Sign language fieldwork

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7 Sign Language Fieldwork

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Chapter Overview

This chapter addresses the understudied area of sign language fieldwork, taking into account issues that may arise in fieldwork on sign languages outside a context of deaf[1] education and in multilingual and endangered settings. It discusses fieldwork for the purpose of description as well as for that of documentation. The chapter describes practical, interpersonal, and ethical issues in the field that pertain to collaboration with research assistants, consultants, and the larger

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community. Then it turns to more technical issues involved in sign language fieldwork. The use of video and computer technology is briefly touched upon, then followed by the topic of data collection for grammatical analysis. In summary, the chapter discusses the collection of lexical data and of metadata, then the processing and analysis of field data.

Introduction

Linguistic fieldwork concerns the collection of linguistic data in their natural environment, that is, outside of the controlled environments of the laboratory or the library (see Bowern, 2008; Majid, 2012). Linguistic fieldwork is often done for the sake of language documentation and/or description. There is a sound body of studies on fieldwork concerned with spoken languages, including handbooks and guides that address practical, social, and methodological issues. Although they address topics related to the languages of hearing speakers, these studies are in many respects highly relevant for sign language fieldwork (e.g., Newman and Ratliff, 2001; Crowley, 2007; Bowern, 2008; Thieberger, 2011).

There is only a limited number of publications specifically addressing the methodology of fieldwork in sign languages. The first one, Stokoe and Kuschel's (1979) *A Field Guide for Sign Language Research*, is a 30-page paper with checklists for the elicitation of lexical items, grammatical structures, and sociolinguistic metadata as well as with a discussion of how to use them. The second publication is Fischer (2009): a book chapter with a discussion of practical, technical, and ethical issues in sign language fieldwork. Finally, in 2012 Zeshan and Vos edited a volume on rural sign languages that discusses various fieldwork-related issues.

Most of the sign languages studied are majority languages used by large deaf communities that evolved around deaf schools, in industrialized regions. Typically, these sign languages have been studied by linguists based in the countries where the respective languages are used. Most of the data collection for these studies has taken place in well-equipped facilities at universities and deaf organizations.

At the same time a small but growing number of linguists have studied sign languages outside of their own country, in situations that are, in a number of respects, radically different from those of the better studied sign languages – for instance in communities that have limited or no access to deaf education and modern technology, register an unusually high incidence of deafness, or assign a markedly different social position to deaf people and sign languages. Since deaf schools and organizations often provide the natural environment for sign languages, the distinction between natural and controlled environments is not always straightforward. However, the focus of this chapter is on fieldwork in undocumented sign languages in the former type of setting.

I will discuss fieldwork issues for descriptive or documentary purposes. I will give an overview of some of the human, practical, and technical challenges one may face when doing sign language fieldwork, highlighting (1) differences from the existing canon of data collection methods for sign language; and (2) differences from fieldwork on undocumented spoken languages.

Literacy, Bilingualism, and Endangerment

Most sign languages studied so far share a striking number of sociolinguistic features; for instance they are used in highly literate societies, where (residential) deaf schools play a central role in the history of the signing community (see Ladd, 2003); and they are the dominant sign language of their country, being used by a signing community that consists mainly of deaf signers. Undocumented sign languages may crucially differ in these respects, with important implications for fieldwork practices.

When sign languages have evolved and continue to be used outside the context of deaf education, deaf signers are likely to be illiterate, especially when literacy does not play a central role in the wider society and both deaf and hearing signers are typically semi-literate at best. Obviously this situation rules out the use of written stimuli in any form, allowing only non-linguistic or monolingual stimuli. A monolingual approach is seen as desirable for sign language research anyway, because of the risk of transfer of features from the written language (Fischer, 2009); but it is often not fully adhered to for practical reasons. A similar risk of transfer of features exists when a contact sign language is used instead of the target sign language. This may be particularly difficult to avoid when a researcher is not fluent at the onset of the research project, which may be quite typical for fieldworkers from outside the signing community. The inaccessibility of writing not only forces a monolingual approach on the data collection method, but affects virtually all aspects of fieldwork, as will become clear later in this chapter.

One of the reasons why sign languages may remain undocumented for a long time is their coexistence with a larger or more prestigious sign language, which often leads to a negative perception of the local sign language and to a subsequent tendency to not overtly identify with its use and/or to shift to the prestigious sign language. An example of this phenomenon occurs in Israel, where Algerian Jewish Sign Language is used next to Israeli Sign Language by deaf Algerian immigrants and their hearing relatives. Due to negative attitudes toward the language, Algerian Jewish Sign Language is used as an in-group language and as a result its use was not noticed by sign linguists for several decades (Lanesman and Meir, 2012). Similar situations are typically found in countries where a high-prestige sign language is being used in deaf schools (often of foreign origin), and local sign languages are (incorrectly) being perceived as inferior, as for example in the case of Konchri Sain in Jamaica (Cumberbatch, 2012). When signers shift from the low-prestige to the high-prestige sign language, the former often becomes endangered (see Nonaka, 2011). Such unbalanced unimodal bilingualism may affect the fieldwork in various ways. The endangered status of sign languages calls for efforts to document representative samples in order to enable analysis and applied uses in the near or more distant future.

In contrast to most sign languages studied so far, undocumented sign languages may have significant proportions of hearing signers. In the case of communities with

a high incidence of hereditary deafness, hearing signers often make up the majority of signers (Nyst, 2012). This situation of balanced bimodal bilingualism exists in tandem with the incidence of hereditary deafness and has important implications for both data collection and analysis.

Descriptive and Documentary Linguistics

For spoken languages, there is a well-established tradition of writing reference grammars that describe the phonology, morphology, and syntax of the language and are optionally accompanied by a word list and samples of text (Ameka, Dench, and Evans, 2006). Such descriptions aim at being data-driven and make use of a repertoire of basic typological notions, which are referred to as "basic linguistic theory" by Dixon (1997).

Writing reference grammars for sign languages is complicated by the shortage of standard methods and tools. First, no convenient phonetic notation system equivalent to the International Phonetic Alphabet (IPA) for spoken languages is available. Second, there is no standard procedure to identify the basic phonological and morphological units of sign languages. Thus there is no standard way to adequately describe the gradient and iconic elements in the lexical and grammatical units or to analyze and describe the phoneme inventory of a given sign language. This makes it hard to describe sign languages in a way that allows for the cross-linguistic comparison that would be necessary for a typology. Recently a collaborative European project has been launched to develop a blueprint for reference grammars of sign languages.[2]

Traditionally, data collection in the field mainly served the purpose of linguistic analysis. More recently the process of data collection has developed into an independent field, in the form of documentary linguistics. Documentary linguistics aims at providing "a comprehensive record of the linguistic practices characteristic of a given speech community ... This ... differs fundamentally from ... language description[, which] aims at the record of a language ... as a system of abstract elements, constructions, and rules" (Himmelmann, 1998: 166).

In view of the endangered state of an increasing number of spoken and signed languages on the one hand and the advance of digital technology on the other, the need was felt to collect representative samples of languages that are accessible to the academic community as well as to the community of users of the language at stake. To this end, data sets need to be representative (e.g., in terms of types of data, but also in terms of language users), accessible (e.g., in terms of annotation, but also practically), and sustainable over time (e.g., in the type of software or tools used). In addition, the involvement of the language community plays a central role in documentary linguistics. Thus ethical issues such as ownership of and access to the language data, reciprocity between the researcher(s) and the community, and language maintenance and/or revitalization are discussed extensively. Language documentation projects may result in representative multimedia corpora (e.g., of discourse, or of stories), lexical databases, and grammatical descriptions. These corpora may also include the documentation of language-related phenomena such as ceremonies, cultural practices, flora and fauna, and so on. Other types of output include materials

for use by the community, such as collections of stories and teaching materials. In the past years, large digital corpora have been initiated for a number of majority sign languages, including Sign Language of the Netherlands (Crasborn, Zwitserlood, and Ros, 2008), British Sign Language (Schembri, Fenlon, Rentelis, Reynolds, and Cormier, 2013), and Australian Sign Language (Johnston, 2009). Recently, annotated video corpora of three African sign languages were deposited in online archives: bilingual corpora of Malian Sign Language as used in Bamako (Nyst, Magassouba, and Sylla, 2011) and in the Dogon area of Mali (Nyst, Magassouba, and Sylla, 2012) and a trilingual corpus of Adamorobe Sign Language (Nyst, 2012). (For an updated overview, see the Sign Language Corpora Survey at http://www.sign-lang.uni-hamburg.de/dgs-korpus/index.php/sl-corpora.html).

Practical, Personal, and Interpersonal Issues

Handbooks on linguistic fieldwork address many practical issues. These include the extensive preparations required for the fieldwork itself – trying to get to know as much as possible about the language and culture one is going to study, but also about the practical circumstances of the field site, such as climate, electricity, and so on. One needs to acquire the necessary equipment and become familiar with it. Travelling needs to be prepared (visa, money, health issues), research permits obtained. The practical issues addressed in these handbooks are highly relevant for sign language fieldwork as well: taking one to the field is recommendable (Bowern, 2008; Chelliah and Reuse, 2010; Newman and Ratliff, 2001).

Field guides also typically address the personal and interpersonal challenges that are inevitably part of fieldwork. Many of these challenges are equally encountered in sign language fieldwork. In addition, there are quite a number of interpersonal issues that are specific to this type of fieldwork; they pertain to research assistants, consultants, and the signing community (among other factors), as will be discussed below.

Co-workers: Consultants and research assistants

The active involvement of native language users is indispensible for any fieldwork. A field linguist depends in many ways on the close collaboration with one or more native language users: these act as language consultants, but often also as teachers of the language, interpreters, research assistants, and advisors.

The form that this collaboration takes will vary from one study or from one linguist to another, depending on the type of study. For descriptive studies, a linguist typically works intensively with a small number of language users or consultants. Documentation projects, on the other hand, often aim for large, representative samples of the language; hence a relatively large number of language users will contribute linguistic data. In view of the intended large size of the data set, a lot of assistance is needed for the collection and annotation of the data.

Carrying over part of the responsibility for the data collection to (deaf) native signers automatically traces out quite an elaborate training program for the

collectors. This program includes an in-depth exchange on the research project, camera use, interview techniques, and (optionally) literacy and computer skills. The division of roles among deaf collectors in the data collection process may vary according to personal interests and skills. Another significant contribution of native signing research assistants can be their fine-grained intuitions about linguistic variation across a larger group of signers.

When one is not a native signer oneself, it is preferable that data collection be done by (deaf) native signing research assistants. This has a number of important advantages. First of all, the possible linguistic effects of the presence of a (hearing) outside observer on the data collection are avoided. One well-known observer effect in the sign language literature is the signers' tendency to shift toward a signing variety with structures more similar to those of the spoken language in the presence of hearing researchers, irrespective of the latter's command of signing (Fischer, 2009). Sign languages with and without access to deaf education can be expected to differ in this particular observer effect, as a contact variety is not systematically taught to deaf signers in the latter. However, the case of Adamorobe Sign Language shows that contact varieties may exist in the absence of formal education as well (Nyst, 2007); so potential restructuring toward the contact variety – and hence toward the spoken language that shaped it – cannot be ruled out a priori. In the process of collecting data on a low-status sign language that coexists with a higher status one, the presence of a (deaf or hearing) signing researcher from outside during collection may trigger the use of (signs from) the high-status sign language.

Of course, not being present, as a researcher, during data collection also has drawbacks, such as a more limited opportunity to develop the aforementioned intuitions on variation and other interesting phenomena that happen outside the scope of the camera. Also, when natively signing research assistants are not familiar with writing and administration, this may pose challenges related to keeping track of metadata about signers (such as name and age) and about the data collection session.

As native signer co-workers play a pivotal role in the fieldwork, each field linguist faces the task of finding one or more good co-workers who can take part in the project as language consultants and/or research assistants. In some cases it may be difficult to find a good co-worker, but in the communities I have worked in so far, the choice of a particular candidate appeared to be quite straightforward, as everybody seemed to agree on who would be the best collaborator(s), usually because of their outstanding signing skills or because of their participation in earlier sign language projects. Indeed the signers proposed by the community turned out to be invaluably helpful co-workers in most cases.

When one collects data for a corpus, typically, larger numbers of signers are recorded. These consultants are selected in such a way as to come to a sample that is balanced and representative. A common criterion for the selection of signing consultants in sign language studies is, first of all, deafness and, second, native acquisition of the sign language under study (see Fischer, 2009). Thus native signers – that is, deaf signers who acquired their sign language as a first language from their (deaf and ideally natively signing) parents – are generally preferred over others as research subjects. This significantly narrows down the scope of candidate consultants for data collection, as only an estimated 5 percent of the deaf signers seem to fit this profile. In these circumstances, the representativeness of a deaf-of-deaf sampling criterion seems to be limited. For sign languages of communities with mainly hereditary deafness, it is relatively easy to find deaf children with deaf parents; but, in communities with mainly non-hereditary deafness, deaf-of-deaf signers may be extremely hard to find – they may even not exist, as for example in the deaf community of Bamako, the capital of Mali. In fact this may also be the case in smaller deaf communities in industrialized areas, as described for the Basque variety of Spanish Sign Language by Costello, Fernández, and Landa (2008).

Whereas deafness seems a straightforward selection criterion for studies on the structure of sign languages, research on small communities with a high incidence of (hereditary) deafness indicates that the majority of signers are actually hearing. Thus a representative sample of these sign languages should include documentation of the signing of hearing signers as well. In case a sign language has a relatively small number of users, it may be preferable to document the signing of all its signers, rather than of a sample.

Ethics

Sign language fieldwork brings about a host of ethical issues. In the framework of documentary linguistics, the ethics related to data handling and to the language community is given considerable attention. Also discussed there is the usability of ethical guidelines developed for working with human research subjects at several institutions, and particularly the notion of informed consent (for a literature overview, see Rice, 2011). Informed consent is the statement of a research subject that he/she agrees to cooperate in the study, voluntarily informed and fully informed about the uses to which its results will be put. Establishing informed consent with research participants who are unfamiliar with academic practices is challenging, and so is obtaining a meaningful statement of informed consent on paper.

At the same time, as one depends critically on video recordings that cannot be anonymized without loss of information, it is vital to carefully consider how best to come to informed consent in sign language fieldwork. An unproblematic alternative to a statement of consent written on paper is a statement made in sign language and recorded on video. More challenging is the task of clarifying the objectives of the study and the uses to which the data will be put. Thus the initial phase of a large-scale corpus project in Mali consisted of several weeks of discussions and training to make sure we were all on the same page about the necessity to which the recordings would be put, and the uses to which the recordings would be put. Such discussions and trainings were held at various stages of the project, whenever new needs or new questions would come up. The natively signing research assistants would then discuss and clarify the objectives of the study to the over 60 consultants that participated in the data collection for the corpus (Nyst, Magassouba and Sylla, 2011).

For an insightful discussion of the issues pertaining to informed consent in such settings, see Kusters' (2012a) account of her research in Adamorobe.

Another ethical challenge, particularly in the case of communities with a high incidence of deafness, is the question of the extent to which fieldworkers are entitled or obliged to disclose the name and location of their field site. In several cases, anthropological or linguistic research that disclosed the location of such communities has transformed them into destinations for tourists and other interested visitors. The negative effects of this transformation on Adamorobe are described by Kusters (2012b).

Both Stokoe and Kuschel's (1969) field guide and Fischer's (2009) methodological chapter have a section on ethics, which discusses among other things what to do when there are significant restrictions on the use of recorded images and when one records signing children. Stokoe and Kuschel (1969), as well as Kusters (2012a), discuss how the expectations of hearing and deaf people in the field may differ from what the fieldworker can offer.

Community

There are many ways in which the language community can benefit from linguistic research, and the most appropriate way to shape the mutual benefit may differ from one community to another. It is important to plan the community benefit factor into the research design and budget, as it usually requires financial resources.

More traditional ways of giving back to the community include handing out culturally appropriate gifts (e.g., staple food, soap, tools). A perhaps more recent way of giving back consists in offering training and financial support for community projects, such as income-generating and educational ones.

A more long-term way of making sure that the community benefits from the research project is by actively and extensively involving community members in the research project in various functions, such as data collectors, annotators, translators, technical assistants, and the like. In most cases this will require intensive training of the intended co-workers – for instance in filming, interviewing, literacy, general research skills, computer skills, and annotation skills – leading to a transfer of project-related knowledge. To make sure that co-workers become co-owners of the project and also acquire the skills necessary for it, it is vital to plan a preparatory phase, in which the researcher and the co-workers discuss the aims and methods of the project in depth and the necessary training takes place. Both the research and the co-workers will benefit from such a preparatory phase. A similar transfer of project-related knowledge to a larger part of the community can be realized by organizing larger scale training events in which the researcher and the co-workers train together. The aforementioned ways of shaping the benefit for the community are merely a few examples of the various kinds of benefit that research projects may offer to a signing community.

The fruits of the research project – a corpus, a lexical database, or a description – will hopefully benefit the community as well. Research projects and products often improve the status of a sign language and its community. To improve access to digital products, it is recommendable to store a copy in local archives. However, even then, access may be problematic if access to computers and to the corpus software is an issue in general.

Various actions can be undertaken to improve accessibility to research products. If the community so wishes, parts of the research output can be turned into applied materials (e.g., a dictionary, teaching materials, a DVD story). It is good to realize that this often requires extensive human and financial resources, which necessitates finding separate funds. Also, the products of the project can be presented to the community and to government officials in a large event. Another way of facilitating access to the research findings and products is to set up a (multilingual) web-portal.

Learning the language one works on is imperative for communicating with community members and with co-workers. Also, good command of the language facilitates the linguistic analysis of that language. Having a working knowledge of

the spoken language (either in speech or in writing) helps a researcher detect traces of language contact, for example in the form of mouthings, loan translations, and grammatical constructions (see Nyst, 2007).

Technical Issues

Ideally, a sign language fieldworker avails her-/himself of the same equipment as her/his colleagues who work in more controlled settings. Typically, however, there are a number of constraints: financial ones (e.g., travel expenses, an already consumed part of the budget), practical ones (limited access to electricity at the field site, or exposure of the equipment to extreme conditions as heat, frost, humidity, or dust). Some of these risks and challenges can be prepared for by bringing sufficient supplies, such as spare batteries and recording space, and perhaps a spare camera.

Documentary linguistics emphasizes the need for high-quality data recordings, which should make sure that the data can be used for various purposes and that loss of quality due to the passing of time will not render the materials useless. To this end, most sign language corpus projects record their data in studios, using extensive equipment to record signers from various angles, the same background for the whole data collection, and several powerful lights for maximum light quality. Corpora recorded in studio conditions of this sort can be used for the development of automated sign language resources, such as signing avatars and machine translation. A professional studio setting is generally not feasible in most field sites, due to practical and budget limitations. Also, signers may be too unfamiliar with such a setting to sign in a natural and relaxed way.[3] An alternative is to record in the daily environment of the signer. This has the added advantage that the natural setting of the sign language is also documented to some extent. This is only possible if everybody in that natural environment is/has become sufficiently familiar with the camera (which in most cases will happen eventually when one carries around and sets up the camera most of the time), so that it does not draw curious crowds. Another possibility is to record at a location relevant to the story being recorded. Thus signers may take the camera on a tour to document and comment on relevant places, animals, plants, and so on.

Grammatical Analysis: Elicitation and Text Collection

The elicitation of linguistic intuitions of consultants is an important tool in the analysis of data in the field. A linguist can ask for intuitions on linguistic features in (recorded) discourse, test the acceptability of constructions made up by the linguist, or translate phrases from a contact language to a target language, for example "How do you say X?" An advantage of elicitation is that one can efficiently elicit complete paradigms.

A drawback of elicitation is that it requires significant metalinguistic awareness from the consultant and/or the language community with regard to the language studied. In my experience, the feasibility of eliciting intuitions is very limited in signing communities where language norms are not strongly defined.

Another disadvantage of elicitation is that one may overlook unexpected features of the language simply by not eliciting them. This is a particularly relevant point, as sign languages of communities with a high incidence of deafness appear to differ significantly in terms of structure, and in an unpredictable way, from the sign languages of large deaf communities studied so far. This drawback of the elicitation method can be circumvented by combining elicitation with textual analysis and long-term to mid-term fieldwork-based observations (see Chelliah, 2001, for a discussion of some benefits of this combination).

Signed texts, such as (semi-)spontaneous monologue and dialogue (as opposed to group discussion) are relatively easy to collect and record and carry a lot of interesting linguistic and non-linguistic information. Sign language consultants often enjoy participating in the collection of (semi-)spontaneous discourse data, for example in the form of personal narratives or open interviews. Spontaneous data have the advantage over elicited data in that they are typically more naturalistic and may bring to light unexpected linguistic features. Working with larger sets of (semi-) spontaneous data requires a corpus-based approach, as target phenomena may be infrequent and dispersed throughout the data. The field of sign language corpus-based analysis is still young, but new tools and approaches are continuously becoming available for the analysis of large sets of digital sign language data.

To aid elicitation and the collection of targeted, semi-spontaneous discourse data, the field linguist can use non-linguistic stimuli. Stimuli used for the elicitation of sign language data typically consist of text, images, props, or a combination of these. (For an overview of elicitation materials, see Hong et al., 2009.)

A popular image-based task is asking signers to retell cartoons or picture stories. Other image-based tasks are "spot the difference" tasks, whereby signers are asked to describe the differences they see between two similar pictures, or "find the right picture" tasks, whereby one signer describes the picture that another signer needs to select out of a set of pictures (e.g., the pictures used by Zwitserlood, 2003).

A perhaps unexpected feature of images is that they require a form of literacy as well. Lack of familiarity with particular types and uses of images makes it difficult to "read" the imagistic codes and conventions used in them. For this reason, most image-based stimuli are hard to use on a representative scale in signing communities with image conventions different from the ones used in the stimuli. Prop-based tasks seem to be particularly frequent in studies on the use of space in sign languages. An example of this is the "man and tree" task (Levinson et al., 1992) as modified by de Vos (2012), which consists of miniature figures that are placed in a particular configuration in space. Pairs of signers are asked to perform various communicative tasks with respect to this configuration.

Collecting Lexical Data

For various purposes, the collection of signs in isolation is useful. Such lexical data may be needed for cross-linguistic comparison (e.g., to asses levels of relatedness between sign languages), for phonological analysis, for documentation, or for (applied) lexicographic purposes.

To collect lexical items, various methods can be used. Lexical items can be elicited with the aid of questionnaires that aim at basic lexical items. The Swadesh list, developed for the elicitation of words for 100–200 concepts in spoken languages, has been adapted by various sign language researchers to be used in their research (Stokoe and Kuschel, 1969; Woodward, 1993; Parkhurst and Parkhurst, 2008). For sign languages that have evolved outside the context of deaf education, it is adamant that these questionnaires use pictures or props instead of written words from the spoken language. However, in view of the problems with pictures mentioned above, props are preferable to pictures. Alternatively, the pictures in the questionnaire can be replaced with locally made pictures of the same object, to maximize recognizability. Collecting a restricted set of basic vocabulary is typically used for the purpose of cross-linguistic comparisons (see Aldersson and McEntee-Atalianis, 2008 for an extensive discussion of lexical comparison studies of sign languages).

To collect as many lexical items as possible, the interviewer may encourage consultants to come up themselves with signs. It often proves a difficult exercise to spontaneously think of a large number of lexical items. To facilitate this process, the interviewer can lead the consultant (or, preferably, the group of consultants) from one semantic field to another: food, family, animals, and so on. Also, going on a "guided tour" or attending events with consultants and the camera can help bring signs to mind.

A general drawback of asking for concepts in isolation is that the resulting set of lexical items will not be informative about their patterns of occurrence in actual usage. An alternative (or complementary) method to counter this effect is to harvest lexical items from a discourse corpus (Crasborn and de Meijer, 2012). The items may consequently be re-recorded in isolation, to be made suitable for phonological analysis or lexicographic purposes.

Metadata

In addition to the linguistic data, one also needs to collect metadata, in other words information about the recorded data. So, for each recording, one needs to collect information about the data collection session, the language(s) involved, the topics, the type of data, the language users, and so on. The IMDI format has been established as a standard for describing multimedia and multimodal language resources (Wittenburg, Broeder, and Sloman, 2000). For sign languages, additional metadata are relevant, such as hearing status, type(s) of school visited, and the like. To cover these additional metadata requirements, a special sign language profile has been developed for IMDI (Crasborn and Hanke, 2003).

Processing and Analysis of the Data

Once the data have been collected, the video data need to be captured and converted, annotated, analyzed, and – especially in the case of endangered languages – deposited in a digital archive. Examples of digital archives containing annotated data of

endangered sign languages are the Endangered Language Archive (http://elar-archive.org) and the DoBeS archive (http://dobes.mpi.nl).

The methods for documenting a sign language are in principle the same as for sign language data gathering in controlled settings, as described in this volume. However, a note on annotation is in place. Ideally, annotation of signed texts, for example in ELAN (Crasborn, Sloetjes, Auer, and Wittenburg, 2006), is done by, or in close collaboration with, a native signer. However, when there are no deaf or hearing native signers with the necessary literacy and language and computer skills, an alternative solution is to form annotation teams in which each member has a complementary skill. Thus I worked with three people on the annotation of AdaSL data: one hearing native signer, bilingual in AdaSL and spoken Akan; one non-signer, literate in Akan; and one non-signer, literate in Akan and English. The signer voiced the translation in Akan, which was written down in notebooks by the non-signer literate in Akan, which in turn was translated into English by the third member. The notebooks served as a support for my own annotations of the data (Nyst, 2007). In the meantime, the translations with time codes in the notebooks have been scanned, typed up and imported into ELAN files, leading to the trilingual corpus of AdaSL (Nyst, 2012). In more recent fieldwork in Mali, a team made up of a deaf non-literate signer and a hearing literate non-native signer was trained to annotate directly in ELAN.

The choice of a language or languages of annotation may not be a straightforward matter when a sign language is used in a multilingual country, where the spoken language in contact with the sign language is different from the national spoken language – which may in turn be different from international academic languages. The often great distance between the field site and the researcher's home base impacts the research process in various ways. Annotation is ideally done by native signers in close collaboration with the researcher. If the researcher is a non-native signer based far away from the signing community and the data sets are large, annotators may continue annotating in the absence of the researcher. Although this is also possible when annotators write their annotations on paper, working digitally greatly facilitates collaboration across distance. For this kind of workflow, the annotation team needs to have access to the processed (i.e., captured, cut, and compressed) video clips. Due to the generally large size of the data sets and the sometimes limited Internet facilities, one may need to send the video files by mail or through helpful visitors.

A great distance also means (or at least used to mean) that the researcher, once returned to the home-based office, cannot ad hoc check a new analysis or fill gaps in the data. However, the ever-expanding access to the Internet, together with the continuing development of software tools for linguistic purposes (e.g. ELAN) and for online collaboration, such as Dropbox or Skype, are breaking down the communicative barriers between the office and the field. This allows research assistants from the community to be employed throughout the project, which positively affects the connection between the researcher, the co-workers, and the project.

Conclusion

Since the start of sign language research, a considerable number of studies involved fieldwork in communities of deaf signers but sometimes also in communities of hearing signers, in the country of the fieldwork itself or far away from it, in deaf communities

that arose in the context of deaf education or outside of it. In many ways, sign language fieldwork may not differ from fieldwork in spoken languages, where an equally large diversity of user communities and settings is found. However, there are some aspects that are typical for sign language fieldwork. In this chapter I tried to focus on these aspects. Also, mainly because of my own fieldwork record, I tried to outline the kinds of issues that are typical of fieldwork in communities that evolved outside the context of deaf education. But then, again, the difference between fieldwork in communities within and outside of the context of deaf schools is a gradient one.

Fieldwork is challenging and multifaceted. The space permitted for this chapter is not even enough to begin to cover all the relevant issues. Despite the considerable number of studies that are based on data collected in the field, there are relatively few publications addressing the topic of sign language fieldwork. Whereas English is overrepresented as a topic of study in spoken language linguistics, the majority of sign language studies concern ASL and sign languages of European origins. Hopefully, more publications on sign language fieldwork will become available, so that current fieldworkers can learn from each other and aspirant fieldworkers can rely on a body of accounts of good practices. A solid body of literature on various aspects of sign language fieldwork, particularly methodology, is likely to stimulate the study of a more diverse sample of sign languages.

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Notes

1 In this chapter I will not follow the convention in the sign linguistic literature of using a capital *D* to signal cultural deafness (as opposed to pathological deafness), because I feel I am not in a position to make this judgment in the case of signers of all sign languages concerned here.
2 "Unraveling the grammars of European sign languages: Pathways to full citizenship of deaf signers and to the protection of their linguistic heritage" (COST SignGram ISCH COST Action IS1006, at http://parles.upf.edu/en/content/cost-signgram).
3 Fischer (2009, p. 6) anecdotally describes a different, but similarly extensive effect of the recording site on the naturalness of signing for American Sign Language. This is a case where a deaf child attending oralist education associated the research lab with school and concluded that signing would not be appreciated in the lab either.

Keywords

endangered sign languages; ethics in sign language research; methodology; rural sign languages; sign language description; sign language documentation; sign language fieldwork

See Also

Chapter 1; Chapter 4; Chapter 9

Suggested Readings

Johnston, T. (1989). Auslan: The sign language of the Australian Deaf community. PhD Thesis, University of Sydney.

Kusters, A. (2012). Being a deaf white anthropologist in Adamorobe: Some ethical and methodological issues. In U. Zeshan, and C. de Vos (Eds.), *Sign languages in village communities: Anthropological and linguistic insights*. Boston, MA/Nijmegen, Nijmegen: Mouton de Gruyter/Ishara Press, pp. 27–52.

Marsaja, I. G. (2008). *Desa Kolok: A deaf village and its sign language in Bali, Indonesia*. Nijmegen, Netherlands: Ishara Press.

Nonaka, A. (2009). Estimating size, scope, and membership of the speech/sign communities of undocumented indigenous/village sign languages: The Ban Khor case study. *Language & Communication* 29(3), 210–229.

Schmaling, C. (2000). *Magannar Hannu- a descriptive analysis of Hausa Sign Language*. Hamburg: Signum Verlag.

References

General

Aldersson, R. R., and McEntee-Atalianis, L. J. (2008). A lexical comparison of signs from Icelandic and Danish Sign Language. *Sign Language Studies* 9(1), 45–87.

Ameka, F., Dench, A., and Evans, N. (Eds.) (2006). *Catching language: The standing challenge of grammar writing*. Berlin: Mouton de Gruyter.

Bowern, C. (2008). *Linguistic fieldwork: A practical guide*. New York: Palgrave Macmillan.

Chelliah, S. L. (2001). The role of text collection and elicitation in linguistic fieldwork. In P. Newman and M. Ratliff (Eds.), *Linguistic fieldwork*. Cambridge: Cambridge University Press, pp. 152–165.

Chelliah, S. L., and de Reuse, W. J. (2010). *Handbook of descriptive linguistic fieldwork*. Dordrecht: Springer.

Costello, B., Fernández, J., and Landa, A. (2008). The non-(existent) native signer: Sign language research in a small deaf population. In R. M. de Quadros (Ed.), *Sign languages: Spinning and unraveling the past, present and future: TISLR9, forty five papers and three posters from the ninth theoretical issues in sign language research conference*. Pétropolis, Brazil: Editora Arara Azul, pp. 77–94.

Crasborn, O., Sloetjes, H., Auer, E., and Wittenburg, P. (2006). Combining video and numeric data in the analysis of sign languages with the ELAN annotation software. In C. Vetoori (Ed.), *Proceedings of the second workshop on the representation and processing of sign languages: Lexicographic matters and didactic scenarios*. Paris: ELRA, pp. 82–87.

Crasborn, O., and Hanke, T. (2003). *Additions to the IMDI metadata set for sign language corpora: Agreements at an ECHO workshop, May 8–9, 2003, Nijmegen University*. Radboud University Nijmegen, Nijmegen, Netherlands. Accessed September 8, 2014. http://www.google.nl/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=2&ved=0CCsQFjAB&url=http%3A%2F%2Fwww.ru.nl%2Fpublish%2Fpages%2F522090%2Fsignmetadata_oct2003.pdf&ei=kqIWVMe2CMaMO4T1gcAC&usg=AFQjCNG2BylLGxZRfbhB-34utDNbxaK1qA

Crasborn, O., and de Meijer, A. (2012). From corpus to lexicon: The creation of ID-glosses for the Corpus NGT. In O. Crasborn, E. Efthimiou, E. Fontinea, T. Hanke, J. Kristoffersen, J. Mesch (Eds.), *Proceedings of the fifth workshop on the representation and processing of sign languages: Interactions between corpus and lexicon*. Paris: ELRA, pp. 13–17.

Crowley, T. (2007). *Field linguistics: A beginner's guide* (N. Thieberger, Ed.). Melbourne: Oxford University Press.

Cumberbatch, K. (2012). Sociolinguistic sketch of Konchri Sain. In U. Zeshan and C. de Vos (Eds.), *Sign languages in village communities: Anthropological and linguistic insights*. Boston, MA/Nijmegen, Netherlands: Mouton de Gruyter/Ishara Press, pp. 387–388.

Dikyuva, H., Escobedo Delgado, C. S., Panda, S. and Zeshan, U. (2012). Working with village sign language communities: Deaf fieldwork researchers in professional dialogue. In U. Zeshan and C. de Vos (Eds.), *Sign languages in village communities: Anthropological and linguistic insights*. Boston, MA/Nijmegen, Netherlands: Mouton de Gruyter/Ishara Press, pp. 313–344.

Dixon, R. M. W. (1997). *The rise and fall of languages*. Cambridge: Cambridge University Press.

Fischer, S. (2009). Sign language field methods: Approaches, techniques, and concerns. In J. H.-Y. Tai and J. Tsay (Eds.), *Taiwan Sign Language and beyond*. Chia-Yi: Taiwan Institute for the Humanities, National Chung Cheng University, pp. 1–19.

Himmelmann, N. (1998). Documentary and descriptive linguistics. *Linguistics*, 36, pp. 161-195.

Hong, S.-E., Hanke, T., König, S., Konrad, R., Langer, G., and Rathmann, C. (2009). *Elicitation materials and their use in sign language linguistics*. Poster prepared for the workshop "Sign language corpora: Linguistic issues," London, July 24–25, 2009.

Johnston, T. (2009). Creating a corpus of Auslan within an Australian national corpus. In M. Haugh, K. Burridge, J. Mulder, and P. Peters (Eds.), *Selected proceedings of the 2008 HCSNet workshop on designing the Australian national corpus: Mustering languages*. Somerville, MA: Cascadilla Proceedings Project, pp. 87–95.

Kusters, A. (2012a). *Since time immemorial until the end of days: An ethnographic study of the production of deaf space in Adamorobe, Ghana*. PhD Thesis: University of Bristol.

Kusters, A. (2012b). The gong gong was beaten: Adamorobe: A "deaf village" in Ghana and its marriage prohibition for deaf partners. *Sustainability* 4, 2765–2784.

Ladd, P. (2003). *Understanding Deaf culture: In search of deafhood*. Clevedon, UK: Multilingual Matters.

Lanesman, S., and Meir, I. (2012). The survival of Algerian Jewish Sign Language alongside Israeli Sign Language in Israel. In U. Zeshan and C. de Vos (Eds.), *Sign languages in village communities: Anthropological and linguistic insights*. Boston, MA/Nijmegen, Netherlands: Mouton de Gruyter/Ishara Press, pp. 153–180.

Levinson, S. C., Brown, P., Danziger, E., De León, L., Haviland, J. B., Pederson, E., and Senft, G. (1992). Man and tree & space games. In S. C. Levinson (Ed.), *Space stimuli kit 1.2*. Nijmegen, Netherlands: Max Planck Institute for Psycholinguistics, pp. 7–14.

Majid, A. (2012). A guide to stimulus-based elicitation for semantic categories. In N. Thieberger (Ed.), *The Oxford handbook of linguistic fieldwork*. New York: Oxford University Press, pp. 54–71.

Newman, P., and Ratliff, M. (2001). *Linguistic Fieldwork*. Cambridge: Cambridge University Press.

Nonaka, A. (2011). Language endangerment and language socialization. In A. Duranti, E. Ochs, and B. Schieffelin (Eds.), *Handbook of language socialization*. Oxford: Wiley Blackwell, pp. 610–630.

Nyst, V. (2007). *A descriptive analysis of Adamorobe Sign Language (Ghana)*. Utrecht, Netherlands: LOT.

Parkhurst, S., and Parkhurst, D. (2003). *Lexical comparisons of signed languages and the effects of iconicity*. Work papers of the Summer Institute of Linguistics, University of North Dakota (47). Accessed September 5, 2014. http://arts-sciences.und.edu/summer-institute-of-linguistics/work-papers/_files/docs/2003-parkhurst-parkhurst.pdf

Rice, K. (2011). Ethical issues in linguistic fieldwork. In N. Thieberger (Ed.), *The Oxford handbook of linguistic fieldwork*. Oxford: Oxford University Press, pp. 407–429.

Schembri, A., Fenlon, J., Rentelis, R., Reynolds, S., and Cormier, K. (2013). Building the British Sign Language Corpus. *Language Documentation and Conservation* 7, 136–154.
Stokoe, W., and Kuschel, R. (1979). *A field guide for sign language research*. Silver Spring: Md. Linstok Press.
Thieberger, N. (Ed.) (2011). *The Oxford handbook of linguistic fieldwork* (Oxford handbooks in linguistics). Oxford: Oxford University Press.
de Vos, C. (2012). Sign-spatiality in Kata Kolok: How a village sign language in Bali inscribes its signing space. PhD Thesis, Radboud University Nijmegen, Nijmegen, Netherlands.
Wittenburg, P., Broeder, D., and Sloman, B., (2000). EAGLES/ISLE: A proposal for a meta description standard for language resources. White Paper, LREC 2000 Workshop, Athens, Greece.
Woodward, J. (1993). The relationship of sign language varieties in India, Pakistan, and Nepal. *Sign Language Studies* 78, 15–22.
Zwitserlood, I. (2003). Classifying hand configurations in Nederlandse Gebarentaal (Sign Language of the Netherlands). PhD Thesis, LOT, Utrecht, Netherlands.

Corpora

Crasborn, O., Zwitserlood, I., Ros, J., and the Centre for Language Studies, Radboud Universiteit Nijmegen (2008). *Het Corpus NGT: Een digitaal* open access *corpus van filmpjes en annotaties van de Nederlandse Gebarentaal* [The corpus of NGT: A digital open access corpus of clips and annotations of the Dutch Sign Language]. Accessed September 4, 2014. http://www.ru.nl/corpusngt
Nyst, V. (2012). *A reference corpus of Adamorobe Sign Language: A digital, annotated video corpus of the sign language used in the village of Adamorobe, Ghana*. Universiteit Leiden: Leiden University Centre for Linguistics.
Nyst, V., Magassouba, M., and Sylla, K. (2011). *Un corpus de référence de la Langue des Signes Malienne,* I: *A digital, annotated video corpus of the local sign language used in Bamako and Mopti, Mali*. Universiteit Leiden: Leiden University Centre for Linguistics.
Nyst, V., Magassouba, M., and Sylla, K. (2012). *Un corpus de référence de la Langue des Signes malienne,* II: *A digital, annotated video corpus of local sign language use in the Dogon area of Mali*. Universiteit Leiden: Leiden University Centre for Linguistics.

8 Research Methods for Studying the Form of Signs

Rachel Channon

Chapter Overview

This chapter discusses methodological considerations related to researching the form of a sign – research that can be subsumed to the phonology, phonetics, prosody and iconicity of sign languages. The research process, possible methods, and potential problems are considered in a step-by-step manner, which proceeds from finding a research question to collecting the data, finding signers, determining the equipment needed, and storing, annotating, and analyzing the data.

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