
The first national Dutch Sign Language (NGT) Dictionary in book form: Van Dale Basiswoordenboek Nederlandse Gebarentaal

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In October 2009 the first national Dutch sign language (NGT) dictionary in book form was published by Van Dale publishers. (Schermer/Koolhof 2009). The content of the book is produced by the national centre for NGT and for sign language lexicography, the Dutch Sign Centre, and is based on 25 years of research into the lexicon of Dutch Sign Language (NGT) which we will describe briefly in our paper (Schermer 1990, 2004). Subsequently we will describe organisation and content of the Van Dale dictionary which contains 3.000 standard signs with illustrations ordered alphabetically by using a gloss as lemma.. In addition to the Van Dale dictionary in book form an online NGT dictionary is available on our website (Schermer/Koolhof/Muller 2010) which offers both search features: alphabetically and via handshape/location. Each entry in the Van Dale dictionary contains further information: an example sentence of how the sign is used and grammatical information about the non manual features and type of verb. We will show examples from both dictionaries, discussing the dilemma's we faced and the solutions we opted for in the making of this dictionary.

1. Introduction

In October 2009 the first national Dutch sign language (NGT) dictionary in book form was published by Van Dale publishers. (Schermer/Koolhof 2009). The content of the book is produced by the national Centre for Dutch Sign Language and sign language lexicography, Nederlands Gebarencentrum (Dutch Sign Centre) and is based on 25 years of research into the lexicon of Dutch Sign Language (NGT). In order to understand the relevance of this book for the Dutch Deaf Community and the status of NGT we will first give you short historical overview thus addressing the reason for making a two dimensional book for a visual language in addition to the already existing NGT multimedia dictionaries on dvd-rom and online.

Subsequently we will provide a summary of the research on the NGT lexicon which is the basis for the data in the Van Dale dictionary, including the standardisation process of NGT. Finally we will discuss the dilemma's we faced and the solutions we opted for in the making of this dictionary. Specific issues we will address are the following:

- What constitutes a lemma in a sign language dictionary? We will address here the type of dictionary and the difference between the frozen and productive lexicon dictionaries.
- The choice of the (standard) signs in the Van Dale dictionary: a short overview of our research on lexical variation in NGT, the standardization project that was carried out between 1999 and 2002 and the national sign language database from which the signs were selected.
- The organisation of the dictionary: alphabetical order of the lemmata, the use of glosses, the grammatical information and the example sentences.

2. Sign language research and the deaf community: a brief history

Sign language research and more specifically sign language lexicography is a fairly young field. Since the discovery by the American linguist William Stokoe in 1963 of the fact that a sign can be analyzed into five parameters (handshape, movement, location, orientation and non-manual features) linguists in various countries started to conduct research on their national sign languages to establish these languages as the natural language of native deaf signers.

The recognition of a language as a fully fledged language has been a major issue since the early days of sign language research. The status of a sign language depends on the status of the deaf community, the historic background and the role a sign language plays within deaf education. The history of sign language research is very closely connected to the history of deaf education and the perspectives on deafness and deaf people. Deafness has been viewed as a deficit for centuries. This, often medical, perspective focuses on the fact that deaf people cannot hear well. From this perspective deaf people have a problem that needs to be cured as quickly as possible in order to integrate properly and fully in the hearing society. This perspective on deafness has had and still has tremendous impact on the lives of generations of deaf people throughout the world (for an overview see Monaghan/Schmaling/Nakamura/Turner 2003 and Ladd 2003). The status of sign languages in Western societies varies throughout history. In some periods sign languages were used in some form in deaf education (in the 18th century for example in Paris), at other times sign languages were banned from deaf education all together (from 1880–1980 in most Western societies).

Another perspective on deafness and deaf people has been around since 1965 which can be formulated as follows: if sign languages are natural languages, then its users belong to a linguistic minority. Deaf people are not hearing people with a deficit, they are people who are different from hearing people. They do not have access to a spoken language but they do have access to a visual language which can be acquired in a natural way comparable to the acquisition of a spoken language. In this view deaf people form a Deaf¹ community with its own language, identity and culture.

Sign language research in most countries in the second half of the last century has been strongly influenced by this latter perspective on deafness and cannot be separated from the emancipation movement of the Deaf community. Sign languages have been ignored and therefore underestimated for their potential for a very long time. In those areas where deaf people are not allowed to use their own natural language in all functions of society, their sign language clearly has a minority status which is closely related to the status of its users. However, being a minority does not always automatically generate a minority status with respect to sign language. The status of sign languages depends very much on the legal recognition of these languages especially from the point of view of Deaf communities and Deaf organisations and has been one of the most important issues in various countries since 1981. Most of the activities have occurred around the theme of sign language recognition and bilingual education.

As Krausnecker (2003: 11) has pointed out, recognition of a sign language will not solve all problems of its users at once and maybe not even in the near future. But legal recognition of sign languages will secure the social and legal space for its users to stop the tiresome work of constant self-defence and start creative self-defined processes and developments. Legal recognition of a language will give a minority space to think and desire a plan and achieve the many other things its members think they need or want. Basic security in the form of language rights will influence educational and other most relevant practices deeply.

The legal status of sign languages is quite diverse around the world. There is no standard way in which such a recognition can be formally or legally extended: every country has its own interpretation. One of the main reasons for producing the *Van Dale Basiswoordenboek NGT* in book form is that a national dictionary in book form published by a highly regarded

¹ Capital D in Deaf is used to indicate that being deaf is not viewed as a medical deficit.

publisher gives the national sign language the status and impetus that is needed for its legal recognition process. NGT is one of the few sign languages in the European Union that has not legally been recognised by its government. As a number of native deaf signers expressed at the presentation of the dictionary: 'We are finally part of the Dutch society now we have a Van Dale dictionary of our own language: we have a Van Dale dictionary, therefore, our language exists'.

3. NGT lexicon research and language policy (1982-2010)

In the Netherlands research on NGT started in 1982 with a large research project to make an inventory of signs that existed in Dutch Deaf community. In this KOMVA-project 15.000 signs were collected on videotape from 100 native Deaf people (age 18-75) from five different regions (around the five schools for the Deaf) based on a wordlist of 2000 words in different contexts (Schermer 1990). All signs were transcribed into a notation system and compared with each other. This KOMVA project yielded information about lexical differences both within and between regions and indicated that no grammatical differences existed between the five regions.

Between 1982 and 1999 our language policy was to produce dictionaries and educational materials such as sign language courses that reflected regional variation. The first national dictionary came out in 1988 and contained 600 signs for parents of young deaf children (Schermer/Harder/Bos 1988). The dictionary was very simple: the illustration of the sign was provided with a translation into written Dutch. The dictionary could be organised alphabetically according to the Dutch translations of the signs, or it could be organised according to the handshape(s) of the sign. It was also indicated in which regions this sign was used. The signs that were used in all regions were called 'preference signs'.

In 1999 the language policy changed: there was a strong pressure from hearing parents and teachers of deaf children to standardize part of the NGT lexicon. Main reason for this was that the educational policy in schools for the Deaf had changed dramatically: after a hundred years of oralism (the use of signs or sign language in schools was forbidden between 1880 and 1980), signs were allowed in Deaf education. The Dutch Department for Education, Culture and Science together with the Dutch Deaf Council and the five organizations for deaf education commissioned a large project to standardize the basic lexicon of NGT. This project, *Standardisation of Basic and Educational lexicon* (STABOL) was carried out by the Dutch Sign Centre between 1999 and 2002. In total 5000 signs were standardized, using the results from our previous lexicon research (Schermer 2004). The STABOL project was required by the Dutch government as a prerequisite for legal recognition of NGT.

The standardisation of the NGT basic lexicon was a very controversial issue among many people in the Netherlands. As far as the Dutch government was concerned it was not negotiable: without a standard lexicon there could be no legal recognition of NGT. The idea of standardisation has met with strong opposition in the Deaf community and from researchers in the Netherlands at that time. The concept of standardisation was probably also difficult for the Deaf community to accept since it was not so long ago that their language was forbidden by hearing people. And again hearing people were now enforcing some form of standardisation. There was also an economic argument for standardising part of the lexicon: the development of NGT materials in different regional variants was expensive. Moreover, hearing parents and teachers were not inclined to learn different regional variants. The schools

for the Deaf were also in favour of national NGT materials which could be used in NGT tests to monitor the linguistic development of the students and to set a national standard.

The STABOL project was carried out by a group of linguists, native deaf signers (mostly deaf teachers) and native hearing signers in close cooperation with the Deaf community and coordinated by the Dutch Sign Centre. A network of Deaf signers from different regions was established. This network in turn maintained contacts with larger groups of Deaf people whose comments and ideas were shared with the project group which made all of the final decisions. Within the project a standard sign was defined as:

A sign that will be used nationally in schools and pre-school programs for deaf children and their parents. It does not mean that other variants are no longer 'proper signs' the Deaf community can no longer use. This approach turned out to be a crucial factor in the acceptance of the notion of standard signs by the Deaf community. (Schermer 2004).

Within the STABOL project 2.500 basic signs and 2.500 educational signs were standardised. The 2.500 signs that were part of the STABOL project were selected from the basic lexicon: that is, all signs that are used in the first three levels of the national NGT courses. The STABOL project group used a set of guidelines in their meetings that was developed based on previous research. In principle the signs that were nationally the same (preference signs) that were chosen for previous sign language dictionaries were accepted as standard signs. However, an exception was made for the days of the week and months of the year. Most of the signs for the days of the week and months of the year are initialised signs. Some of the signs for the days of the week are originally Northern signs. For months of the year new signs were developed. These signs were accepted very quickly and without any problems both within and outside the deaf community.

The educational lexicon (lexicon that is used in the schools and for school subjects) consists mostly of national signs and new signs. Because NGT has not been used in all domains there are no signs for a great number of concepts. The NGT lexicon has been expanded systematically in the last four years. A major tool in the development and the dispersion of new lexicon is a national database and an online dictionary all coordinated by the Dutch Sign Centre. The database contains presently 15.000 signs including context and grammatical information and regional variants in the Netherlands. This database has provided the data for the compilation of the Van Dale dictionary.

4. Distribution of the signs

In 2006 the online dictionary of NGT standard signs was introduced. Between 2006 and 2009 the Dutch Sign Centre produced several multimedia dictionaries, in total 12.000 signs are now available online and on DVD-ROMs. In Figure 1 the distribution of the signs is shown: 25 % of the standard signs have been standardised within the STABOL project, 42% of the signs are existing national signs (no regional variation) and 33% is new lexicon (no regional variation, mostly signs that are used in health and justice and for school subjects).

The 2.500 signs that were standardised in the STABOL project can be characterised as follows.

- 60% of the signs are national signs: recognised by all regions and/ or used with the same meaning, no regional variation;
- 25% of the signs: regional signs that have been included in the standard lexicon;

- 15 % of the signs: a selection was made for a standard sign.

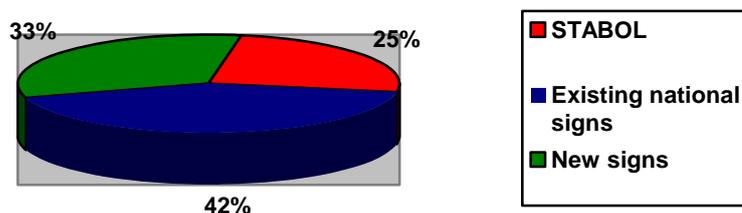


Fig.1. Distribution of signs in NGT standard sign language dictionaries

In the STABOL project regional variation was included in the standard lexicon in various ways. Regional variation is included in the standard lexicon as a synonym: for example the signs FRIEND and PARENTS as shown in table.1. A great number of synonyms were added to the lexicon in this manner. Even though these synonyms are originally regional variants, anno 2009 it seems that the youngest generation of deaf children who grew up with these signs considers them no longer as belonging to a particular region (Elferink 2008).

a.



b.



c.



d.

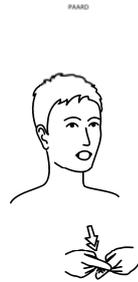


Table1. Regional variation as synonyms

Apart from synonyms, regional variation is included through refining the meaning of a sign. For example the signs HORSE and HORSEBACKRIDING.

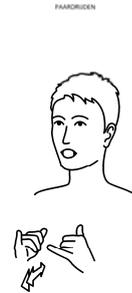
The sign HORSE in the region Amsterdam was used for both horse and horsebackriding. In the region Groningen the sign HORSE was only used for horse and not for horsebackriding. In the standardisation process the Groningen sign became the standard sign HORSE and the Amsterdam sign became the standard sign for HORSEBACKRIDING as is shown in table 2. So both regional variants were included.

a.



HORSE

b.



HORSEBACKRIDING

Table 2. Regional variation through refining the meaning

The STABOL project revealed interesting differences in meaning between signs that were first labelled as regional differences. For example the five different signs for ‘being nervous’ referred to the different ways in which a person can be nervous and turned out not to be regionally defined.

In the STABOL project for only a few hundred signs out of the 2500 signs an explicit choice was made between regional variants based on linguistic criteria as mentioned earlier in this paper. Naturally, the establishment of a standard sign alone is not sufficient for the implementation and acceptance of a lexicon. The implementation of the NGT standard lexicon is coordinated by the Dutch Sign Centre and involves several activities, some of which are ongoing:

5. Sign Language dictionaries and type of lexicon

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 fully 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.

Sign Language dictionaries deal with variation in the language in different ways. Even though the majority of sign lexicographers primarily intends to document and describe the lexicon of a sign language, their choices in this process determine which signs varieties are included and which are not. Therefore inevitably many sign language lexicographers produce a standardizing dictionary of the sign language or at least (mostly unintentionally) nominate one variant to be the preferred one. And even if it is not the intention of a sign language lexicographer, the general public – especially hearing sign language learners- often interprets the information in the dictionary as a prescribed, rather than described vocabulary. The fact that sign languages lack a written form confronts sign language lexicographers with a problem: what constitutes a lemma, 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, or whether it is used by a particular section of the population. Only a few sign language dictionaries have

been based on extensive research on language variation (see for example Johnston 1989 for *Australian Sign Language (Auslan)*, Schermer et al. 1988, 2006 for *NGT and the Centre for Sign Language* and Sign Supported Speech KC 2008 for *Danish Sign Language (DSL)*).

In cases where sign language dictionaries do have been made with the explicit purpose of standardising the sign language in mind and have not been based on extensive research on lexical variation, these attempts to lasting standardisation have usually failed because the deaf community did not accept the dictionary (as happened in Flanders and Sweden in the 1970's) as a reflection of their sign language.

Spoken language dictionaries are mostly either monolingual or bilingual dictionaries. This is not the case for sign language dictionaries. Monolingual sign language dictionaries hardly exist. The most well known dictionary that might be viewed as monolingual was produced by William Stokoe et al. describing American Sign Language (ASL) in a notation system (Stokoe/Casterline/Cronenberg 1965). With multimedia technologies these dictionaries will perhaps be more common in future. However, most sign language dictionaries are produced for hearing learners and therefore mostly bilingual. These dictionaries are organised either by parameters of a sign (handshape, location, movement) using the sign as lemma or more often alphabetically using a gloss as lemma. A gloss is defined as the translation of the sign in written language which comes closest to the meaning of the sign. For example in NGT the sign AANWEZIG ('to be present').

One important aspect of the sign language vocabulary is the difference between the *frozen* and *productive* lexicon. As Brennan (1992) pointed out, learners of a sign language often wonder why they find it so difficult to understand real life sign language conversations even if they know hundreds of individual signs. The reason for this is that learners have been introduced to only one kind of vocabulary which is sometimes called the frozen or established lexicon. These signs exist and are usually found in dictionaries. There is however another major category of sign language vocabulary which Brennan called the *productive* or *do-it-yourself* lexicon which is hard to capture in a dictionary. The signer creates signs as they are needed and in doing so may produce combinations which have never actually be used before, but are fully understandable and meaningful in context (Brennan 1992). An example in NGT is the difference between the frozen sign RIJDEN *in een auto (to drive a car)* and the productive sign RIJDEN *in een auto, hortend en stotend (driving a car on a bumpy road)*. As opposed to the first sign, the second one is not included in the dictionary.

6. The Van Dale Basiswoordenboek NGT: content and organisation

The dictionary contains 3.000 standard signs that belong to the frozen lexicon. These signs are a selection from the signs from the STABOL project and new signs.

Guidelines for the selections of the signs were:

- all signs from the national NGT courses level 1-3;
- signs for concepts that occur in *Van Dale pocketwoordenboek Nederlands als tweede taal* (Dutch as second language) and *Van Dale Basiswoordenboek Nederlands* (Basic dictionary Dutch);
- frequency list for written Dutch
- typical NGT signs
- the illustration of a sign has to be possible

The *Van Dale Basiswoordenboek NGT* is organised alphabetically according to glosses of the signs and not according to the parameters of the sign. The use of glosses was preferred over the use of a notation system. A notation system does reflect the sign more adequately, however the average user of this dictionary will not be able to read a complex notation system. The dictionary is not organized according to the parameters of the sign because in book form this information would be less user friendly. In addition to the Van Dale dictionary in book form an online dictionary is available on our website (Schermer/Koolhof/Muller 2010) which offers both search features: alphabetically and via handshape/location.

6.1. Examples from the dictionary

We will discuss some examples from the *Van Dale Basiswoordenboek NGT* and the *van Dale NGT online dictionary*. An example of an entry in the *Van Dale Basiswoordenboek NGT* looks like the signs for *fantasy / to fantasize*.



Each entry in the *Van Dale Basiswoordenboek* contains the following:

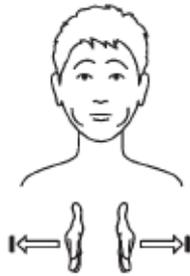
- a gloss
- an illustration of the sign. All illustrations have been produced by the Dutch Sign Centre using a computer program.
- non manual information (oral components, spoken components). The dictionary contains an overview with pictures of all oral components that occur in the dictionary.
- grammatical information, such as type of verb
- example sentences. Because a gloss may be only one of the possible translations for the sign, other possible translations are added. For example the sign FANTASIE / FANTASEREN can also be used for *verzinnen* (*make up*) indicated by the symbol +. If a sign cannot be used in a particular context this is indicated by the symbol x. For example: the sign FANTASEREN cannot be used for *to wish*.

The online dictionary Van Dale NGT offers sign movies for each sign illustration and translations in NGT for all example sentences in addition to the above mentioned search options.

The following examples illustrate some of solutions for finding the right glosses for the signs. The signs GROOT (big, in general), GROOT persoon (big person, but not tall person which is the same word in Dutch). GROOT grote objecten (big of big objects) and GROOT kleine voorwerpen/dieren (big of small objects or animals).

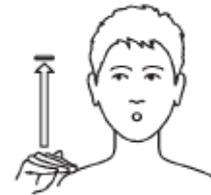
GROOT

locatief
 hv variabel
 de vorm en grootte van het voorwerp
 bepaalt de vorm van het gebaar
 nm: bolle wangen



- Ik ben bang voor grote honden.

GROOT persoon



- Wat ben je groot geworden.
- ◆ lang van personen

GROOT grote objecten

nm: bolle wangen



- Wat een groot gebouw is dit.

GROOT kleine voorwerpen / dieren

locatief
 hv variabel: afhankelijk
 van de vorm en grootte
 nm: bolle wangen



- Dit doosje is groot in vergelijking met wat erin zit.

7. Conclusion

Some people may view the production of a dictionary with standard signs such as the *Van Dale Basiswoordenboek NGT* as avoiding the issue of regional variation all together. This is not the case in the Netherlands: we started out in the 1980's to make an inventory of regional variation based on a large corpus and contrary to most other countries at that time our first sign language dictionaries contained all regional variants. Without thorough knowledge of lexical variation, standardisation of NGT lexicon and the implementation of the standard signs in all schools for the deaf and teaching materials would not have been possible.

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