the sign language data they collected is on the right side of the continuum between the "native" end and the speech-supporting end. Although LaSiMa has emerged outside the context of Deaf education, a continuum of LaSiMa varieties ranging from little to more influence of Bambara, the dominant spoken language in Bamako is found for this language as well. Interestingly, young ASL signers in Bamako assert that they value LaSiMa, because it allows them to communicate with their family. As a consequence, these signers do not consider LaSiMa an endangered language. However, the signing referred to by them is likely to differ greatly in structure, prosody and lexicon size from the LaSiMa variety used among monolingual signers of LaSiMa. In the Deaf community in Bamako, the degree of hearing impairment is not a strict criterion for

membership. There does not seem to be a taboo for Deaf people to speak when they can. Deaf (and hearing) people considered good signers may actually sign and speak at the same time in their communication with other Deaf signers.

In the case of LaSiMa, and probably any sign language endangered by another one, an extra continuum of variation is added; the continuum of varieties more or less influenced by the dominant sign language. In the recordings made so far, almost all signers use ASL signs in their LaSiMa.

One may argue that there is yet a third continuum to be discerned. The majority of deaf Malian children, especially in rural areas, are likely to be isolated from regular interaction with a group of Deaf people. A number of these children –from within and outside of Bamako- will enter the Deaf community at an advanced age, after the critical period for language acquisition. Though prelingually deaf in many cases, these late learners of LaSiMa are likely to enlarge the scope of linguistic variation in the language as well.

Typically, sign language corpora focus on the language production of native signers, whereby the ultimate native signer is defined as being prelingually deaf and born to Deaf parents. In Bamako, the percentage of deaf children born to Deaf parents is likely to be relatively low for several reasons. Marriages between two Deaf persons are a new phenomenon in Bamako and there seem to be no family in Bamako well-known for multigenerational deafness. In short, it is hard to define the profile of the ideal signer who is representative for the "native" variety of LaSiMa. Variation according to the continua outlined above is a characteristic feature of LaSiMa as it is used today. Therefore, I aim to reflect this variation in the documentation project as well.

It was easy to find signers displaying the diverse linguistic backgrounds described above. It was much harder to find signers displaying diversity in age and gender. As in most cases of language endangerment, LaSiMa is mostly used by older people, in this case of 35 years or older. Thus, the rarity of LaSiMa discourse of younger people in the corpus is representative of the user community. More striking is the low number of women we have been able to record so far. Factors contributing to this low number may be the gender of the Deaf interviewers/filmers, as well as a dislike in some women of their image being taken. However, the most important factor seems to be the predominance of male signers in the LaSiMa user community. As described in §2, LaSiMa has evolved in public spaces where deaf people have a chance of meeting and gathering on a regular basis irrespective of the family,

neighborhood, social or ethnic group they belong to. However, many women spend most of their social life inside family compounds, where the chance of meeting another deaf person is small. In view of this pattern, it is likely that the sign language production of elder Deaf women in Bamako will be quite different from the LaSiMa production of elder Deaf men. On the one hand, one would expect that the female signing will tend towards the home sign end, showing structural difference with the signing common among male signers, as well as a smaller size of the lexicon. On the other hand, the female signing is likely to be less influenced by ASL, being more conservative in that respect.

Recordings during the remainder of the project will focus 1) on filming female signers of LaSiMa and 2) on finding ways to record LaSiMa responses to stimuli used in other sign language research to allow cross-linguistic analysis.

4.3 Annotation

So far, twenty hours of discourse have been filmed. The filmed discourse is to be translated in French using ELAN software. A selection of the discourse in the corpus will be glossed. The material will be deposited in a digital archive, where it will be accessible through internet for the academic as well as the Malian Deaf community.

The annotation process has not been started yet. Issues complicating the transcription are the rarity of Deaf LaSiMa signers with a good command of a written language. Educated Deaf signers typically use ASL. Hearing signers with a good command of LaSiMa are rare. The lack of trained hearing interpreters makes the option of providing voice-over translations impossible. The approach that will be taken now is to work with a team of a Deaf signer with a good command of LaSiMa and a second hearing or Deaf signer with a moderate command of LaSiMa, but good writing and typing skills.

5.   Acknowledgements

6.   References

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