

Sign Language Lexicography

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1. Introduction

In november 2001 Simon Winchester told a wonderful story to the audience of the first conference on sign language dictionaries at Gallaudet University in Washington. It was the story of the making of the Oxford English dictionary. The modern idea of a dictionary of a table of words alphabetically arranged, including their pronunciation and their spelling and their meaning originated in the 17th century. The first dictionary ever, a table of alphabetically listed hard English words was published in London in 1604.

In the next hundred years dictionaries for all sorts of different groups became very popular. The first dictionary that wasn't specific to a particular group of readers, came out in 1757 in two volumes by Samuel Johnson and colleagues: the first real dictionary of the English language. An interesting aspect of this dictionary is the way in a lemma was defined: not in a neutral way- as we expect from modern dictionaries- but clearly reflecting the opinion of its makers. As it turned out, this would cause the philologist Richard Trench in 1855, to plea for a different type of dictionary: a dictionary that would incorporate the entire English language, every single word that existed, with every sense, meaning, alternate spelling, derivations, etymology and most importantly, a biography of every word to show how its meanings had changed over the centuries.

In order to achieve this goal of a great dictionary, a network of volunteers was established. These volunteers would provide the dictionary staff with the necessary written information and quotations of English words. The main informant for over twenty years was one man: a wealthy American surgeon, who had committed a murder and was sentenced to spend the rest of his days in an asylum in London.

Why is this story interesting? Because it illustrates in a nutshell most of the questions and problems a lexicographer may come across in carrying out his or her work: what is the status of a dictionary, who is the potential user, what constitutes a lemma, who decides what should go into the dictionary and why, what are the limits of a lemma definition, the source of your information, who is a proper informant etcetera.

All though the first known 'dictionary' of signs was produced by John Bulwer, in 1644, sign language lexicography did not really start until 1965 when the first sign language dictionary based on linguistic principles was published (Stokoe, Casterline and Croneneberg, 1965).

This dictionary, DASL, has become the inspiration for a great number of sign languages. In the next paragraphs the most important aspects of sign language lexicography and the making of sign language dictionaries will be discussed. The issues can be divided into two sets:

- 1) issues that relate to the process of making a dictionary and the organisation of a dictionary: type and function of dictionary, datacollection, informants; the lexeme and its the depiction.

- 2) issues that relate to the status of the language as a minority language: standardisation, variants, dictionary as proof of a sign language being a full fledged language.

2. The making of a dictionary and the organisation of a dictionary

The history of most sign languages is one of oppression by hearing educationalists. Until the mid 1960's most sign languages were not viewed as full fledged languages, comparable to spoken languages. Once sign language research takes off in a country, usually the first major task one sets out to do is the compilation of a dictionary.

2.1 Type of dictionary

The majority of the published sign language dictionaries in bookform are bilingual dictionaries: they usually offer translations of signs into the written language of the hearing community. This problem stems from the absence of orthographies for sign languages. Most signlanguage dictionaries that have been produced in the 1970's and 1980's are uni-directional bilingual dictionaries (O'Rourke, 1978, Sternberg, 1981). The loose-leave SLN children's dictionary (Schermer et al, 1988 is an example of a simple bi-directional, bilingual dictionary: it can be organised according to handshape, or alphabetically. Examples of the most sophisticated bi-directional and bilingual dictionaries in book form are: the Auslan dictionary (Jonhston,1989), dictionary of British Sign Language (Brien,1992) and the dictionary of Italian Sign Language (Radutzky,1992) and the Finnish Sign Language Dictionary (Malm, 1998). Examples of bi-directional, bilingual dictionaries on cd-rom or

on the web are: Signs of Australia (Johnston, 1997), several cd-rom's on SLN (Schermer e.a., 1996-2002), the digital sign language dictionary on VGT (Van Herreweghe e.a 2004). These dictionaries represent the lexicon of a signed language by an ordered sequence of headsigns, which they subsequently explain in the second language. This requires a detailed analysis of the features of phonology of signs.

Monolingual dictionaries, offering citation forms, definitions in the sign language itself, in bookform are virtually impossible. Today, with the availability of cd-rom technology and digitised video's stored in computerized databases, it is possible to make a monolingual dictionary. A prototype of such a dictionary was produced by Brien, Brennan and Collins in 1996, The BSL /English Dictionary of Deaf Community and Culture on cd-rom. In this dictionary the presentation of meanings of signs is given directly in BSL as well as grammatical information on the type of sign. A great advantage of cd-rom applications over traditional sign dictionaries is that it provides the users with demonstrations of how the sign is produced and it offers the possibility of searching on the linguistic parameters of a sign.

The web technology will make it feasible in the near future to produce true monolingual sign language dictionaries. In order to do fully justice to the richness of the lexicon of sign languages it is necessary to develop and produce monolingual dictionaries. Bilingual dictionaries should be based on monolingual dictionary information in order to avoid the translation difficulties between the sign language and the spoken language of a community.

2.2. The function of a dictionary

Publishers of spoken language dictionaries changed from listing only the hard words, to wanting to archive the whole lexicon of a language: the number of words in a dictionary is seen as an indication of the complexity and thus status of a language. Sign Language dictionaries are usually made for two purposes: to describe the language of the Deaf community and to make the language accessible for (hearing) language learners. The majority of deaf children have hearing parents: hearing parents need to learn a completely new language and they need course materials and dictionaries to accomplish that. More and more we find examples of thematic dictionaries or dictionaries for specific groups and subjects: parents, children, teachers, second language learners.

2.3 Data collection and informants

Spoken language lexicographers have access to large digital corpora of texts, corpora that permits easy searching and concordance extraction. Sign Language lexicographers have to rely on the information from sign language users. The importance of data collection has long been neglected in sign language lexicography. In the early dictionaries the information in the dictionary is often not accounted for. In extreme cases, the whole dictionary is based on the information of one informant, the editor himself. However, it has become common practice for sign lexicographers to define a set of criteria that informants have to meet. Most importantly: informants have to be native deaf sign language users, preferably deaf from deaf parents and they have to be well respected members of the Deaf community; in some cases hearing children from deaf parents whose first language is a sign language are involved in the data collection. In cases when sign language

dictionaries are based on the information of hearing sign language users only (teachers, priests, linguists), the dictionaries are often not accepted by the Deaf community.

Contrary to spoken language dictionaries, sign language dictionaries often do not only contain existing signs, but also newly developed signs. For almost a century most sign languages in western Europe have been forbidden in the educational systems. As a consequence, there are deficiencies in the sign language corpora compared to the spoken languages of the hearing community. The expansions of bilingual (sign language/ spoken language) programs, the continuing growth of educational interpreting at secondary and tertiary levels has created an urgent need for a coordinated effort to determine signs for example for technical terms and for school subjects. It is very important for native deaf signers to be involved in the development of new signs. A productive method is to work with a team of native deaf signers, (deaf) linguists and people who have content knowledge. A nice example of a series of dictionaries aimed at a specific profession for which new signs had to be developed are the sign language dictionaries starting with one on Psychology, produced by the Arbeitsgruppe Fachgebärden in Hamburg.

2.4 The lexeme and its depiction

The question "What constitutes a lemma?" has yielded a lot of discussion. One issue is the productive versus the frozen lexicon. Some lexicographers feel the need to incorporate both the productive and the frozen lexicon, since

the frozen lexicon is such a small portion of the possible lexicon of most sign languages. Other lexicographers claim that a lexicographers should primarily be interested in defining the lexical signs of a language. They make a distinction between a lexeme and a sign: not all signs are lexemes but all lexemes are signs.

The grammatical information for a given lexeme poses difficulties for most sign language lexicographers: in most cases there is no reference grammar of a sign language of the sort that would be a necessary to constitute this type of information.

Specific for sign language dictionaries is the fact there is usually a depiction of the signs: a drawing, a photograph, or on cd-rom or web, a digital movie. The problem with drawings and photographs is that the movement and the nonmanual features of a sign cannot accurately be depicted. Digital movies are much preferred. However, movies confront the editor of a dictionary with a set of problems: what is the exact form of the citation form (what to do with optional nonmanual components such as some mouthings in some sign languages); who can be a model (the model in a movie often known to the deaf community and may be subject to criticism). A lot of research has been done into the demands on movies with respect to background colour, light, clothes of the model, signing speed.

3. The role of a sign language dictionary, standardisation and variation

3.1 The role of a sign language dictionary

Dictionaries clearly are much more than a text that describe the meaning of words. The word 'dictionary' suggest authority, status and scholarship: the size of the dictionary, the paper that is used and the cover all attribute to the status of the language that has been described. The first dictionaries of sign languages serve not only the purpose of description of the lexicon of the language but for most Deaf communities a sign language dictionary is a historic publication of paramount social importance which can be used as a powerful instrument in the advancement of quality bilingual education in well as in the full exercise of the constitutional rights deaf people. Many introductions to sign dictionaries mention the fact that the purpose of the dictionary is to raise the status of the sign language, which was until not long ago not considered a real language.

3.2 *Standardisation and variation*

Like spoken languages, sign languages exhibit variation. Variation occurs at all levels of a language: phonology, morphology and syntax. Furthermore studies have shown that , like in spoken languages, variation in sign languages correlates with social factors such as region, age, gender, ethnicity and socioeconomic status.

Sign Language dictionaries deal with variation in the language in different ways. The majority of sign lexicographers is inclined to produce a standardizing dictionary of the sign language or at least nominate one variant to the preferred one. And even if it is not the intention of a sign language lexicographer, the general public often interprets the information in the dictionary as the a *prescribed*, rather than *described* language. The fact that sign languages lack a written form confronts lexicographers with a problem:

which form of the sign is the correct one, the citation form in the dictionary. Therefore, lexicographers have to determine, one way or the other, whether an item in the language is used by the majority of a given population and can thus be labelled standard, or whether is it a dialect, that is, used by a particular section of the population. The more sophisticated dictionaries account for variation in one way or the other. Few dictionaries have been based on extensive research into the language variation. The new web technology and computerized database technology could solve this problem in the near future. It will help to make sign language lexicography come of age.

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