Concise Lexicon for Sign Linguistics
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Foreword

This large, well-researched and clearly formatted lexicon of a wide variety of linguistic terms is a long-overdue and extremely welcome addition to the bookshelves of sign language teachers, interpreters, linguists, learners and other sign language users.

Unique to this lexicon is not only the inclusion of many terms that are used especially for sign languages, but also the fact that for the terms, there are not only examples from spoken languages but there are also glossed and translated examples from several different sign languages.

As a sign language linguist, I foresee many interesting uses of this lexicon. There is an immediate temptation to find examples of terms in the sign language one is studying as well as determining how many of the most used concepts would be signed in the local language. As there are to date still almost no reference grammars of sign languages, the definitions of many of these concepts would be extremely helpful for those linguists planning to make a reference grammar of their sign language. The format provides a helpful guide for noting concepts which one uses for one’s own sign language, but which might not (yet) be in this lexicon.

Curious researchers of spoken languages might also be interested in the linguistic terms used primarily for signed languages.

I predict that this book will gather no dust on the bookshelves of its many different users.

Penny Boyes Braem, PhD. Dr. h.c.
Basel, December 2015
Introduction and acknowledgments

This *Concise Lexicon for Sign Linguistics* has been developed out of an expressed need by beginning sign language (SL) learners in Higher Education Institutions (HEI). During the last decades, more and more departments of sign linguistics have been established, as well as SL interpreter training and SL teacher programs. We can find such educational programs at different levels (diploma courses, bachelor and master programs (academic and professional) and even post-academic trajectories. The core of such programs is, of course, always the sign language. Its form, content and use need to be studied, learned and/or acquired within the cultural context of the local Deaf community.

For second language learners, explicit instruction in form, content and use has been demonstrated to be supportive for the language learning process. However, for many sign languages no or little description exist of the various linguistic domains as there are, i.e. phonology, morphology, syntax, semantics and pragmatics, to name the most important. What we do know is that signed languages, sharing the visual-manual modality, seem to have many similarities and overlapping grammatical structures, besides of course also having their own language-specific features.

For beginning students of sign languages, we wanted to provide an overview of the most commonly found terminology and concepts, offered in a systematic way to enhance comprehension and learning by novice HEI sign language learners. Of course, advanced learners or native signers can also make use of the lexicon, since it provides an overview of the most commonly studied aspects of signed languages in general.

We would like to mention that this lexicon can be seen as a sign language diptych along with *The Linguistics of Sign Languages. An Introduction* by Baker et al. (2016), also published by Benjamins.

We hope this lexicon will support many learners of signed languages, be they pupils, students, parents of deaf children, or others interested in these visual languages.

We could not have done this work without the feedback and support of many colleagues. We cannot thank them all, but wish to specially mention here dr. Roland Pfau (University of Amsterdam), and dr. Penny Boyes Braem (Center for Sign Language Research, Zurich, Switzerland) for their willingness to discuss lemmas with us. The responsibility for any errors rests, of course, with us.

This publication has been made possible with the support of the Deaf Studies Research Unit, the Knowledge Center, and the Institute for Sign, Language & Deaf Studies of Faculty of Education, Hogeschool Utrecht, University of Applied Sciences.

Jan Nijen Twilhaar and Beppie van den Bogaerde
Utrecht, January 2016
Sign language acronyms

In the lemmas of this dictionary we regularly refer to sign languages by means of acronyms that are conventionally used in the international literature. These references are not entirely uniform. Some acronyms are based on the English name of the sign language (for example, BSL for British Sign Language). Other acronyms are based on the name of the sign language which is used in the concerning country (for example, NGT for Sign Language of the Netherlands). In the examples of the lemmas we always use the full English name of the sign languages. The acronyms listed below are always put between brackets behind these full names.

ASL  American Sign Language
Auslan  Australian Sign Language
BSL  British Sign Language
DGS  German Sign Language (Deutsche Gebärdensprache)
ISL  Israeli Sign Language
LIS  Italian Sign Language (Lingua Italiana dei Segni)
LIU  Jordanian Sign Language (Lughat il-Ishaara il-Urdunia)
LSA  Argentine Sign Language (Lengua de Signos Argentina)
LSE  Spanish Sign Language (Lengua de Signos Española)
LSF  French Sign Language (Langue des Signes Française)
NGT  Sign Language of the Netherlands (Nederlandse Gebarentaal)
SSL  Swedish Sign Language
VGT  Flemish Sign Language (Vlaamse Gebarentaal)

Transcription of sign language examples

Sign language examples in glosses

Signs are often represented in the form of glosses in small caps. These glosses do not give any information about the phonological form of the signs. We will first illustrate the conventions for the manual glosses and then those for the non-manual markers. For handshapes we make use of the font developed by the Department of Linguistics and Modern Languages, Centre for Sign Linguistic and Deaf Studies, of the Chinese University in Hong Kong, handshapes2002 (CUHK).

poss\textsubscript{x}  A possessive pronoun, which in many sign languages is signed with a hand. For instance poss\textsubscript{i} is articulated on the signer’s chest.
SIGN  A gloss (i.e. the translation of a sign in written form of a spoken language) is indicated in small capital letters, for example \textsc{house}. In this book all signs are glossed in English.
Introduction and acknowledgments

**SIGN++** Reduplication of a sign (for example to express plurality or certain aspectual categories), for example book++ means ‘books’.

**SIGN^SIGN** Combined signs in a compound, for example monk^boss ‘abbot’.

**SIGN–SIGN** Linked words if several words are needed to gloss one single sign, for example break-with-stone.

**CL_{xx}, CL:X** A classifier handshape is indicated by ‘CL’ in combination with a subscript referring to the referent, for example CL\textsubscript{big} or CL\textsubscript{thin}, or with a symbol for the handshape, for example CL: \(\hat{\circ}\) or CL: \(\hat{\circ}\).

**xSIGN_y** This is a verb sign that moves from one location to another, indicating agreement between the verb and the subject and/or object. Both subscripts indicate the locations. The verb \_GIVE\_ for instance, moves from the location of the signer (me) to the addressee (you).

**s-i-g-n** Fingerspelled elements are indicated in lower case letters, linked by hyphens, for example for names: ‘s-a-l-l-y’.

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Lines above the glosses indicate the extension or scope (the beginning and the end) of a specific non-manual marker. Non-manual markers have functions at different linguistic levels. In this book the following symbols are used.

_____/op/ Phonological marker: the silent articulation of the corresponding spoken Dutch word ‘op’. This mouth picture accompanies the NGT auxiliary \textsc{aux-op}.

_____ t This marker indicates a topicalized constituent: usually raised eyebrows and a slight forward tilt of the head.

_____ wh This marker accompanies a content question (wh-question): usually lowered eyebrows.

_____ y/n This marker accompanies a yes/no question: usually raised eyebrows, sometimes in combination with head forward.

_____ neg This is the marker of negation: usually a headshake, often accompanied by a negative facial expression.

_____ aff This is the marker of affirmation: repeated head nods.

_____ hn This is a single head nod, for affirmation or in an imperative sentence.

_____ bl This is the marker for a body lean in the direction of a specific location, for example ‘bl-3a’ or ‘bl-left’.

_____ se This is the marker for squinted eyes, which is used in counterfactual conditional clauses.

_____ pl This is the marker for pursed lips, which is used in non-restrictive relative clauses.

_____ eg-3a/3b This is the marker for eye-gaze, in this case from location 3a to 3b.

_____ )(or () These markers are used to add the meaning ‘small’ (sucked in cheeks) or ‘big’ (blown out cheeks) to the sign.

_____ This marker means raised eyebrows accompanying different types of subordinate clauses.
Lexicon
**Activation**
When somebody sees a sign or hears a word, a particular part of her/his brain is activated. In that place the bloodstream is stronger.

→ also Semantic network

**Activation spread**
This refers to the process in which, after activation in the human brain of a particular sign or word, other signs/words are activated, that semantically form a connected network with that particular sign/word.

→ also Semantic network

**Active hand**
This is the moving (preferred) hand in two-handed signs, where the two hands have different handshapes. The other, non-moving hand is called the passive hand.

→ also Dominant hand, Passive hand, Preferred hand and Two-handed sign

**Adjectival constituent**
This is sign or word group in which the head is an adjective. In the next example high is the head of the adjectival constituent. To this head ten meter is a modifier.

*Sign Language of the Netherlands* (NGT)

(1) \textit{tree}_{ac}[\textit{ten meter high}]_{ac}

‘The tree is ten meters high’

The modifier ten meter itself is also a constituent: a nominal constituent with meter as the head for which ten is a modifier.

The next examples are from English. Here heavy is the head, and very is its modifier.

*English*

(2) They predicted a_{ac}[\textit{very heavy}]_{ac} storm

(3) Yesterday’s storm was_{ac}[\textit{very heavy}]_{ac}

→ also Constituent
Adjectival predicate
This is the nominal part of the predicate in the form of an adjectival predicate.

*Sign Language of the Netherlands* (NGT)

(1) INDEX₁ BROTHERₐc[NICE]ₐc INDEX₃a
    ‘My brother is nice’
→ also Adjectival constituent and Predicate

Adjunct
An adjunct is a constituent that is optional, is not obligatory to the sentence and can thus be left out without an ungrammatical sentence as a result, even when its content has not been made clear from the context. In Example (1), the constituent SYDNEY could be omitted and thus has the function of an adjunct.

*Australian Sign Language* (Auslan)

(1) WOMAN BUY CAR SYDNEY
    ‘The woman buys a car in Sydney’

In the next example from spoken English, two adjuncts occur (*yesterday* and *as a comic*):

(2) Yesterday he performed as a comic.
→ also Constituent function

Adverbial clause
This is an optional constituent (adjunct) in the form of a subordinate clause, which we found in both spoken and in signed languages. There are different types of adverbial subordinate clauses. Some specify time, others a reason or a condition. The various types of adverbial clauses are discussed in separate articles.

→ also Adverbial clause of condition, Adverbial clause of reason, Adverbial clause of time and Complex Sentence

Pfau (2016a)

Adverbial clause of condition
This is the type of adverbial subordinate clause in which a condition is expressed.

Example:

*Sign Language of the Netherlands* (NGT) and *Flemish Sign Language* (VGT)

(1) (if) TOMORROW SUN-SHINE, INDEX₁ PLAY-FOOT-BALL
    ‘If the sun shines tomorrow, I will play football’
NGT and VGT have the sign *if*, which is not obligatory. In these sign languages however, the non-manual grammatical marker ‘brows up’ is obligatory in the adverbial clause of condition. In this type of subclause we distinguish between factual and counterfactual conditional clauses. The subordinate clause is factual when the situation in the sentence is real (as in (1)). If that is not the case, then the subordinate clause is counterfactual, as in Example (2) from Israeli Sign Language. The counterfactual non-manual marks additionally has squinted eyes (in the gloss ‘se’).

*Israeli Sign Language* (ISL)

(2) \(\text{∩∩}\) & se

(If) INDEX\textsubscript{3} STOP SMOKE, INDEX\textsubscript{3} LIVE

‘If he had stopped smoking, he would still be alive.’

→ also Adverbial clause and Complex sentence

Dachkovsky & Sandler (2009), Smith (2004) (NGT)

**Adverbial clause of reason**

This is the type of adverbial clause that specifies a reason. Examples:

*Sign Language of the Netherlands* (NGT)

(1) INDEX\textsubscript{1} HAPPY BECAUSE \(\text{landırma}\) VISIT\textsubscript{1}

‘I am happy because you are visiting me.’

*Flemish Sign Language* (VGT)

(2) \(\text{∩∩}\)

INDEX\textsubscript{1} HAPPY WHY, VISIT\textsubscript{1}

‘I am happy, because you are visiting me.’

The two sentences have the same meaning. In (1) the reason for the happiness is expressed by the sign BECAUSE. In (2) the signer, as it were, asks himself a question (WHY), which he then subsequently answers at once in the subordinate clause. In this sentence the non-manual marker ‘raised eyebrows’ should be used. This construction is also used in VGT in (3). However, the scope of the non-manual grammatical marker in VGT is only over the question word.

*Flemish Sign Language* (VGT)

(3) \(\text{∩∩}\)

INDEX\textsubscript{1} TAKE UMBRELLA WHY, RAIN

‘I am taking my umbrella, because it is raining.’

An important difference in wh-questions in NGT and VGT is that in wh-questions (amongst other things) the non-manual grammatical marker ‘frowned eyebrows’ is
used. In (2)–(3) there is no ordinary wh-question, but a so-called wh-cleft-construction (→ Wh-cleft-construction).
→ also Adverbial clause, Complex sentence and Rhetorical question.

**Adverbial clause of time**

This is the type of adverbial clause that specifies time. Example:

*Sign Language of the Netherlands* (NGT)

(1) □□□□□□

INDEX₁ SCHOOL FINISH, INDEX₁ HOUSE GO

‘As soon as I am finished at school, I will go home’

In DGS too a sign like FINISH is used to indicate that an event in the subordinate clause took place before the event in the main clause. This sign then is in sentence final position. What is also important in such complex sentences is the use of the non-manual marker. In the NGT sentence in (1) this is ‘raised eyebrows’. Sometimes this marker is the only indication that there is subordination. Often the main clause also contains a head nod, or a slight shift in upper body position and there can be a pause between the main clause and the subordinate clause. In the next DGS sentence the non-manual grammatical marker is also crucial:

*German Sign Language* (DGS)

(2) □□□□□□

INDEX₃̃ STUDY BEGIN, BEFORE INDEX₃̃ WORLD-TRIP MAKE

‘Before he begins his studies, he will make a world trip’

If this marker is left out, both (1) and (2) could also be interpreted as two main clauses. In (1): *I finished school. I am going home*. In (2): *He begins his studies. Before that he went on a world trip.*

→ also Adverbial clause and Complex sentence

**Adverbial constituent**

This is a sign or word group of which the head is an adverb. In the next NGT example MAYBE is the head of the adverbial constituent.

*Sign Language of the Netherlands* (NGT)

(1) \text{ADV_C}[MAYBE]\_ADV C INDEX₁ CAR BUY

‘Maybe I will buy a car’

The next example is from spoken English.
English

(2) He ran away<sub>ADV</sub>[quickly]<sub>ADV</sub>

→ also Constituent

**Affirmative head nod**

Each type of sentence can be affirmative (or neutral) or negative. In sign languages it is possible to accompany a sentence by a non-manual grammatical marker in the form of a head nod. The head nod is usually optional and can have different functions in contrast to the headshake in negated sentences, which is usually compulsory and has only one function. In the next invented example a non-manual grammatical marker (head nod) is used, which can also be left out without a change in the meaning of the sentence:

(1) \[\text{INDEX}_1 \text{ MOTHER BICYCLE BUY} \]

‘My mother buys a bicycle’

However, the non-manual marker can also be used in an explicit affirmative way:

(2) \[\text{INDEX}_1 \text{ MOTHER BICYCLE BUY} \]

‘My mother indeed buys a bicycle’

There are also sign languages that use a *lexical* affirmative marker together with the head nod. For instance, NGT has a sign certain that adds emphasis to the affirmation. Because a sentence can be either affirmative or negative, the term polarity is used here.

In (1) and (2) examples of an affirmative declarative sentence are provided. The other two sentence types can also be affirmed: the imperative and the interrogative sentence (yes/no question and wh-question).

Books: Pfau & Bos (2016)

**Affixation**

When a bound morpheme is added in a morphological process, this is called affixation.

→ also Bound morpheme

**Age**

The factor of age can play a role in language variation. Young people sign and speak different than older people and these differences have to do with age.

→ also Language variation and Sign order
Agent

By agent the semantic role of an entity that does the action is meant, which is expressed by the predicate. In the example below, Jan is the agent.

Sign Language of the Netherlands (NGT)

(1) \text{JAN}_{\text{Agent}} \text{FOOTBALL}

‘Jan is playing football’

→ also Semantic role

Agreeing verb

Agreement can be manifested in various ways. In many sign languages two types of agreeing verbs can be distinguished: directional verbs (see (1)) and locative verbs (see (2)). The former are verbs where the movement is from argument to argument (e.g. from subject to object); these verbs maximally agree with two constituents. In the latter verbs a change in location (with regard to the location of the basic form) marks the agreement, with maximally one constituent (the object).

(1) $\text{INDEX}_1 \text{ASK}_{3a}$

‘I ask her’

(2) $\text{INDEX}_1 \text{BAL}_{3a} \text{FIND}_{3a}$

→ also Directional verb and Locative verb


Agreement

Agreement is the grammatical phenomenon where there is concord between a verb and one or more parts of the sentence (subject, direct and/or indirect object, adverbial adjunct). Agreement can be found in many verbs in many sign languages. These verbs are called agreeing verbs (→ Agreeing verb). Verbs that are body-anchored often do not take agreement (→ Non-agreeing verb). In NGT, sometimes non-agreeing verbs develop over time into agreeing verbs. There is poor and rich agreement: some verbs have a poor, and other a rich verbal paradigm (→ Poor agreement and Rich agreement).

In sentences with a non-agreeing verb often an auxiliary can be used that shows the agreement. In NGT for instance this is the auxiliary aux-op (→ Auxiliary and aux-op). A serial verb can also be used as the carrier for agreement (→ Serial verb). The auxiliary can also be used in combination with an agreeing verb (→ Auxiliary).
Usually a sign verb can agree with maximally two arguments. In the verb **give** these are the subject and the indirect object of the sentence. For NGT **give** it is obligatory that the classifier for the direct object (that which is given) is shown in the verb, but in VGT for instance, this is optional. Some researchers assume that the realization of this classifier is also a form of agreement. In this view the verb **give** can thus agree with maximally three arguments: the subject, the indirect object and the direct object.

Agreement also occurs in spoken language and is manifested in many ways. There can be congruence in number and person between the finite form of the verb and the subject in contextual flexion, or there can be correspondence between an antecedent and its relative pronoun in relative clauses or a relation in the form of an adjective and the gender of the noun. An important difference between spoken language and sign languages is that spoken languages do not allow for both types of agreement (poor and rich). For instance, if a language has poor agreement, this is true for all verbs.

→ also Agreement carrier

Costella (2015) for LSE

**Agreement carrier**

In NGT there are two types of agreement carriers: the auxiliary **op** and a few serial verbs. Serial verbs can be considered as auxiliaries too on the basis of their function. An auxiliary must always be used together with a main verb and its only function is to carry agreement (**→ Auxiliary and aux-op**). The serial verb occurs together with the main verb in the same sentence and its function is to carry agreement for the main verb. So this serial verb has the same function as the auxiliary **op** (**→ Serial verb**).

→ also Agreement

**Allomorphy**

Allomorphy is a phenomenon, which comprises different forms of the same bound morpheme. An example of such a variation in the area of derivation in Dutch is allomorphy in the formation of diminutives. In Dutch there are five variants of diminutives: **huisje, boonje, raampje, koninkje en ringetje** (respectively: little house, bean, window, king and ring). Those variants have a phonological condition, because the form of the suffix is determined by the phonological structure of the basic word (**huis, boon, raam, koning** and **ring**). Something similar can be observed in sign languages. In Israeli Sign Language (ISL) the bound negation morpheme **without** is signed with one hand or with two, depending on the previous sign. This is called phonological conditioning, as can be seen in Figure 1.
Allophone

A variant of a phoneme is called an allophone. The big difference between the two concepts is that a phoneme makes a distinction in meaning, and an allophone does not. This is true both for signed and spoken languages. However, that does not mean that the conditions that define allophones in spoken languages are the same as in sign languages. For instance, there are different ways to pronounce the phoneme /t/ in English. Usually this consonant is articulated in alveolar position (as in the word eight). In the word eighth, however, this consonant is articulated in dental position, influenced by the place of articulation of the following sound th. These are called the alveolar en dental allophones of the phoneme /t/.

About the conditions for the occurrence of allophones in sign languages not much is known. It is assumed that there are allophones in handshapes. Thus the \( \text{\textcircled{c}} \)-hand and the \( \text{\textcircled{c}} \)-hand could be allophones of the \( \text{\textcircled{c}} \)-hand and the \( \text{\textcircled{c}} \)-hand respectively. There is only a phonetic difference and this difference seems to be predictable on the basis of other features of the same sign: for instance, if someone wants to sign in NGT \( _1 \text{visit}_2 \) ‘I visit you’ then the \( \text{\textcircled{c}} \)-hand is used. If he wants to sign \( _2 \text{visit}_1 \) ‘you visit me’, where the fingertips touch the torso of the signer, it would be a physical challenge to use the \( \text{\textcircled{c}} \)-hand. So the handshape is changed into the \( \text{\textcircled{c}} \)-hand, which is an allophone. A certain
allophonic handshape can thus be predicted on the basis of other phonological features of the sign. An allophone is a particular kind of phonetic variant (→ Phonetic variant).

→ also Basic element and Phoneme

**Allophonic handshape**

This is a handshape in a sign that is a phonetic variant to the basic form of a sign, which does not lead to a change in meaning, i.e. a certain form of phonetic variation that is caused by linguistic factors. Allophonic handshapes can be considered to be an allophone (phonetic variant) of the basic handshape.

→ also Allophone, Basic element and Handshape

**Alphabetic script**

In the alphabetic script every symbol represents, as it were, a sound; every symbol is thus connected to a particular sound form, but this connection is arbitrary.

→ also Manual alphabet and Writing system

**Alternating movement**

This refers to the movement that the hands make in the realization of a two-handed sign, where the movement is not symmetrical, but asynchronous (alternating), as in NGT signs bicycle and exchange.

→ also Movement and Two-handed sign

**American Sign Language**

American Sign Language (ASL) is the national sign language of the United States, but this sign language has only been officially recognized in some of the states. Many states in the US have laws that recognize the ASL as a ‘foreign language’ for educational purposes. Other states recognize ASL as instruction language in education. ASL is used these days by large groups of people in the United States, in the English speaking part of Canada and in parts of Mexico.

→ also Recognition of sign languages


**Anaphor**

This is a pronoun, which refers back to a nominal constituent (the antecedent) that is mentioned elsewhere in the linguistic context.

→ also Anaphoric reference and Pronominalization
Anaphoric reference

This is a form of pronominalization where a pronoun (the anaphor) refers to a nominal constituent (the antecedent) that is mentioned elsewhere in the linguistic context. The antecedent and the anaphora have the same referent: they refer to the same entity. In this aspect there is a huge difference between signed and spoken languages. Compare the following three sentences in English.

*English*

(1) The student shamefacedly told us that he had not made his homework.
(2) The woman told us that she had bought a dog
(3) Jan told Piet that he had to go home

In these three sentences the pronouns in bold have a referring function. When taking a closer look at these sentences, that it seems obvious that the anaphora in (1) refers to the antecedent the student mentioned earlier. In the same manner in (2) the anaphora can refer to the woman (other possibility: another, not mentioned female entity). In (3) the anaphora refers to Jan, Piet or an earlier mentioned male entity. In sign languages it is also possible to refer to earlier mentioned entities. These are first localized in the syntactic space (see (4)). Subsequently it is possible to refer to these locations (see (5)).

*Sign Language of the Netherlands (NGT)*

(4) MAN INDEX\textsubscript{3a1} WOMAN INDEX\textsubscript{3a2} THEY-TWO\textsubscript{3a1} INSTITUTE WORK \textsubscript{3a1} THEY-TWO\textsubscript{3a2}
   ‘The man and the woman work at the Institute’
(5) INDEX\textsubscript{3a1} LINGUISTICS TEACH INDEX\textsubscript{3a2} DEAF CULTURE TEACH
   ‘He teaches linguistics, she Deaf culture’

Here there is also pronominalization and this form of reference is similar to the anaphoric reference in spoken language. In the sign language sentence in (5), however, both entities are, as it were, visually represented by localization in the syntactic space. This form of reference is not only anaphoric, but also deictic in nature. Therefore it has been proposed that in sign languages it is better to compare this type of reference to indicative pronouns than to personal pronouns.

→ also Localization and Pronominalization


Anecdotal evidence

When evidence for phenomena in child language is obtained by parental anecdotes about the language use of their children, or by chance observations of a researcher, this is called anecdotal evidence. This appears to be a not too reliable way to collect language
facts. The memories of the informant can be subjective or obscured by the course of
time. However, this way of collecting data can be very usable, when sound question-
naires are used and the informants are sufficiently instructed by the researchers.

**Annotation**

Linguistic annotation covers any descriptive or analytic notations applied to raw lan-
guage data. The basic data may be in the form of time functions – audio, video and/or
physiological recordings, or it may be textual.

→ also ELAN, SignStream™ and iLex

📖 Bird & Liberman (2000)

**Antecedent**

This concept plays both a role in anaphoric reference and in complex sentences with a
relative clause. In the first case the antecedent is the nominal constituent to which the
anaphor refers (→ Anaphoric reference). In the second case the concept antecedent is
used for the noun to which the relative pronoun (→ Relative pronoun) and the relative
clause relate.

→ Localization and Relative clause

**Anticipation**

With anticipation is meant a mistake in sign languages where an element (usually a
noun or a verb) occurs too early in an utterance. This type of mistakes also happens in
spoken languages in slip of the tongue.

→ Handshape anticipation, Slip of the hand and Slip of the tongue

**Antonymy**

When signs or word have opposite meanings this is called antonymy. Examples are
**light** and **dark**, **black** and **white**, **good** and **evil**.

**Aphasia**

Aphasia (Greek aphasia ‘not speak’) is a language disorder that is caused by brain
damage as a consequence of an accident, a tumor or a stroke. The severity and extend
of the aphasia is also dependent on the place and the degree of the brain damage and
the earlier language capacity. There are different types of aphasia that in this lexi-
con are treated under different entries. In aphasiology the following distinctions are
made: Broca’s aphasia, which is characterized by problems in language production, and Wernicke’s aphasia, which causes problems in language comprehension. In clinical practice a mixture of these two forms of aphasia is often encountered.

This major division is true both for signed and for spoken languages. Brain damage in corresponding areas causes in sign language users disorders that are similar to Broca’s and Wernicke’s aphasia in spoken language, which is an indication that these languages are situated in the same areas in the brain. Interestingly, ASL users with aphasia do understand and produce pantomime. They are also more than capable to use their hands for other purposes than language.

→ Broca’s aphasia and Wernicke’s aphasia


Aphasiology

Aphasiology is the science that studies language disorders that are caused by brain damage.

Arbitrary

An important characteristic of words in spoken languages is that the relation between the form and the meaning of a word is predominantly arbitrary. That relation is also conventional. This means that conventions have been established for the connection between form and meaning, or that this connection has emerged. In sign languages this arbitrary connection between the form (the sign) and the meaning is less evident than in spoken languages between form (the word) and meaning.

→ also Arbitrary sign and Iconic sign

Arbitrary localization

In the phenomenon localization a distinction can be made between iconic and arbitrary localization. In arbitrary localization various entities are localized in the syntactic space, but these locations are no reflection of the relations that these entities have in the real world. In this form of localization the relations as they are in the real world are not important for a good understanding of the discourse. The localization provides the possibility to refer to these localized entities by means of pronouns and verbal forms.

→ also Iconic localization
**Arbitrary sign**

When in a sign there is no evident direct connection between the form and the meaning, this sign is called an arbitrary sign. Examples of arbitrary signs in NGT are day, easy, and holiday. The same is the case for the Auslan sign sister (which is identical to the sign for sister in both BSL and NZSL) and the sign for sister in ASL. In spoken languages there is less often a connection between the form of the words and their meaning than in sign languages. The fact that the lexicon of sign languages is partly iconic has little influence on the way in which people process and produce sign language. However iconicity can have much influence on how signers, for example, coin new signs. The iconicity of signs can provide mnemonic support in the memorization of signs to people who are learning a sign language as a second language.

→ also Iconicity

**Argument**

This term is used to indicate constituents that are obligatory by the meaning of the predicate and thus cannot be omitted in the sentence without it becoming ungrammatical, unless the content of the argument is already clear by the context. Example:

*Sign Language of the Netherlands* (NGT) and *Flemish Sign Language* (VGT)

(1) tomorrow [index₁ mother] [car] buy

‘Tomorrow my mother will buy a car’

The constituents index₁ mother and car are arguments, because they cannot be left out without making the sentence ungrammatical.

Please compare to the English example in (2), in which also two arguments occur.

*English*

(2) [The woman] admires [the pianist]

If the content of the argument has been made clear by the context then omission of an argument is possible. This is called contraction (→ Contraction).

→ also Constituent function

**Artificial language**

An artificial language is a language that is invented for a specific purpose rather than having developed over the centuries as natural languages do. A large number of languages have been invented, having different purposes and widely diverse characters. A well-known example of an artificial language is Esperanto, which has a complete grammar and is nowadays learned as a first language by children.
Sign languages, like spoken languages, have developed naturally. An exception is the artificial language Gestuno that was contrived as a lingua franca to use in international communication situations where there is no common sign language. The name Gestuno is from Italian, and means 'unity in sign languages'. Gestuno consists of 1500 signs from various signed languages, but has no concrete grammar and it is not used for everyday purposes in a sign language community nor is it learned by children. That is the reason why Gestuno, contrary to Esperanto, is not considered a 'real' language.

→ also Gestuno


Aspect

Unlike tense, which is a phenomenon that usually is expressed by means of time lines, aspect deals with the internal temporal structure of an action or an event: the course of the action that is expressed in the sentence by the verb. Aspect can, amongst other things, indicate the beginning or the course of the action as in the following examples from English:

**English**

(1) John laughed  
(2) John started laughing  
(3) John was laughing

All three sentences describe an event in the past. However in (1) the event is viewed as an unanalysable whole, which is a perspective aspect. Both (2) and (3) show an imperfective aspect, because the two events have some kind of internal structure (it is still going on). In (2) an illustration of the inchoative aspect (the event is viewed as just beginning) is presented, in (3) of the progressive aspect (the event is viewed as extending over time).

In sign languages aspect is expressed predominantly by verb flexion. One of the ways for instance to indicate that a certain action happens usually, is to repeat the movement of the sign for that action.

Aspect can also be expressed in sign and spoken languages through signs/words like always/always, continuously/continuously of course. There are many different forms of aspect (→ Completive aspect, Durative aspect, Habitual aspect, Imperfective aspect, Inchoative aspect, Iterative aspect, Perspective aspect and Progressive aspect)

Aspectual adjunct

This is an adjunct that reflects the course of an action that is expressed by the verb in the sentence. An example of an aspectual adjunct is the sign ALWAYS that indicates that the action can be performed at any given time.
In NGT and VGT, for example, temporal elements like yesterday, today and tomorrow and locative clauses are usually placed in the initial sentence position. Aspectual adjuncts like always are usually placed after the subject in NGT. See Examples (1) and (2):

**Sign Language of the Netherlands (NGT) and Flemish Sign Language (VGT)**

(1) TOMORROW INDEX₁ FATHER HOUSE BUY
  ‘Tomorrow my father buys a house.’

(2) INDEX₁ ALWAYS DOG WALK
  ‘I always walk the dog.’

→ also Sign order

**Assimilation**

Assimilation is a general term that relates to the influence of a certain sign or word on the articulation of another sign or word, as a consequence of which signs or words become more similar in certain phonological aspects. Just as in spoken languages, there are various forms of assimilation in sign languages. A phonological feature (phoneme) of a sign can become the same as a phoneme in a neighboring sign (such as handshape); → Assimilation of handshape). Another possibility is that the phonological features change, but not become similar as the neighboring sign, as for example in the NGT sign for lamppost post^lamp (→ Assimilation of movement and Regressive assimilation). In sign languages and spoken languages assimilation can be regressive or progressive.

→ also Assimilation of handshape, Assimilation of location, Assimilation of movement, Coarticulation, Progressive assimilation and Regressive assimilation

**Assimilation of handshape**

When the basic element Handshape changes under the influence of a neighboring sign, this is called assimilation of handshape. In Swedish Sign Language the compound red^comb ‘cock’ is a nice example of assimilation in which one handshape adjust to another. The sign red is made with the index finger near the mouth. The sign comb-on-head has a $\text{Z}$-hand on top of the head. In the compound red^comb the handshape of the first sign anticipates the handshape of the second sign. The first sign also now takes a $\text{Z}$-hand near the mouth, which enables a movement from the mouth to the top of the hand with a $\text{Z}$-hand. This is an example of regressive assimilation of handshape.
Assimilation of location

When there is a change in the basic element Location of a sign under the influence of a neighboring sign, this is called assimilation of location. An example is the compound monk^boss ‘abbot’ in DGS. The sign for monk is made high on the back of the head. The sign boss is made in front of the body, with an upward movement. In the compound monk^boss the beginning position of boss however is on the side of the head, quite near the end position of the sign monk. We see here a change in the position of the sign boss, which changes from the front of the body to the side of the head. Also, in the compound the direction of the movement of boss changes to downward. So there is also assimilation of movement, as in the NGT compound post^lamp but then in the opposite direction.

(1) German Sign Language (DGS)

Baker et al. (2016: 201)
**Assimilation of movement**

In this form of assimilation the basic element (direction of) Movement is adapted under the influence of a sign in the immediate environment. An example is the NGT sign POST^LAMP ‘lamppost’. The compound POST^LAMP is a combination of the signs POST and LAMP, in that order. The sign POST is made with a downward movement. Because LAMP is articulated higher, the direction of the movement of the sign POST is changed from downwards to upwards in the compound POST^LAMP. This is an adaptation of the basic element Movement. The direction of the movement of the first sign (POST) is assimilated, as a consequence of which the movement of this sign ends in the same place as the second sign (LAMP) is articulated. To be complete, it should be mentioned that in NGT also the variant LAMP^POST is used, where there is no question of the mentioned assimilation. In the DGS sign MONK^BOSS ‘abbot’ there is also assimilation of movement but then in the opposite direction (→ Assimilation of location).

(1) *Sign Language of the Netherlands (NGT)*

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**Attention strategies**

Attention strategies are used during communication to draw or hold the attention of the conversational partner. This happens between adults, between adults and children and between children. In signed languages several strategies can be used, e.g. waving your hand(s) or tapping someone. This should be a light tap on the arm or the shoulder. It is also possible to bring one hand or both hands within the visual field of the other person; however, it is considered impolite when this is done too close. One can also draw a deaf person’s attention by hitting the table or stamping on the (wooden) floor, because then the vibrations can be felt. Another possibility is to flick the light switch quickly on and off.

→ also Turn taking

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Baker et al. (2016: 271)

Van den Bogaerde (2000)
Auditive aphasia

Auditive aphasia occurs when there is damage to the corpus callosum (brain stem). People with a damaged corpus callosum are not deaf, but they cannot process the language through their hearing.

→ also Aphasia

Augmentation

When a sign is enlarged, this is called augmentation. In this process a sign is simultaneously accompanied by a non-manual modifier, which functions as a bound morpheme. The non-manual feature for augmentation is ‘puffed cheeks’.

Sign Language of the Netherlands (NGT)

(1) INDEXball BALL

‘That is a big ball’

The non manual feature ‘puffed cheeks’ can also be simultaneously made with a sign that follows the noun that indicates the size of the ball (→ Size and Shape Specifier).

→ also Derivation and Diminutiviation

Auxiliary verb

Auxiliary verb signs are semantically empty and do not occur very often in sign languages. There are descriptions for German Sign Language, Greek Sign Language, Indopakistani Sign Language, Sign Language of the Netherlands and Taiwan Sign Language. In non-agreeing verbs (e.g. NGT verbs understand, love and forget), the relationship between the referents can be made clear by using an auxiliary that in itself has no meaning: AUX-OP. In this way agreement can be expressed (→ the lemma AUX-OP). Furthermore serial verbs can be used (→ Serial verbs). Most of the auxiliary verbs mark syntactic subject and object agreement and do not show other grammatical features like aspect. These functional devices have evolved in order to compensate for the ‘agreement gap’ left when a plain verb is the main verb of a sentence.

The most ‘grammatical’ kind is realized as an index handshape that moves from the subject to the object locus, glossed as aux for convenience. They can occur both with forward and with backwards verbs (see Example (1)).

Argentine Sign Language (LSA)

(1) JOHN₁ MARY₃ LOVE₁AUX₃

‘John loves Mary’
In spoken languages often auxiliaries are used for a different reason, for example to help form a perfective tense:

**English**

(2) The woman *has* seen the meal

(3) The meal *was* eaten by the woman

In sentence (2) the auxiliary *has* helps the past participle *seen* to form the perfect tense. In (3) the auxiliary *was* helps the past participle *eaten* to form the perfect tense in a passive sentence.

→ also aux-op, Directional verb, Non-agreeing verb and Serial verb

**AUX-OP**

A number of sign languages use an auxiliary that in itself has no meaning, to express the relation between the argument(s) and the predicate in a signed sentence. Its function is to express agreement. In DGS the auxiliary is glossed as ÜBER-PERSON. NGT uses the auxiliary aux-op as agreement carrier (→ Agreement carrier). This sign is made with a B-hands, where the back of the hand is always pointed to the location of the subject and the hand palm (at the end of the movement the tip of the finger) to the location of the object. This auxiliary agrees only with sentence parts that are [+animate]. The movement of this sign is always from the subject to the direct or indirect object. The auxiliary is always placed next to the main verb, usually directly after, and sometimes before. It is often accompanied by the mouth picture /op/ ‘on’. Example:

**Sign Language of the Netherlands (NGT)**

(1) /op/  
INDEX₁ SEARCH₁ AUX-OP₂  
‘I was looking for you’

The auxiliary can co-occur with non-agreeing verbs and with agreeing verbs, in the second case with directional or locative verbs. These auxiliaries can either be marked or unmarked for agreement. When the auxiliary and the main verb are both marked, there is double agreement, as in the next example:

**Sign Language of the Netherlands (NGT)**

(2) /op/  
MAN INDEX₃ₐ INDEX₃ₐ TEASE₁₃ₐ AUX-OP₁  
‘The man was teasing me’

→ also Auxiliary
**Avatar**

An Avatar is a computer animation that looks like a human and can be used for the production of sign language on a screen. Often texts in sign language are shown through films but downloading may require some time. Also, when the content of the film changes the film has to be remade. The avatar makes signs and follows instructions that are written in ‘computer language’. These instructions can be downloaded quickly and it is thus possible to have the avatar produce signs, for example, on the Internet. One important advantage is the fact that with the use of the avatar on Internet, for instance, signer identification is protected. The possibilities of the avatar are still being developed.

Avoidance strategy

Language learners can be insecure about certain signs or words and constructions, and out of fear of making mistakes they avoid those language forms. L2-learners are often alert about marked forms in language, such as constructions of figurative language use, which cannot be literally translated from their native tongue into the target language. Some expressions do overlap in both languages, like the expression in English *to murder somebody in cold blood*, which is the same in French: *assassiner quelqu’un de sang-froid*, and in Dutch: *iemand in koelen bloede vermoorden*. However, if this seems unlikely to the language learner, he can avoid the use of this L2-expression. Users of a signed language as a second language can also do this; for instance some constructions in NGT seem to be a literal translation of Dutch, which of course is not necessarily the case. But out of fear of making mistakes, such constructions can be avoided.
Babbling
A few weeks after birth a child, whether deaf or hearing, produces vowel-like sounds as e.g. *aaa*, *eee* and *ooo*. This is called vocalization. From the fifth month onwards children produce sounds and sound pattern in which also consonants appear and this is referred to as babbling. These productions do not have a fixed reference, so they are not yet called words, or language, but until about the eighth month, this is called 'universal babbling', as the sounds that are produced can occur in various other languages than in the language that is used in the child’s surroundings. This form of babbling also occurs both in deaf and in hearing children's productions. Following this, until the twelfth month, a change can be heard to ‘language specific babbling’. Hearing children gradually produce only sounds that belong to their mother tongue. Here there is a notable difference with deaf children, who cannot hear the sounds of the spoken language that surrounds them. In the period between eight to twelve months and thereafter, deaf children exposed to a sign language regularly make hand movements which are ‘signed babbles’. These hand movements do not have a fixed meaning, but according to some they are the precursors to the first real signs.


Backwards verbs
This is a directional verb in sign language where the movement starts at the (location in the signing space of the) object and ends at the (location of the) subject. An example is the NGT sign *FETCH*:

*Sign Language of the Netherlands (NGT)*

(1)  $\text{JAN INDEX}_{3a} \text{PIET INDEX}_{3b} \text{FETCH}_{3a}$

‘Jan is fetching Piet’

Another example is ASL and BSL *INVITE*, which is also a verb with backwards agreement for example in NGT and VGT.

*American Sign Language (ASL) and British Sign Language (BSL)*

(2)  $\text{I}_{3b} \text{INVITE}_{3a} \text{YOU}$

‘I invite you’

**Basic element**

Basic elements in sign linguistics are the meaningless building blocks of which signs are built. These building blocks have also been called parameters. Five parameters can be distinguished:

1. *Location*
   The place where a sign is made in the signing space, including the body: some signs are made on the body.

2. *Handshape*
   The handshape component of a sign. Different sign language may vary in the number of handshapes, but many sign languages have not been phonologically analyzed yet.

3. *Orientation*
   The direction to which the palm of the hand and/or the outstretched fingertips are pointing.

4. *Movement*
   The movement component of a sign. This movement can be hand-internal (often change in handshape and/or orientation) or with the whole hand or arm.

5. *Non-manual part*
   Not all signs as lexical items, have a non-manual part but when they do, it is that part which is not produced by the hand(s): facial expression, the tilt of the head or the upper body and mouth movements. Two important mouth patterns can be distinguished: mouthings (also called spoken components or word pictures) and mouth gestures (or oral component or oral adverbials or mouth arrangements). Mouthings are commonly derived (or borrowed, as some researchers call it) from the spoken language, whereas mouth gestures emerge from within the sign language. In two signs the spoken or oral component can be the only difference. Should this component be left out, then the context must make clear which meaning the sign carries.

The realization of a basic element is called a phoneme (→ Phoneme)

Boyés Braem & Sutton-Spence (2001); Van der Kooij & Crasborn (2016)

**Basic form**

It is assumed that the language user has stored one form of each sign in his mental lexicon. This is called the basic form. The realization of the sign is the phonetic form and can be different each time. Other terms for the basic form are citation form and phonological form. Signs are included in dictionaries in their citation form. A sign in citation form is made in neutral space, i.e. on or near the torso (chest, shoulder, forehead, cheek etc), or in the space just in front of the body (→ Neutral space).

→ also Basic element, Coarticulation, Phonetic variation and Phonological adaptation
Bed monologue

A bed monologue is the conversation that a child has with himself while he is lying in his bed. Particularly between ages three and four, the child has a period in which grappling with certain sentence constructions and searching for the right words stand out. In this kind of monologue in a non-communicative situation, the child tries out constructions that are difficult for it and thus produces new linguistic experiences. This can happen when the child is in bed, but also when it is awake but playing by itself. The literature gives examples of monologues in which the child tries out various color names in combination with a noun or diminutives in connection to ‘big’ and ‘little’ or for a long time practices a certain vowel set like broom or toom. There is almost do data about this phenomenon in children in sign language research but only from anecdotal evidence (→ Anecdotal evidence).

Behaviorism

Behaviorism is a theory that assumes that psychology should only deal with observable and measurable phenomena. The American psychologist John Broadus Watson (1878–1958) is considered to be the founder of behaviorism. Watson thought that looking at observable behavior and reactions of people in certain situations – not at their inner, mental states – was the only objective way to gain insights in human behavior. Emotions, according to him, were forms of behavior and could be influenced by conditioning. Behavioral reactions are to be explained by learning processes, where all behavior is seen as (a chain of) reflexes. In this model a reaction or response is always elicited by a stimulus (the Stimulus-Response model). As Behaviorism assumes that all knowledge must be linked to phenomena that can be checked empirically, it is understandable that the American linguist Chomsky had strikingly harsh criticism of the Behavior psychologist B. F. Skinner. Skinner viewed human learning, including language acquisition, as a behavioral habit formation. The oldest approach to L2 acquisition can be found in the transfer hypothesis, which is based on the insights of behaviorism (→ Transfer hypothesis).

→ also Native language competence, Plato’s problem and Skinner’s learning theory.

Bilingual community

People who regularly use two languages are called bilingual. In many parts of the world people are bilingual. Different types of bilingual communities can be distinguished:

Type 1: In the community almost everyone is monolingual but some people are bilingual;
Type 2: In the community almost everyone is bilingual;
Type 3: In the community part of the people are monolingual and another part are bilingual.

Signed languages are usually of type 3. There are a few Type 2 situations, mainly involving a Village Sign language (→ Village Sign Language).

Bilingual education
The educational results in many western countries after the (re)introduction of signs in deaf education in the 1970s were not as good as had been expected (→ Total Communication). This was followed by the idea that education for deaf children should be bilingual, i.e. both the signed language and the spoken language should be implemented in the curriculum. For this, the schools had to decide which language was to be the language of instruction as well as the point in time when the different languages were to appear in the curriculum. The sequential approach starts with sign language, and when this language was more or less acquired, begins with the spoken language. The simultaneous approach has both languages in the curriculum from the beginning. At this point in time (2015) the development of bilingual education for the deaf child is seriously endangered in many western countries by the increasing use of cochlear implants, which enables many deaf children to be placed in mainstream educational classes with hearing children, and where often no sign language is provided.

Spencer & Marschark (2010)

Bilingualism
This is the situation when two languages are used by individual or within in a community in which people regularly use more than one language. A child can acquire its two languages simultaneously, but can also become bilingual by acquiring a second language at a later age.

→ also Bilingual community, Bimodal Bilingualism and First language acquisition

Bimodal bilinguals
Bimodal bilinguals are individuals who know both a signed and a spoken language. This in contrast to unimodal bilinguals, who know two spoken languages or, less often, know two sign languages.

→ also Bilingualism and Modality

Emmorey, Borinstein, Thomson & Golan (2008)

Bimodal code-switching
This is a form of code-switching involving two languages that are expressed in different modalities, a sign language and a spoken language.

→ also Code-blending and Code-switching

Emmorey et al. (2005) for English/ASL, and Van den Bogaerde & Nortier (2006) for Dutch/NGT
Body lean
This is a small forward, backwards or sideways movement with the upper body, the shoulders or the head, which, among other things, is used to emphasize a part of the sentence with focus.

→ also Focus and Information structure

Body shift
Body shift means the turn of the trunk that the signer makes to indicate the taking of the role of another entity.

→ also Constructed action, Constructed dialogue and Role taking

Bound morpheme
This is a morpheme that cannot occur by itself as a sign or a word, but only in combination with another morpheme (a free morpheme). In many sign languages the verb give is a directional verb that has maximal agreement with two arguments: the subject and the indirect object. If, for example, the I-person gives something to the third person, this is notated as follows:

(1) \[ _1\text{GIVE}_{3a} \]

Both locations (1 and 3a) are considered bound morphemes.

Classifiers are also considered bound morpheme (→ Classifiers). A classifier handshape that is incorporated into the verb give (see (1)) can indirectly reflect the form of the handled object by showing how the object is typically held. These are called handling classifiers (→ Handling classifiers). A verb can also have a classifier handshape that is a direct reflection of a referent by reflecting the form of the subject referent. Such classifiers are called whole entity classifiers (→ Whole entity classifier).

In the above examples flexion morphemes are discussed. In the derivation of signs there are also bound morphemes. In the NGT sign for ‘small house’ it is possible to simultaneously use a non-manual modifier to indicate a smaller than usual size (diminuation). This non-manual marker has the function of a bound derivational morpheme. ASL has a negation suffix, which is a bound morpheme used to negate verb such as eat, feel and see. This suffix is a one-handed sign in which the fingers form the shape of a zero, while the hand moves outward from the signer.

American Sign Language (ASL)

(2) see-zero

‘not see at all’

→ also Allomorphism and Derivation

Aronoff, Meir & Sandler (2005)
Broca, Pierre Paul
The Frenchman Pierre Paul Broca (1824–1880) is especially known for his discovery of the relation between specific language disorders and areas of damage to the frontal lobe. Because of this the eponyms (→ Eponym) ‘Broca’s area’ and ‘Broca’s aphasia’ were coined.

→ also Broca’s aphasia

Broca’s aphasia
This form of aphasia is also called expressive aphasia or motor aphasia. For motor aphasia the cause of the language disorder can also be outside Broca’s area, in the motor cortex. For Broca’s aphasia, the cause lies in the damaged Broca’s area. People with this affliction understand what is being said and can provide an answer inside their head, but they cannot, or cannot well, express it. They have problems with grammatical relations and speak in telegraphic style without using grammatical elements like articles. It has been determined that ASL users with Broca’s aphasia sign slowly and leave out all grammatical inflections made by the location and movement components.

→ also Aphasia, Broca, Pierre Paul and Broca’s area

Broca’s area
This is an area in the left frontal lobe that has been named after the Frenchman Pierre Paul Broca, who became famous for his discovery of the connection between a certain aphasia (a language disorder) and trauma in the left hemisphere.

→ also Aphasia, Broca, Pierre Paul and Broca’s aphasia
Change in orientation

The expression ‘change in orientation’ is used when movement changes the orientation of the wrist or the lower arm, like in the two-handed NGT sign pass-away. Change of orientation can thus be part of a complex movement when considered together with path movement. In the complex NGT sign over the orientation of the palm changes during the path movement.

Figure 2. Change in orientation.

→ also Complex movement, Movement and Path movement

Character perspective

In sign languages signers have the option to refer to actions, emotions, thoughts or speech/signing through indirect reports, or directly through depictions of the entity’s actions, emotions, thoughts or feelings. This form of direct depiction is referred to as character perspective.

Hendriks (2008:169)

Child-directed communication: signing

This is adapted sign language that adults use with small children and that follows a particular pattern. Parents communicating in sign language with their child often sign more slowly, make larger signs and use more repetitions. The NGT sign PENGUIN for instance, is made by moving the body sideways two or three times, while the hands make a wagging movement at the waist. The movement of the body and of the hands can be repeated
and made slower in child directed signing. The location of a sign can be adapted, for example by making it on the body of a child or near a picture in a book. The NGT sign rabbit, for instance, is conventionally made high up on the right side of the head, but in child-directed signing can also be made near a picture of a rabbit in a book or on the head of the child. Signs are often not only made on the body of the child, but also their locations are adapted so that they are in the visual field of the child. Furthermore, the facial expression is often exaggerated in the language input to the child, a feature that can be compared to the adapted intonation in spoken language for children.

→ also Child-directed communication: speech

**Child-directed communication: speech**

This is a non-standard form of spoken language that adults used with small children. Characteristics of child-directed speech are amongst other things a high voice, exaggerated intonation patterns, short sentences in which sometimes words are left out, repetitions, many diminutives, constructions that commonly do not occur in adult language use (like Dutch slaapje doen instead of slapen ‘to sleep’) and substitution of the first person singular by the third person, in the form of a noun or a common name (like Shall daddy/Eric help you?). The use of this form of language will differ from family to family.

→ also Child-directed communication: signing

**CI**

This is a commonly used abbreviation for cochlear implant.

→ Cochlear implant

**Citation form**

This is another term for the concept basic form, phonological form or underlying form. Signs are included in sign dictionaries in their citation form.

→ also Basic form and Underlying form

**Classifier**

A classifier is a handshape (sometimes combined with a specific orientation) that, when combined with the other parameters of movement and location, forms a ‘verb of motion or location’. The classifier hand in this type of verb is a bound morpheme that reflects a form or meaning characteristic of the nominal referent. For example, a classifier hand that is incorporated in the verb sign meaning ‘give’ in many signed languages indirectly represents the form of the handled object by depicting the manner
in which that object is held. These are called handling classifiers (→ Handling classifier). When the handshape is related to the subject or object of the signed utterance, these classifiers are called whole entity classifiers (→ Whole entity classifier). A whole entity classifier is used to show the motion or location of the referent subject or object. There is still much debate among researchers about the exact function of what has been called classifiers, or more recently, ‘depicting handshapes’.
→ also Bound morpheme and Pluralization

Zwitserlood (2012)

**Classifier verb**

Many signed languages have been shown to have classifier verbs (predicates). This group of verbs classifies certain aspects or properties of the argument noun phrase. This is done by changing the phonological parameters of the handshape and/or hand orientation. The following examples are taken from DGS:

**German Sign Language (DGS)**

(1) Intransitive agentive verbs that classify their subjects:

<table>
<thead>
<tr>
<th>German phrase</th>
<th>English translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT WALK-CL_{4-legs}</td>
<td>'A cat walks'</td>
</tr>
<tr>
<td>PERSON WALK-CL_{2-legs}</td>
<td>'A person walks'</td>
</tr>
</tbody>
</table>

(2) Intransitive non-agentive verbs that classify their subjects:

<table>
<thead>
<tr>
<th>German phrase</th>
<th>English translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BALL ROLL-CL_{big}</td>
<td>'A ball rolls'</td>
</tr>
<tr>
<td>PENCIL ROLL-CL_{thin}</td>
<td>'A pencil rolls'</td>
</tr>
</tbody>
</table>

(3) Objects classified by a transitive verb:

<table>
<thead>
<tr>
<th>German phrase</th>
<th>English translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(INDEX) FLOWER _GIVE_{2-CL}_thin</td>
<td>'I give a flower to you'</td>
</tr>
<tr>
<td>(INDEX) APPLE _GIVE_{2-CL}_round</td>
<td>'I give an apple to you'</td>
</tr>
</tbody>
</table>

Glück and Pfau (1998)

**Closed class**

Signs and words belong to either a closed or an open class. A class is closed when it is not easily expanded with new forms, such as function signs and words (→ Function word/sign for examples).
→ also Open class

**Closed handshape**

Handshapes can be distinguished from each other by the distinctive features *open* and *closed*. The following are two examples of closed handshapes:

→ also Handshape
Co-articulation

Co-articulation is a phonetic variation of articulation influenced by the linguistic factor of the words or signs in its immediate environment. The NGT sign good, for example, can have different locations depending on the signs that precede or follow it. The sign is produced higher than normal when combined with a phrase such as good evening, as the onset position of the sign evening is higher in the syntactic space than the basic position of good. This is an example of what is called regressive co-articulation, as the adaptation is made to a following sign. This is comparable in spoken language to, for instance, the first sound /k/ in the word kick. This consonant is normally pronounced with the back of the tongue against the soft palate (velum). In the word kick however the onset consonant /k/ is articulated further forward.

Sometimes the influence of the context is so strong that assimilation or deletion occurs. In for instance ten billion the nasal of ten is pronounced als a [m] under the influence of the following b. Examples of deletion are postman and pumpkin when pronounced as [posman] and [pumkin].

There is the possibility that assimilation, in certain cases, can be considered co-articulation. However, generally co-articulation refers to a small adaptation in articulation, where, for example, the realization of Location or Handshape for a sign shows a slight phonetic variation from the basis form of the sign. These realizations are always of the same phoneme as in the basic form of the sign. In assimilation there is always a phonological adaption, where the realization of a basic element results in another phoneme than in the basic form of the sign.

→ also Phonetic variation and Phonological adaptation

Cochlear implant

This is an electronic prosthesis in the ear that since the 1980’s has been surgically implanted in deaf children and adults who are deaf due to damage to sensory hair cells in their cochleae. The cochlear implant, or CI, receives sounds and changes these into electric impulses that stimulate the auditory nerve, thus enabling a better perception of these sounds. The deaf children receiving this implant generally have better access to the spoken language than with traditional hearing aids, which, in turn, enables them improve their receptive and productive spoken language skills. However, this does not mean that people with a CI experience sounds in the same way as people with normal hearing.

Coda

A coda is a Child Of Deaf Adults. Originally the term Coda was only used for hearing children of deaf parents who have been raised with a sign language as their first, native language. Today, the term is also sometimes used for Deaf children of deaf parents. A newer term for young children of deaf parents is Koda (Kid of Deaf Adult).

→ also First Language Acquisition and Native language
**Code-blending**

In code-switching, a person switches between two languages. This is a linear process in the use of successive elements in spoken language, and can also occur between a spoken language and a sign language. Unique to the combing of signed and spoken language, however, is the simultaneous mixture of elements from both languages. This is seen most often in many situations in which signs are accompanied by equivalent spoken words (→ Mouthings). The use of two modalities at the same time is thus a special type of code-switching and is called code-blending.

→ also Bimodal code-switching and Code-switching

Emmorey et al. (2005) for English/ASL; Van den Bogaerde & Baker (2009) for NGT

**Code-switching**

Code-switching occurs when a bilingual alternatively uses two language in a conversation. This can occur between sentences but also between constituents. Contrary to what was thought earlier, the phenomenon appears to occur especially in the language use of people who are very fluent in both languages. This is mainly true for spoken languages. Code-switching occurs very often in the contact between deaf and hearing people, but in this situation usually the fluency in both the signed and the spoken language is not very high. If the hearing person knows no sign language, the deaf person will adapt the signing to use more spoken words during signing. The hearing person can use signs and words, either sequentially or simultaneously, to enhance communication.

→ also Bimodal code-switching, Code-blending


**Coding**

Language production follows a number of steps, during which various kinds of coding take place. When somebody wants to utter a sentence in signed or spoken language, the mental process is as follows: One will first prepare a preverbal message. This message consists of a number of concepts, to which no signs or words are yet linked. Subsequently, grammatical coding has to occur, after which the relevant lemmas are linked to the different concepts (→ Grammatical coding). When these lemmas are linked a syntactic structure is the result. The sentence is at this point not yet phonologically specified. This happens during the phonological coding process (→ Phonological coding). Subsequently the sentence is pronounced. For the production of sign language to this end various muscles are tensed in the arm, the hand and the fingers to perform the movements that are necessary to make signs. In spoken language the articulatory organs are activated that are necessary to produce spoken language. Both in the
grammatical and in the phonological coding process things can go wrong. In sign language these are called slip of the hand (→ Slip of the hand), for spoken language slip of the tongue.


Cognitive science
Cognitive science focuses on the study of cognitive skills including perception, thinking and learning as well as the use of language. Cognitive science is not so much considered to be a hard science, but rather to be interdisciplinary as it touches on various fields of science: psychology, neuroscience, intelligent technology, linguistics and philosophy.

Coherence
When in a discourse consistency is achieved through both linguistic and non-linguistic means, this is called coherence. Non-linguistic means are things like knowledge of the world necessary to perceive consistency. So coherence is a broader concept than cohesion, which is only achieved through several linguistic means (→ Cohesion). For example, when somebody is talking about a cash dispenser that swallowed his pass because he used a wrong code three times in a row, his story will not be coherent for somebody who misses the specific knowledge of the world, that banking passes are taken in to protect the customer from fraud by others.

→ also Anaphor, Contraction, Ellipsis, Paraphrasis

Cohesion
This term is often used to refer to the defining property of words as grammatical units. Sometimes it is used to refer to the internal cohesiveness of constituents. In discourse, whether it concerns a story that someone is telling in signed or spoken language, or a written text, there must be cohesion in order for the text to be comprehensible to the listener or reader. Within the scope of discourse the term cohesion is a major concept to refer to the phenomenon that different parts of sentences or larger units are linked by linguistic elements, for instance anaphoric signs or words, ellipsis, contraction, compounding and paraphrasis (→ Anaphor, Compounding, Contraction, Ellipsis, Paraphrasis). The term coherence is used in a broader sense when discourse consistency is produced through the use of both linguistic and non-linguistic means, e.g. knowledge of the world (→ Coherence).

Comment
This is another term for the concept of focus i.e. that part of a sentence which gives new information about a topic.
→ also Focus and Information structure

Communication chain
Communication chain refers to the production of a signal, the signal itself and the perception of the signal:

(1) Production Signal Perception
    Signing    hands, torso, head, face light waves eyes
    Speech     speech organs sound waves ears

Communicative competence
Communicative competence is the knowledge someone has of the rules for language use.
→ also Competence

Compensation strategy
When one cannot think of a sign or word, one can compensate for this by describing the object (paraphrasis). For example, if one cannot think of the word for the part of a device, one could describe what sort of device it is, what it is for etc. This is a kind of compensation strategy. When learning a new language, there will often be moments when one will have to use such a strategy. In learning a sign language, if one does not know a specific sign, or cannot retrieve it, it is possible to use a compensation strategy which literally translate parts of a spoken word. Two examples taken from an educational setting in the Netherlands are as follows:

Sign Language of the Netherlands (NGT)

<table>
<thead>
<tr>
<th>NGT</th>
<th>Dutch</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) HAY-FEVER</td>
<td>hooikoorts</td>
</tr>
<tr>
<td>(2) HOT-ACTION</td>
<td>op heterdaad betrappen</td>
</tr>
</tbody>
</table>

‘hay fever’
‘catch in the act’

Second language learners of Dutch, for instance, who cannot find the word hengel ‘fishing rod’ might say ‘a stick to catch fish’ or for the verb extinguish in English ‘to stop the fire with water’. Sometimes the second language learner falls back on his native language. Dutchmen learning English who cannot find the word ‘tailor’ might say clothes maker. These phenomena also occur frequently in children who are acquiring their first language (→ Neologisms).
Competence

Competence is the knowledge someone has of his language/languages. There are two types of knowledge. Knowledge about the language system is called linguistic competence. Communicative competence is the knowledge someone has about the rules for language use.

→ also Communicative competence and Linguistic competence

Complement clause

This is an argument of the predicate in the form of a subordinate clause. Transitive verbs in NGT for instance are verbs like hope, know, see and doubt. In the next examples the complement clause is between square brackets. Here the complement clause is in final sentence position (→ Extraposition). In the NGT sentences (1)–(3) the complement clause has the function of an object.

Sign Language of the Netherlands (NGT)

(1) index₁ hope [tomorrow william index₃a₃ₐVISIT₁]
    ‘I hope that William will visit me tomorrow’

(2) index₂ know [index₂ windscreen broken]
    ‘You know, don’t you, that your windscreen is broken’

(3) index₁ doubt [eric ill]
    ‘I doubt that Eric is ill’

→ also Complex sentence


Completion stage

This is the phase from about 5–9 years in first language acquisition. In this last period of language development the hearing child acquires exceptions and expands his/her vocabulary and pragmatic skills. Just as with hearing children, the acquisition of pragmatic skills in sign language by deaf children continues for a long time. Certain grammatical aspects, for instance complex sentences with sub-clauses, are acquired. During this period they also learn how to fingerspell, but there are children who learn this in an earlier phase. Furthermore their narrative skills increase by effectively using grammatical elements they learn to construe a coherent story.
**Compleitive aspect**

Aspect in sign language is frequently expressed through verb flexion. However, sometimes aspect can be manifested through the use of a lexical sign. NGT uses for instance the sign klaar ‘ready’ to add the feature completive to the action. In the next NGT sentence this aspect marker indicates that the action in the subordinate clause must be completed before the action in the main clause can happen. The sign klaar is called a perfective marker. Instead of completive aspect also perfective aspect is used.

*Sign Language of the Netherlands (NGT)*

(1) $\text{INDEX}_1 \text{ EAT READY, INDEX}_1 \text{ SLEEP}$

‘When I am through eating, I’ll go to sleep’

In the following example also the term perfective aspect can be applied. Even though no free morpheme is used to give a completive aspect to the action, the adjunct YESTERDAY and the sign SMOKE make it clear that the action is completed.

*Sign Language of the Netherlands (NGT)*

(2) $\text{YESTERDAY MAN CIGAR-SMOKE}$

‘Yesterday the man smoked a cigar’

It is also possible to add an imperfective aspect to the action (→ Imperfective aspect).

→ also Aspect

**Complex action**

This is a movement that consists of two simple movements. A path movement can be combined with a hand internal movement. The NGT sign FLOWER for instance has a path movement and simultaneously there is a hand internal movement (change from $\text{A}$-hand to $\text{E}$-hand). A path movement can also be combined with a change in orientation. In the NGT sign OVER, when the hand makes an arched movement forward the orientation of the palm changes during the path movement. Combinations of a hand internal and an orientation change hardly ever occur. The reason they speak of a complex movement is because children learning a sign language as a first language, in the beginning leave out one of the two movements.

→ also Change in orientation, Hand internal movement, Movement and Simple movement

**Complex sentence**

Contrary to simple sentences, a complex sentence has more than one predicate. In these sentences there is either coordination or subordination:
Sign Language of the Netherlands (NGT)

(1)  Coordination

\[
\begin{array}{c}
\text{bl-3a} \\
\text{FATHER INDEX} \text{3a WORK GO, SON INDEX} \text{3b SCHOOL GO}
\end{array}
\]

‘The father is going to work, the son goes to school’

(2)  Subordination

a.  \(\text{JOHN KNOW [PETER ILL]}\)

‘John knows that Peter is ill’

b.  \(\text{MARY ASK [YESTERDAY CHARLES ILL]}\)

‘Mary asks if Charles was ill yesterday’

In (1) a complex sentence is shown that consists of coordination of two main clauses. In (2) there are two examples of complex sentences in subordination. The sentences between square brackets are called subordinate clauses. Because these clauses are part of another sentence as a constituent, they are also called embedded sentences. The subordinate clauses in (2) are both object clauses. A sentence in which another sentence is embedded as a constituent is called matrix sentence. The predicate of the matrix sentence is called the matrix predicate.

In complex sentences sometimes conjunctions are used. NGT for instance has the conjunction MAAR (‘but’), which is a coordinating conjunction, and OMDAT (‘because’) and ALS (‘if’), which are subordinating conjunctions. Auslan has for example BUT and OR for coordination and BECAUSE and UNTIL for subordination. Some conjunctions in Auslan are borrowed from English, and are fingerspelled, for instance I-F. ASL has e.g. AND, PLUS (‘and’) and BUT for coordination, although sometimes it is suggested that these elements may be discourse markers (like ‘oh’, ‘well’ and the like in spoken English) rather than true conjunctions for coordination. BSL has e.g. BUT and OR as coordinating conjunctions, and IF as a subordinating conjunction. All these conjunctions have been borrowed into BSL through fingerspelling.

→  also Conjunction, Coordination and Subordination


Complex sign

This is a sign that consists of more than one morpheme (also called polymorphemic sign). In the examples below the explanation is given after the example.

1.  Compound

Sign Language of the Netherlands (NGT) and Flemish Sign Language (VGT)

(1)  SLEEP^ROOM

‘bedroom’
Here the complex sign consists of the two free morphemes SLEEP and ROOM.

2. Derivation

**Sign Language of the Netherlands (NGT)**

(2) INDEX<sub>1</sub> BALL SEE

‘I see a little ball.’

**American Sign Language (ASL)**

(3) FEEL-ZERO

‘not feel at all’

In (2) a complex sign is shown that has the free morpheme BALL and a bound morpheme in the form of a non-manual modifier as a diminutive that is articulated simultaneously with the sign BALL. In (3) is FEEL a free morpheme, and ZERO a derivation suffix.

3. Flexion

**Sign Language of the Netherlands (NGT) and Flemish Sign Language (VGT)**

(4) 1GIVE<sub>3a</sub>

Here the sign GIVE is a free morpheme. In some linguistic theories these loci 1 and 3a are bound morphemes that relate to the agreement of the verb with respectively the subject and the indirect object.

4. Incorporation

**Sign Language of the Netherlands (NGT) and Flemish Sign Language (VGT)**

(5) YESTERDAY BOOK FALL-CL: \(\overset{\text{Hand}}{\text{Hand}}\)

‘Yesterday the book fell.’

**Sign Language of the Netherlands (NGT)**

(6) INDEX<sub>1</sub> MAN INDEX<sub>3a</sub> BALL 1GIVE-CL: \(\overset{\text{Hand}}{\text{Hand}}\)

‘I give the ball to the man.’

(7) THREE-WEEK

‘Three weeks.’

In (5) a bound morpheme, viz. the whole entity classifier for BOOK in the form of a \(\overset{\text{Hand}}{\text{Hand}}\)-hand, is incorporated in the verb FALL (a free morpheme). In (6) this is done with the handling classifier for BALL in the form of a \(\overset{\text{Hand}}{\text{Hand}}\)-hand in the verb GIVE (a free morpheme). In (7) the numeral THREE (a free morpheme) is incorporated into the sign for WEEK (a free morpheme) through number-incorporation. Here the handshape in
week (星期) is replaced by the handshape for three (手), with which the movement of the sign week is made.

→ also Bound morpheme and Free morpheme

**Compound**

When two signs or two words are joined together to form a new sign or word, this is called a compound. In compounds there can be a coordinating or a subordinating relation between the two parts. Some compounds contain a head, others do not. In compounds certain changes can occur. These can be phonological (→ Phonologic adaptation) or semantic. Compounds often have a specialized meaning that develops over time. In ASL the compound bed^soft does not mean a soft bed, but *pillow*. It is thus possible to combine the sign hard with the compound pillow, see the following example:

**American Sign Language (ASL)**

(1) bed^soft hard
    ‘a hard pillow’

For spoken languages more examples can be found than for signed languages. The specialized meanings of compounds is easily illustrated in spoken languages by comparing them to non-idiomatic word groups:

**English**

     | Compound                     | Word group               |
    ---|-----------------------------|--------------------------|
(2) | a brown blackbird           | *a brown black bird       |
→   | Endocentric compound, Exocentric compound, Coordinated compound, Subordinated compound
→   | also Lexicalization

▷ Pfau (2016b)

**Conduction aphasia**

This form of aphasia is caused by damage to the connections between the areas of Broca’s and Wernicke’s. Patients who have this form of aphasia can produce language, but they are incapable to repeat what they have heard just before.

→ also Aphasia

**Conjunction**

Conjunctions form coordinating or subordinating relations between elements. In signed languages there are conjunctions, but the use differs per sign language. Usually
coordination or subordination occurs without a conjunction. In NGT coordination can either occur with or without the coordinating conjunction maar (but). The signed version of the sentence *The father goes to work, the son goes to school* can be produced without a conjunction (→ Coordinated sentence) but also with the coordinating conjunction (coordinator) maar. DGS and Auslan also know a sign conjunction but to connect two main clauses with a contrastive relation, ASL has the conjunctions and and plus, NGT and BSL also have or.

Spoken languages too have conjunctions to indicate a coordinating or subordinating relation. Compare the following sentences in English, where the conjunctions are in bold.

**English**

Coordinated

1. John is going to school by bike, **and/but** Peter by bus
2. I am going to work today by train **or** by car
3. He is staying at home today, **for** he is ill

Subordinated

4. I hope **that** you will come tomorrow
5. We do not know **whether** Peter is also going to the meeting
6. She is happy **because** you are doing well

→ also Compound sentence, Coordination and Subordination

**Connectionism learning theory**

Connectionism is a recent theory on language acquisition that stems from modern psychology. According to this theory the domains of human knowledge, like language, are neural networks. These are characterized by connections with different strengths between neurons. How well something is stored in the brain is also dependent on the frequency of the information that is offered. In Chomsky’s approach, for instance, the past tense *laughed* of the verb *to laugh* is justified by a rule that attaches the ending *-ed* to the verbal stem *laugh*. The information ‘past tense’ is linked to this. The more the person acquiring the language hears these pieces of information in the language input, the better the pattern will be fixed in his brain. This approach of language acquisition can be applied both to first and to second language acquisition.

**Connotation**

By connotation those aspects of meaning of a certain concept are meant that are to do with the situation often in combination with the social class of the language user.  
→ also Denotation and Synonymy
Consecutive bilingualism
This is another term for successive bilingualism.
→ Second language acquisition and Successive bilingualism

Consecutive language acquisition
This is another name for sequential or successive language acquisition and second language acquisition.
→ Second language acquisition

Constituent
Constituents are sign or word groups with a particular internal structure that fulfill a function in the sentence as a clause or part of a clause. Four types of constituents in both signed and spoken languages can be distinguished: nominal, adjectival, adverbial and verbal constituents. The constituents are named for the head of the constituent, the only part that can never be left out: noun, adjective, adverb and verb. The parts that specify the head are not obligatory and are called modifier. In certain cases it is possible to omit the head. On the basis of the context it must be identifiable. This is true for most sign languages and spoken languages and is called ellipsis (→ Ellipsis).
→ also Adjectival constituent, Adverbial constituent, Head of a construction, Modifier, Nominal constituent, Verbal constituent,


Constituent function
Constituents have a certain function both in sign languages and spoken languages. Three functions can be distinguished: a constituent can be argument, adjunct or predicate.
→ also Adjunct, Argument and Predicate


Constructed action
This is a signer’s use of various parts of the body – such as the hands, head, torso, or eyes – to depict the actions of one or more entities (persons, animals, objects) and taking the perspective of the entity. For instance, the signer takes the role of a tiger stalking his prey, or acts like a walking robot.
→ also Character perspective and Role-taking

Metzger (1995), Quinto-Pozos (2007), and Hendriks (2008)
**Constructed dialogue**

When a signer reports emotions, thoughts and/or speech/signing not as himself but as the person whose emotions, thoughts and speech/signing are reported (→ Character perspective), this is called constructed dialogue. There are various ways in which this can be realized, e.g. through body shift, changes in eye-gaze direction, head position or facial expression.

→ also Character perspective, Constructed action and Role-taking

Hendriks (2008)

**Content word/sign**

Content words/signs (also known as Lexical words/signs) refer to words or signs that have their own meaning independent of the context of the sentence. Content words can be nouns, adjectives, adverbs or verbs. Children, when learning their mother tongue produce mainly content words in the one-word stage of acquisition. For example, the little girl Andrea, when asked if she wants to sleep in the car, answers with all content words and uses no function words:

(1) Andrea car sleep not
    ‘Andrea does not want to sleep in the car’

Content signs are nouns (e.g. house, man), adjectives (good, funny), verbs (look-at, walk) and adverbs (maybe, tomorrow).

→ also Function word/sign and Word class

Baker & Pfau (2016)

**Context effect**

This is a phenomenon that occurs in sign and word recognition. It is a form of priming, in which a certain sign or word is recognized sooner, when in the context a sign or word has been produced that shares its meaning. In the next example someone is telling a story. In (2) any clause can be inserted.

*Sign Language of the Netherlands (NGT)*

(1) THIS MORNING INDEX₁ HENHOUSE INDEX₃₂ WALK₃₂
    ‘This morning I walked to the henhouse.’

(2) (….)

(3) INDEX₁ SEE COCK PECKING
    ‘I saw that the cock was pecking’

Because in the first sentence activation takes place of the sign HENHOUSE in the brain of the person receiving this message, the spreading of activation causes the sign COCK,
which is in the same semantic network, to be activated too. In turn this causes the sign 
cock to be recognized earlier than if the sign henhouse had not been made.
→ also Priming and Semantic network

**Contextual inflection**

This is a form of inflection that, contrary to inherent inflection, is dependent on the 
syntactic context. Agreement in sign languages is an example of contextual inflection. 
For instance, in the following NGT sentence the verb geven ‘give’ can agree with 
maximally two arguments, the subject and the indirect object (see also Argument):

**Sign Language of the Netherlands (NGT)**

(1)  Jan index3a piet index3b book 3agive3b
    ‘Jan gives the book to Piet.’

In spoken languages contextual inflection is expressed by agreement in number (sing-
ular or plural) and person (first, second and third person singular or plural):

**French**

(2)  

<table>
<thead>
<tr>
<th>Person</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Je parle</td>
<td>1 s</td>
</tr>
<tr>
<td>Tu parles</td>
<td>2 s</td>
</tr>
<tr>
<td>Il/elle parle</td>
<td>3 s</td>
</tr>
<tr>
<td>Nous parlons</td>
<td>1 p</td>
</tr>
<tr>
<td>Vous parlez</td>
<td>2 p</td>
</tr>
<tr>
<td>Ils/elles parlent</td>
<td>3 p</td>
</tr>
</tbody>
</table>

Another form of inflection in Dutch, for example, can be observed in (3): the adjective 
hoog ‘high’ only shows inflection when it has the function of a modifier (see (4a)–(4b) 
in bold) and not when it is the head of a predicate (see (3a)–(3b) in bold).

(3)  

a. De burg is hoog ‘The bridge is high’
   b. De brug is erg hoog ‘The bridge is very high’

(4)  

a. Dat is een hoge brug ‘That is a high bridge’
   b. De hoge brug was beschadigd ‘The high bridge was damaged’

→ also Agreement and Inflection

**Continuative aspect**

This is another term for durative aspect.

→ Durative aspect
**Continuous signal**

In sign and spoken languages there is a continuous signal: there are no pauses between the signs and the words, as is observed in written language, where words are separated by blank spaces. Of course there are pauses as a consequence of, for instance, word retrieval problems or between two constituents, but in other places the signs and the words smoothly follow each other. When one is listening (or looking at) one’s mother tongue or another language that is known very well, the separate signs or words are effortlessly recognized in the continuous stream. A person who does not know the language will not recognize the hand movements or the sounds as separate signs or words.

**Continuum**

This is a general term that is used in linguistics to indicate in language variation the phenomenon of one form gradually changing into another, without abrupt changes. Such a continuum can be used in different ways: geographically, diachronically but also synchronously. For dialect areas various continua are distinguished, where language forms are gradually changing. In general it is not the case that one dialect abruptly changes into another dialect that can be found a few miles further on. When looking at language change, we can see that the different stages in a language could also be interpreted as a continuum. A language evolves slowly and in, say, a period of fifty years no completely new language will develop (compare e.g. the development of the Roman languages from Vulgar Latin). However, there are languages that form an exception. Creole language, for instance, can develop in one generation from a pidgin. In this way the creole language Sranan Tongo (Surinam) evolved within half a century.

A continuum was also proposed for all the communication forms from sign language to spoken language that are the two extremes of this continuum. In such a continuum a spoken language (e.g. English) would form one end of the continuum and a signed language (e.g. ASL) at the other end. Combinations of English/ASL or words and signs are found in the middle of this continuum in various blending types (→ Code-blending). Although in the literature domains are mentioned (→ Sign Supported Speech) the boundaries between these domains are vague and undefined, so that there still may be a continuum.

**Contour Sign**

This is a specific sign that occur in most signed languages, that has the function of an adjective and that can be linked as a free morpheme to a verbal sign, and not as a bound morpheme such as the entity and handling classifiers (→ Whole entity classifier and Handling classifier). The contour sign specifies a nominal sign because its movement depicts the contour of a sign, especially the circumference of a certain object. Another
name for this sign is tracing classifier or Size and Shape Specifier (SASS) (→ Size and Shape Specifiers). For instance, a contour sign can indicate that an object is round:

*Sign Language of the Netherlands* (NGT)

(1) **Table Round**

‘The table is round.’

Zwitserlood (2003) and Pfau (2016b)

**Contra factual conditional clause**

This is a type of adverbial clause in which the situation that is expressed is real.

→ Adverbial clause of condition

**Conventional**

The relation between form and meaning in languages is not only arbitrary but also conventional: there are (tacit) agreements about the relation between form and meaning of signs and words, or this relation just emerged.

→ also Arbitrary

**Conventional Lexicon**

This is another term for Frozen Lexicon.

→ Frozen Lexicon

**Conversational implicature**

This refers to the meaning someone can give to a speech act of a conversational partner. Sometimes that meaning cannot be *directly* deduced from the speech act. Suppose someone asks her neighbor on New Year’s Eve whether or not her husband will be displaying fireworks, and the neighbor replies ‘William is in bed with a high fever’. In this conversation, whether spoken or signed, the neighbor seems not to keep to the assumption of relevance, and thus to infringe on the cooperation principle (→ Cooperation principle and Relevance assumption). And yet this is not the case. Even though the neighbor does not directly answer the question, she implies that William is too ill to get out of bed, and thus will not be able to display fireworks. The person who asked the question will have no trouble in understanding her answer, because, thanks to his knowledge of the world, he is able to relate a conversational implicature to the provided answer. With that he knows that the answer implies that William will not be displaying fireworks.
Conversational maxim of manner
This is the rule of conversation that states that for a smooth conversation the contribution of the conversational partners should be perspicuous, that it should be orderly and brief, without obscurity and ambiguity.
→ also Cooperation principle and Speech act

Conversational maxim of quality
This is the rule of conversation that says that conversational partners should speak the truth for a smooth continuation of a conversation.
→ also Cooperation principle and Speech act
Grice (1975)

Conversational maxim of quantity
This is the rule of conversation that says that conversational partners should provide enough information, in order to guarantee the smooth continuation of the conversation, but not too much – i.e. not too much or too little.
→ also Cooperation principle and Speech act

Conversational maxim of relevance
This is the conversational rule that states that conversational partners should assume, for a smooth continuation of the conversation, that the other says things that are relevant for the progress of the conversation.
→ also Cooperation principle and Speech act

Conversion
Conversion is a special form of derivation, where a sign or word changes into another lexical category without another morpheme being added. There is conversion in signed languages when two signs have exactly the same form, but belong to different word classes. However, there is no question of conversion when spoken components are omitted.

Sign Language of the Netherlands (NGT)

(1) verb noun
CARRY BAG
PUSH SHOVE
SIT CHAIR
For spoken languages it is true that in all cases it concerns forms that can be both a verb and a noun, without deciding which word class is the basic form.

**English**

(2) record, dance, hammer, cough, fall, sail, hit, love, paint, taste, walk…

→ also Derivation

**Cooperation principle**

In order to have smooth conversations, the conversational partners stick to a number of rules that are part of the cooperation principle. For instance, there is a rule called the ‘quality assumption’. This rule simply means that during communication one does not lie. According to the ‘quantity assumption’ partners in conversation provide each other with sufficient information. Suppose someone is asked whether he knows where the post office is, and he simply answers that he indeed know, then the quantity assumption is not met. The person posing the question may expect that he will also receive the correct directions. Then there is also the assumption of relevance: things are mentioned that are relevant for the continuation of the conversation.

→ also Speech act

📖 Baker & Van den Bogaerde (2012)

**Coordinate compound**

In a compound two signs or two words are joined to make another sign or word. There are compounds where the two parts are equal in the sense that there is no semantic head and no part specifying the head, like in subordinate compounds (→ Subordinate compound). Because the relation between both parts is a relation of coordination, these constructions are called coordinate compounds. Another name for these compounds is ‘copulative compounds’. In NGT the signs for *parents* and *perceive* are examples of such compounds:

**Sign Language of the Netherlands (NGT)**

(1) father^mother see^fetch

‘parents’ ‘perceive’

The compounds in (1) are exocentric because there is no part that functions as head with the other part functioning as a further specification of this head.

Many spoken language know comparable compounds. English: *bittersweet* and *washer-dryer*.

→ also Compound
Coordinate conjunction

This is a conjunction that has a coordinating function: it links two equal parts (sentences or clauses or constituents). NGT has the coordinating conjunction but.

English has and, but, or, for and other such coordinating conjunctions.

→ also Complex sentence and Conjunction

Coordination

Coordination or juxtaposition is the linking of two main clauses by means of a coordinating conjunction or a pause. Coordination in NGT is often expressed by a non-manual grammatical marker in the form of body movement. This is possible in a sentence as in (1).

Sign Language of the Netherlands (NGT)

(1) bl-3a bl-3b
   father index3a work go, son index3b school go
   ‘The father goes to work the son goes to school.’

Whilst the first clause is signed, the body of the signer slightly inclines toward location 3a. The same happens to location 3b when the second clause is signed. This non-manual grammatical marker can be left out, but then this is not coordination anymore; there are now two separate main clauses.

There are sign languages that have conjunctions, but for instance NGT only uses but (coordinating) and because (subordinating). In the following Auslan sentence the two main clauses are joined by the conjunction but:

Australian Sign Language (Auslan)

(1) father like cat but mother prefer dog
    ‘Father likes cats but mother prefers dogs.’

→ also Complex sentence

Johnston & Schembri (2007) for Auslan, and Pfau (2016a)

Corpora of sign languages

For corpus sign linguistics it is necessary that large sign language corpora can be used for linguistic research. Thanks to modern technologies, there are now several signed language corpora on Internet that can also be used for cross-linguistic research. These usually consist of a database of meta-data and film clips, often with transcriptions and/or translations written in English or any other script of a spoken language.
Corpus callosum
This is a wide, flat bundle of neural fibers that connects the two parts of the great brain. Another name is brainstem.
→ also Hemisphere

Created location
When the entities that are talked about are not physically present, and are to be located in space, locations in the syntactic space must be created. Subsequently these locations can be referred to. This is called a created location.

Creative Construction hypothesis
It is assumed in the creative construction hypothesis that second language (L2) acquisition is hardly influenced by the native language. A second language, it is thought, just as a first language uses the creative language acquisition ability of the language learner. He makes hypotheses in a creative way about the second language. These hypotheses are tested by the learner with the help of new language input, which in turn can lead to adaptations of the hypotheses. According to the supporters of this hypothesis, the developmental mistakes an L2-learner makes show many similarities to the developmental mistakes of L1-learners, and thus these cannot be traced back to structures in the mother tongue of the L2-learner. For this reason it is also sometimes called the ‘universal language acquisition hypothesis.’

Creole language
A creole language arises from a pidgin. When groups of people with different native languages, who do not know each others’ language, have to communicate with each other over a longer period of time, for instance in a situation where they have to work together, a simplified language system (restricted lexicon and grammar) can emerge, that is nobody’s native language. Such a communication system is called a pidgin. As the contact continues, the system is further developed because the lexicon is growing and simple grammatical structures emerge. When children learn such a pidgin as a mother tongue, this communication system is developed into a fully-fledged language. This is called a creole language. These are mature, natural languages. Examples of creole languages are Sranang (Surinam), Tok Pisin (New Guinea), Papiamento (Aruba, Bonaire, Curacao). Creole languages can develop in relatively short periods of time in contrast to other natural languages that developed over a long period of time.

Some researchers considered sign languages to be creole languages. They were thought to have emerged from the contact between hearing parents and their deaf
Concise Lexicon for Sign Linguistics

children. On the basis of that pidgin (mixing signs and words) and with the support of their innate language acquisition ability, the deaf children were to have developed a creole language with each other. An interesting case of homesign varieties (→ Homesigns) evolving into a fully-fledged language is Nicaraguan Sign Language; this process has been compared to the creolization processes that occurred for spoken languages.

→ also Homesigns and Innate language acquisition ability


Critical period

This term is used both in first and in second language acquisition. It is assumed that learning a first language should happen before puberty, because otherwise it will not be possible anymore to learn a first language well. In learning a second language it is also true, that the younger one begins to learn that language, the better the chance that a native speaker level will be achieved. This is especially true for phonological skills like articulation and intonation and for facial expression in signed languages. Here too the period until puberty is considered to be the critical period, in that it would be very difficult after puberty to acquire the language without an accent. However, there are people who learn a second language later in life to a very high level, including phonological skills. So it seems that the differences between first and second language acquisition on the one hand, and on the other hand differences between different L2 learners are determined, to a large extent, by factors like language aptitude, language contact, language input etc. Therefore there is actually not a critical period, not in the sense that after this period the acquisition or learning of another language would be impossible. However, it is evident that the level in which someone learns to use a new language is somehow linked to the age of acquisition of that (new) language. Research on the acquisition of ASL at different ages by deaf children has shown that when children learn ASL as a second language between the ages of 5 and 10 years, they often reach a language competence that is similar to that of native users of ASL. This is not the case when the acquisition starts after puberty.

→ also Fossilization

Deaf

Contrary to hard-of-hearing people, who can acquire spoken language with their residual hearing and with the help of hearing aids and extra efforts, deaf hardly have residual hearing and are not helped by traditional hearing aids in the acquisition of spoken language. For the communication with hearing people they therefore usually rely on the support of sign language interpreters. When these are absent, of the deaf person does not use a sign language, the deaf are dependent on speech reading. However, not all sounds/words can be read on the mouth.

The degree of hearing loss is expressed in decibels (dB). According to medical criteria someone is deaf with a hearing loss more than a certain number of decibels. However, the number of dB’s which defines deafness differs across countries. The hearing loss is established with an audiological test, through an audiogram.

People can become hard-of-hearing or deaf at all ages and there are different causes for deafness. Often the cause is unknown. People are early-deaf when they are born deaf, or turn deaf before the basis for language acquisition has been acquired. In the latter case are meant children who, at the moment of becoming deaf, have not, or only partly, acquired the spoken language. The term ‘prelingually deaf’ is not used here. In the first place, the term prelingual is used differently in language acquisition research, viz. for the period up to the first birthday. In the second place some people object to the use of the term ‘prelingually deaf’, because deaf children of deaf parents do develop a language, namely a sign language.

For people who become deaf after they have acquired a first language, the term postlingually deaf is used. People who are postlingually deaf can be divided in two categories. When someone turns deaf from one moment to the other, the term sudden-deaf is often used. When the deafness slowly occurs, after a period of increasing hearing loss, this is called late-deaf.

When the audiological definitions is followed, deaf means ‘unable to hear’. However, deafness is seen by many deaf people as a characteristic, a variation, like the colour of skin. The deaf who share this point of view usually were born deaf or became deaf at a very early age. To indicate that the characteristic ‘deaf’ is part of their identity they call themselves Deaf, with a capital ‘d’. Thus they show that they are a group of people (the Deaf community), who share a language of their own (sign language) and cultur
Concise Lexicon for Sign Linguistics

(Deaf culture). Being Deaf for them is not a handicap, but a variant besides being able to hear, of even a very positive one. Hearing people with deaf parents can consider themselves to be members of the Deaf community, on the basis of their experiences in the world they grew up in.

Deaf-blindness

People are deaf-blind when they have both a visual and an auditive impairment. The term ‘deaf-blind’ actually is a collective noun for all the variants that can occur in the combinations of hard-of-hearing/deafness and visually impaired/blind. In interaction the deaf-blind use different ways of communication, like speechreading, sign language, hands-on signing, fingerspelling in the hand, or types of Braille. Just like deafness, deaf-blindness can have different causes and can occur at any time in life. Usually at birth or at a young age an auditive or visual impairment is already present and the other impairment develops later. Both impairments however, can also be present from birth or from a young age. Both can occur later in life.

→ also Fingerspelling in the hand and Hands-on signing

Deaf community

This is the minority group of people who are early-deaf and who do not see their deafness as a handicap, but as a variety next to hearing people. They have their own sign language and their own culture (Deaf culture).

→ also Deaf Culture and Deaf

Deaf culture

People who are early-deaf, experience their deafness not as a handicap, but as a variant next to hearing. Their deafness feels like part of their identity. They call themselves Deaf, with a capital ‘d’ and thereby indicate that they are a minority group, the Deaf community, that share a language and culture of their own, with their own traditions, values and artistic expressions.

→ also Deaf

Deafhood

The term Deafhood was coined by Paddy Ladd in the early ‘90s, and has since been adopted by many Deaf people and researchers. An exact definition of the term is hard to find, but in general it refers the philosophy that Deaf people consider themselves
to be a cultural linguistic minority, that has suffered (is suffering) from the effects of colonization by the hearing majority.

Deafhood encompasses:

- The total sum of all positive meanings of the word ‘Deaf’, past, present and future
- All the largest meanings of what Sign Language Peoples have been, are, and can become.

Including: all that Deaf people have created in this world, all that they created which has been lost to sight (because of colonialism) and all that they might create in future.

Ladd (2003), Grushkin (n.d. retrieved 7 July 2013)

Declarative sentence
This is one of the three sentence types that can be distinguished. In a declarative sentence a declaration is made. Example:

_Flemish Sign Language_ (VGT)

(1) TOMORROW MAN COME
   ‘The man is coming tomorrow’

→ also Sentence type

Deictic reference
When present participants are referred to in a conversation this is called deixis. The referring words are used in a common frame of reference. Such words function to indicate issues that are talked about. In the next sentence the deictic reference is expressed by both indices (first and second person).

_Sign Language of the Netherlands_ (NGT)

(1) TONIGHT INDEX₁ INDEX₂ SEE
   ‘Tonight I’ll see you’

Other deictic elements are THIS/THAT, THESE/THOSE, HERE and NOW. For spoken Dutch this is the same.

→ also Anaphoric reference and Pronominalisation

Deletion
Deletion is a phenomenon when a linguistic element is omitted. In some two-handed signs, especially symmetrical signs as the NGT sign TRAIN the weak hand may be left out. This form of deletion is called Weak Drop (→ Weak Drop). Deletion can also
occur in syntactic context, when identical constituents in a coordinated construction are left out, which is then called gapping. In ellipsis (→ Ellipsis) deletion also occurs. Pro-drop is another form of deletion (→ Pro-drop).

**Denotation**

Denotation is the fixed, literal meaning of a concept, which is independent of the user’s situation. The word *rugby* for instance has as its central sense (its denotation) ‘a particular type of ball game’. Depending on one’s experience of this sport, rugby can be associated with for instance manliness, bawdy behaviour, etc. All these associations are part of the connotation of the word rugby.

→ also Connotation and Synonymy

**Derivation**

Derivation is the process in which a sign or word is derived from another sign or word(stem) by means of a bound morpheme. In this aspect derivation is distinguished from compounding, because in compounding the joining of two lexical items: signs or words is observed.

Schematically:

(1) **Compound**
- Sign/Word + Sign/Word -> Sign/Word
- Examples BSL: man^woman -> people

**Derivation**
- Sign/Word (stem) + Bound morpheme -> Sign/Word
- Example NGT: house+nm -> little house

In house+nm in NGT there is a stem house with the tip of the tongue just showing between tightly rounded lips, which is considered to be a bound morpheme (see also the example in (5)). This ‘tonguetip’ might also be made simultaneously with the sign following the noun indicating the size of the house (i.e. small). More examples of sequential derivation is given further on.

An important difference with inflection is that in derivation a change in word class can occur. This never happens with inflection. Another important difference between derivation and inflection is that inflection always has syntactic implications (→ Inflection) and derivation never has.

In (1) is shown the NGT sign for ‘small house’, which is the result of simultaneous derivation. Derivation can also occur sequentially. ASL has a negation suffix: a bound morpheme that is used to negate a verb. Verbs like *eat*, *feel* and *see* can be combined with this bound morpheme:
American Sign Language (ASL)

(2) see-zero

‘Not see at all’

The morpheme zero is a one-handed sign in which the fingers form a zero (0) (→ Negation suffix). ISL has a similar negation morpheme (→ Allomorph). Another example of sequential derivation in ASL is the person marker that is used after the verb (PM means person marker):

American Sign Language (ASL)

(3) act + pm ‘actor’

In order to express the feminine form ‘actress’ in ASL another manual bound morpheme is used that precedes the verb and which serves as a feminine gender marker (GM means gender marker):

American Sign Language (ASL)

(4) gm + act + pm ‘actress’

In the Examples (2)–(4) sequential derivation processes are presented. But simultaneity also occurs in derivation in sign languages, as was shown in (1). Simultaneous derivation is not only seen in diminutivation, but also in augmentation. In both processes the relevant sign is accompanied by a non-manual modifier, that functions as a morpheme. In diminutivation this is called ‘tongue-tip’, in augmentation ’puffed cheeks’.

Sign Language of the Netherlands (NGT)

(5)

INDEX₁ house see

‘I see a little house’

(6)

TOMORROW INDEX₁ FATHER house buy

‘Tomorrow my father is buying a big house’

Here, ‘tongue-tip’ and ’ballooned cheeks’ are made simultaneously with the sign that follows the noun and that refers to the small or big size of the house (e.g. little).


Descriptive grammar

In a descriptive grammar the language use of the native speakers of that language is described without judgment about certain varieties on sign or sentence level. This way of working is considered a basic principle of a scientific approach. In language classes,
for instance, it is often assumed that the interrogative sign of a wh-question in NGT is positioned at the end of the sentence. In practice, however, this interrogative sign can also be encountered in first position. In a descriptive grammar the sentence in (2) is not discarded, but accepted as a variety of the one in (1). Of course the condition is that a construction such as (2) occurs more or less regularly.

*Sign Language of the Netherlands (NGT)*

(1) \[\begin{array}{l}
\text{wh} \\
\text{TOMORROW HOUSE BUY WHO} \\
\text{‘Who is buying a house tomorrow?’}
\end{array}\]

(2) \[\begin{array}{l}
\text{wh} \\
\text{WHO TOMORROW HOUSE BUY} \\
\text{‘Who is buying a house tomorrow?’}
\end{array}\]

**Deutsche Gebärdensprache (German Sign Language)**

The Deutsche Gebärdensprache (DGS) is the national sign language of Germany. Although this country knows a strongly oral tradition, DGS was officially recognized in 2002, and since then deaf people have a legal right for an interpreter in any dealings with the government. DGS uses a one-handed finger alphabet in fingerspelling, which is derived from the French manual alphabet from the 18th century. This sign language knows diverse regional varieties. The biggest difference can be found between the sign languages of former East Germany and those of West Germany.

Leuniger & Happ (2005)

**Developmental mistakes**

The language-acquiring child finds many barriers on his way. During a certain period the child may use a range of adaptations in his language production, that do not occur in adult language and that disappear in the course of time. These forms are called ‘developmental mistakes’ and occur on syntactic, semantic, phonological and morphological levels. Well-known examples are ‘overextension’ when too many concepts are linked to one particular form, ‘under-extension’ where too few concepts are linked to a particular form and ‘overgeneralization’ where a grammatical rule is applied too broadly (→ Underextension, Overextension and Overgeneralization).

**Diachronic language description**

A diachronic description deals with the changes in a language over a certain period of time. This is in contrast to a Synchronic language description, which looks at the language at a specific point in time.

→ also Linguistics, Synchronic language description
Dialect

The term ‘dialect’ has various meanings. It can refer to any of the languages that originate from one common language, for instance the Roman dialects (Italian, Spanish), that share vulgar Latin as basic language. Usually by dialect a regional language is meant. In the sense of regional language there are also different variants of NGT (or other sign languages). So there is a standard NGT, which is taught in educational settings and for which a large number of standard signs have been established, and the NGT variants from the different regions. In general, however, those variants are not called dialects, because the differences are mainly in the lexicon, and people prefer the term NGT variants. The same holds true for other sign languages. Variants in signed language can, just as in spoken language, not only be determined by region, but also by age, ethnic group, sex, etc.

→ also Regional background and Standard language


Differentiation phase

This is the phase in first language acquisition between 2,5–5 years. In this period the hearing child begins to produce more complicated sentences, among which complex sentences. Also, the formed words become more complex in structure. The child is also developing pragmatic skills. Characteristic for this period, in which the child discovers the morphological and syntactic rules of its native language, is overgeneralization.

In the deaf child various aspects that are characteristic for the grammar of signed languages are being acquired or developed further. For instance, more and more use is made of facial expression, head and body for grammatical purposes and the child begins to use agreeing verbs, where also overgeneralization occurs.

→ also First language acquisition

Diglossia

This is a form of functional separation in languages. In some communities there is an official language, that is used in formal situations and that is no-one’s native language (called high (H)), and a language for everyday, informal situations (called Low (L)). Both languages thus have separate functions. This separation of function is called diglossia. A diglossic situation may be found in for instance German: H for High German, and L voor Swiss German. It has been suggested that Signed English is the language for formal situation, and ASL the one for informal situations, but nowadays there is enough evidence that this cannot be true, as ASL is used in lots of situations and not only in informal ones.
**Concise Lexicon for Sign Linguistics**

**Diminutivation**
This is a morphological process in which the referent of a noun is indicated to be small by means of a bound morpheme. In NGT this is done by a non-manual modifier (see (1)) in Dutch through a suffix (appeltje).

*Sign Language of the Netherlands* (NGT)

(1) _____)

INDEX\textsubscript{1} APPLE EAT

‘I am eating a small apple’

→ also Augmentation and Derivation

**Direct object**
This is a clause in the sentence. With the direct object is meant the grammatical role of the entity that is the object of the action of the predicate. In the next sentence boy is the direct object.

*Sign Language of the Netherlands* (NGT)

(1) GIRL INDEX\textsubscript{3a} BOY INDEX\textsubscript{3b} 3ATE\textsubscript{3b}

‘The girl is teasing the boy’

**Direct speech-act**
This is a speech-act in which a performative verb is used, that directly indicates what the verb entails.

*Sign Language of the Netherlands* (NGT)

(1) TOMORROW BOOK TAKE-WITH INDEX\textsubscript{1}

‘Tomorrow I’ll take the book with me’

**Directional verb**
This is one of the two types of agreeing verbs in many sign languages; the second type is locative verbs. In these verbs agreement is expressed by the movement of the verbal sign from one location to another (source to goal). There is agreement with maximally two clauses (subject and direct object, subject and indirect object, or subject and adverbal adjunct). Examples:

*Flemish Sign Language* (VGT)

(1) Subject and direct object

\_{1}TEASE\textsubscript{2}

‘I tease you’
**Sign Language of the Netherlands (NGT)**

(2) Subject and indirect object

\[ \text{JAN INDEX}_{3a} \text{ PIET INDEX}_{3b} \text{ BOOK}_{3a} \text{ GIVE}_{3b} \]

‘Jan gives Piet a book’

(3) Subject and adverbal adjunct

\[ \text{HOUSE INDEX}_{3a} \text{ GO}_{3a} \]

‘I am going home’

In these examples agreement has been maximally realized. It is also possible in VGT or NGT to realize agreement with only one argument or even to leave out agreement at all in certain situations. In the latter case the verb has the basic form. This needs to be distinguished from ‘partly directional verbs’ where agreement in part is inevitable. For instance in the case of the NGT verb *zeggen* (tell) the starting point of the sign is on the chin of the signer, so that there can be no agreement with the subject:

**Sign Language of the Netherlands (NGT)**

(4) \[ /op/ \text{ INDEX}_{2} \text{ TELL}_{2} \text{ AUX-OP}_{3a} \ldots \ldots * \text{ TELL}_{3a} \ldots \]

‘You tell him (…)’

In this type of directional verbs agreement can be completely left out too in certain cases.

In some directional verbs movement is realized from the object to the subject (→ Backwards verbs). In (4) the verb *tell* is combined with the auxiliary verb *aux-op*. Sometimes in NGT a *directional* verb is combined with this auxiliary verb, as with non-agreeing verbs. An agreeing NGT verb like *nag* for instance, can be accompanied by the auxiliary *aux-op*, where the movement of the auxiliary sign starts from the agent, the one who is nagging (→ Auxiliary and op). Furthermore pro-drop (→ Pro-drop) can often be observed with directional verbs, as in the NGT verb *visit*.

→ also Agreeing verb, Agreement, Auxiliary, AUX-OP, and Locative verb

**Discourse**

Discourse is the term used for a collection of speech-acts that form a whole, because they are connected to each other. This can refer to written texts, but also to a monologue or dialogue in a signed or spoken language. The cohesion is achieved in different ways.

→ also Cohesion
Distal
This is an anatomical term that is used in sign phonetics to indicate the distance of parts of the arm or hand, or a movement of those parts, relative to the torso. When the location is further away from that shoulder joint, this is called distal. For example, a movement of the elbow is distal relative to a movement of the shoulder, whereas a movement of the wrist or the fingers is distal relative to a movement of the elbow.
→ also Distalisation

Distalization
When signs are produced more with the distal joints of the wrist and the finger from the shoulders which are nearer (more proximal) to the body. The signer uses Distalization in a kind of signed from of whispering.
→ also Distal, Phonological simplification, Pragmatic adequacy, Proximal and Proximalization

Distinctive feature
By distinctive features the formal representations of characteristics of speech sounds are meant. These features are binary, this means they are either present or absent. For example, the feature /o/ has the characteristics [+voice], [+cont], [+round], [+back], [−low] and [−high]. This means that this vowel is voiced, i.e. is produced with vibrating vocal cords. It is also continuant, and this means that during the formation of this vowel the airstream in the mouth is never completely blocked (as in the /p/ and the /z/). The sound is pronounced with lip-rounding. The other three characteristics refer to the position of the tongue during the articulation of this vowel.

Just as phonemes of spoken languages consist of a set of distinctive features, the phonemes of the basic element Handshape are formed by the distinctive features selected fingers (for instance the 🌈-hand (1 finger) and the 🌈-hand (4 fingers) and position of fingers (bent, e.g. the 🌈-hand, spread, for example the 🌈-hand, and the opening position of the thumb in relation to the finger(s), for instance the 🌈-hand).
→ also Handshape and Phoneme

Van der Kooij & Crasborn (2016)

Ditransitive predicate
This is a three-place predicate. In the literature sometimes a dichotomy is used for predicates: intransitive (one-place) and transitive (multi-place). Others use a trichotomy: intransitive (one-place), transitive (two-place) and ditransitive (three-place).
Dominance condition

This condition entails that two-handed signs in which the hands have different hand-shapes, have two constraints:

1. when one of the hands is moving (active hand), the other hand is not (passive hand),
2. the handshape of the passive hand is selected from a restricted group. This means that not all handshape combinations are possible.

The handshape of the passive hand is usually limited to the following set: \( \frown, \smile, \heartsuit, \), \( \frown \) and \( \heartsuit \). An example is the NGT sign write, where the active hand makes a writing movement on the passive \( \frown \)-hand.

Some two-handed signs have the same handshape, but only one of the hands moves. However, the passive hand does not have to follow the dominance condition as long as the handshape of the active hand is the same. An NGT examples for this group is: agree (\( \frown \)-hands).

→ also Symmetry Condition and Two-handed sign

Dominance reversal

This is a grammatical phenomenon, where the commonly non-dominant hand becomes the dominant hand for the production of a string of signs.

Sometimes the choice for the left or the right hand is driven by locations in space that were used before to refer to something. The left hand then might refer to that which is in the left side of the space, the right hand to what was placed in the right side.

Also a change in hands can be used to first sign something, subsequently change the dominant hand to express an opinion or emotion about what was just signed. This way a contract is established between a statement, and opinions or feelings about that statement.

Finally, the other (non-dominant) hand can be used during a story to express an interjection like ‘I haven’t finished talking yet’. This way the dominant hand remains available for the story, and the other hand is used to prevent someone else to start signing.

Frishberg (1985)

Dominant hand

People usually have a preferred hand: right handed people prefer to use their right hand, and left handed people their left hand, and this is also true in the production of signs. In one-handed signs signers usually use their preferred hand. This is their dominant hand.

→ also Preferred hand, Strong hand and Two-handed sign
**Double articulation**

Double articulation can be defined as a pure articulatory phenomenon. In the way sounds and signs are produced two possibilities can emerge which contribute equally to the identity of the sound or sign. This is called double articulation. The term however can also refer to the specific characteristic of human, natural languages that words and signs by themselves, separately, have a certain meaning but in combination with other signs or words they form a complex message.

Crystal (2008)

**Downwards metaphor**

In sign languages the meaning of some signs is linked to a certain movement. Often signs with a negative meaning make a downward movement in the signing space. This is called the downwards metaphor.

→ also Figurative language use and Upwards metaphor

**Duality of Patterning**

→ Double articulation

**Durative aspect**

Aspect is very often expressed in sign languages by inflection of the verb. In most sign languages it is possible to indicate by means of verbal inflection that the action is taking place during a longer period of time. This may be manifest by repetition of the movement. Those movements may be fairly quick, but can also be slow and large (emphasizing). This is called the durative aspect. A difference with frequentative aspect is that then there are pauzes (holds) between the repetitions of the movement. Durative aspect can also be expressed lexically in many sign languages, for instance by signs like continuously, all-the-time or longtime. Durative aspect is also called habitual aspect.

→ also Aspect and Frequentative aspect

Early linguistic phase

This is the period of about 1–2.5 years in first language acquisition. The beginning of this phase is marked by the first meaningful sign or word. In the one-word phase the child begins to produce sentences where one sign or one word represents the whole phrase. Subsequently the child enters the two-word phase and will begin to make sentences that consist of two signs or words that express a certain grammatical relation (two-word sentence). Soon after this, sentences occur that consist of more than two signs or words. Characteristic for this period are omissions, replacements, overextensions and under-extensions in the language of the child. In sign languages the index gradually gains meaning, because it assumes the function of indicative and personal pronoun. It is assumed that this period is somewhat earlier in sign language acquisition because of the earlier neurological maturing of hand motor skills compared to speech motor skills.

→ also Developmental mistakes and First language acquisition

ELAN

ELAN is a professional tool for the creation of complex annotations on video and audio resources. With ELAN a user can add an unlimited number of annotations to audio and video streams. An annotation can be a sentence, word or gloss, a comment, translation or a description of any feature observed in the media. Annotations can be created on multiple layers, called tiers. Tiers can be hierarchically interconnected. An annotation can either be time-aligned to the media or it can refer to other existing annotations. The textual content of annotations is always in Unicode and the transcription is stored in an XML format. ELAN provides several different views on the annotations, each view is connected and synchronized to the media playhead.

🔗 https://tla.mpi.nl/tools/tla-tools/elan/

Ellipsis

This is an utterance in which one or more elements have been omitted, that can be ‘deduced’ from the situation or from the sentence structure. The ellipsis thus has the same effect as gapping (→ Gapping). However, in an ellipsis there is no omission in a
coordinated construction (coordination). The omitted elements in an ellipsis can sometimes be deduced from the situation in which this utterance is produced. Often it is the case that the ellipsis can be completed in different ways. Someone who signs to a bartender \textit{two beer}, or asks ‘Two beers’ is using an elliptic form, and this can be supplemented to a full utterance in various ways (Can I have two beers, please?, I would like to have two beers, etc.). It is also possible that in an ellipsis one element has already been mentioned in a certain situation and in order to bring it in focus again, it is not explicitly mentioned again, but a sentence structure is used where the conversational partner can supply the desired element himself. Thus the necessary cohesion is achieved. In the next example the signer first asks whether or not his partner in conversation wants a glass of wine, and he add that he has red wine. The sign \textit{wine} is omitted here, and so the construction in (2) is in the form of an ellipsis. The two utterances need not be used adjacent. The person who is asked the question, could ask what wine it is, or the person asking the question could communicate with someone else in between, etc.

\textit{Sign Language of the Netherlands} (NGT)

(1) \textit{\begin{tabular}{l}
\texttt{y/n} \\
\texttt{INDEX\_2 WINE WANT} \\
\texttt{‘Would you like some wine?’} \\
\end{tabular}}

(2) \textit{\begin{tabular}{l}
\texttt{RED HAVE} \\
\texttt{‘I have red (wine).’} \\
\end{tabular}}

→ also Cohesion

\textbf{Endocentric compound}

In a compound two signs or words are joined together to form another sign or word. In the next two examples compounds with a head are shown, because there is talk of a type of room and a type of boss. Such compounds are called endocentric.

(1) \textit{\begin{tabular}{l}
\texttt{SLEEP\^\textit{\texttt{ROOM}}} (NGT and VGT) ‘bedroom’ \\
\texttt{MONK\^\textit{\texttt{BOSS}}} (DGS) ‘abott’ \\
\end{tabular}}

Endocentric compounds also occur in spoken languages. In English there are also constructions like bedroom, \textit{wheelchair}, etc. In spoken language compounds exist like \textit{redskin}, \textit{paleface}, etc. These are also examples of a kind of subordinate compound, with a head on the right. However, these are not a type of skin or pale. Such compounds actually are, as a whole, a metaphor. The right part is in itself already a figure of speech for a certain entity, while the left part further specifies this image. The term ‘redskin’ was used to describe native American people by the colonists, while ‘paleface’ was a (derogatory) term for a white person used by North American Indians). The next two examples in ASL are comparable:
**American Sign Language (ASL)**

(2) \texttt{BLACK^\text{NAME}} \quad \text{‘bad reputation’}
\texttt{MIND^\text{DROP}} \quad \text{‘faint, incapacity’}

There are also exocentric compounds, in which no (semantic) head can be determined (→ Exocentric compounds).

→ also Compounds

**Entity**

That part in reality (human, animal, thing or inconcrete things like ideas and such) to which a certain language form refers to, in signed or spoken language. Another term for this concept is referent.

→ also Referent

**Eponym**

An eponym is a name of an object or phenomenon after a historical person. Hans Asperger, Paul Broca, Sergei Korsakov, James Parkinson and Carl Wernicke, for instance, are persons whose name refers to a disease or a syndrome: Asperger syndrome, Broca aphasia, the area of Wernicke, Parkinson’s disease. In the medical world there are hundreds of eponyms. In other fields too there are eponyms, for example Pullman (very comfortable train wagon (1831–1897), knickerbockers (wide knee trousers, after Diedrick Knickbocker, a ficticious author and hero in a novel by Washington Irving).

📖 Grauls (2001)

**Ethnic background**

In some forms of language variation a connection can be made with the ethnic group to which the language users belong. One example for spoken languages comes from the USA. African-Americans, for instance, appear to prefer the say \textit{She nice} instead of \textit{She’s nice} which is used by Caucasian Americans. For sign languages such examples of language variation that are influenced by the social factor ‘ethnic background’ have not been studied much, although this form of language variation could exist in the larger cities like New York and such.

→ also Language Variation

📖 McCaskill, Lucas, Bayley & Hill (2011)
Etymology
This concept can be understood in two ways: 1. For the origin and history of signs or words and 2. For the scientific discipline that studies the origin and history of signs and words.

Each sign or word in a language has its own story. Researchers of many spoken languages can rely on written sources that were written ages ago. Sign language researchers, however, lack these sources, which of course is a great handicap in the etymological research.

→ also Language change

Euphemism
Euphemisms are disguised words or sayings where something is presented more beautiful or less outspoken that it actually is. With a euphemism it is possible to disguise the real, more negative meaning of a certain idea. Many euphemisms deal with all sorts of subjects about which people rather not speak: *to pass away* for dying, *border incident* for a war between adjoining countries, *love-handles* for fat around the hips, or about issues which bring forth a certain embarrassment: *sex* (*to go to bed, to do it*), to go to the toilet (*sanitary stop, wash your hands*) that refer to the many specific actions that go together with these concepts. Professions can also be indicated by euphemisms: *rodent officer* for a rat-catcher, or *cemetery operative* for a gravedigger. In sign languages euphemisms can also occur (→ Pragmatic correctness). These are often different signs with a somewhat shallower facial expression. If one wants to avoid the harsh term *divorce* (NGT) one can use the euphemism *separate*, which is another sign with another facial expression. Another example from VGT is *now telephone index* which means ‘I am going to the toilet’. Other aspect in the use of euphemisms in sign language are fingerspelling of changing the location of a visually motivated sign like for example ‘testicles’ in BSL, which is made by moving the sign into the space in front of the signer instead of on location.

→ also Pragmatic correctness

Sutton-Spence & Woll (1998) for BSL

Exclusive interpretation of personal pronouns
In many spoken languages the context determines which referents are meant by the personal pronoun *we*. There are two possibilities:

1. the speaker and the addressee(s)
2. the speaker and a third person, without the addressee(s)
In the second case there is an *exclusive* interpretation of *we*, excluding the addressee(s), in the first case an *inclusive* interpretation of *we*, including the addressee(s). In a number of spoken languages there are separate pronouns for these two interpretations (for instance in Tokelau, a Polynesian language, and in Ecuadorian Quechua). In many sign languages there are separate signs for diverse meanings of *we*: US-TWO, US-THREE, WE-ALL, WE-AND-NOT-YOU etc. In these cases the addressee(s) can be included or excluded.

**Exocentric compound**

This is a compound without a (semantic) head. In compounds two signs or two words are joined together to create another sign or word. In the next examples are presented compounds without a head.

*Sign Language of the Netherlands (NGT)*

(1)  father^mother  see^fetch  ‘parents’  ‘notice’

*American Sign Language (ASL)*

(2)  face^strong  wrong^happen  ‘resemble’  ‘accidentally/as it turns out’

Such compounds have no head, because one cannot say that this refers to a type of father or mother or a type of strong or happen. Such constructions differ basically from endocentric compounds (→ Endocentric compound).

→ also Compounds and Endocentric compounds

**Expressive aphasia**

This is another name for Broca’s aphasia.

→ Broca’s aphasia

**Extraposition**

In sign language a subordinate clause can be moved from its normal position to final position in the sentence. This is called extraposition. In the next examples the object is placed between square brackets.

*Sign Language of the Netherlands (NGT)*

(1)  man [house] see  ‘The man sees the house.’
When the object has the form of a subordinate clause, this object clause is always placed after the verb in the main clause:

**Sign Language of the Netherlands (NGT)**

(2) \(\text{INDEX}_1 \ \text{HOPE} \ [\text{TOMORROW WILLIAM INDEX}_{3a} \ \text{VISIT}_1]\)  
‘I hope that William will visit me tomorrow.’

(3) \(\text{INDEX}_2 \ \text{KNOW} \ [\text{INDEX}_2 \ \text{WINDSCREEN BROKEN}]\)  
‘You know that your windscreen is broken.’

In English the same difference between the position of the object-noun clause and the object sentence can be found. Please compare (4) and (5):

**English**

(4) I have [something] heard  
(5) I have heard [that Peter is going to say something tomorrow]

Extraposition can also occur in spoken languages and has been thoroughly researched. It appears that in all languages this form of extraposition is obligatory. This is thus, so it seems, an universal principle that not only applies to spoken languages, but (probably) also for sign languages. This form of extraposition is very likely enforced by the way our brain works, in particular our short term memory. Please compare the following two constructions, that have the same meaning.

**English**

(6) I have heard that Peter has said that John did not go to school.  
(7) I have that Peter that John did not go to school said heard

That the utterance in (7) is incomprehensible, is caused by the fact that a new clause is begun before the previous clause is finished. Therefore the information of the unfinished clause must be kept in the short term memory. This is very hard to do. In (6), however, where the subordinate clauses are in extraposition, the clauses are each finished in turn, so that only the meaning has to be stored in short term memory. In the end meaning can be attributed to the sentence as a whole. For the *production* of such complex sentences the same is true regarding the short term memory. As mentioned before, presumably this universal principle of extraposition also goes for sign languages.
Facial expression
In general facial expression refers to the natural facial expression that all humans have. However, facial expression can also be an obligatory part of the non-manual part of a sign, and can thus achieve a grammatical function. The same is true for facial expression as a non-manual grammatical marker on sentence level, and for role-taking or constructed action.

→ also Basic element and Non-manual grammatical marker

Factual conditional subordinate clause
This is a type of conditional clause in which the expressed situation is real.

→ also Adverbial clause of condition

Figurative language
In figurative language the meaning of the language forms should not be taken literally. In BSL for example one can sign that the man is jumping up and down:

**British Sign Language (BSL)**

(1) MAN INDEX\textsubscript{3} JUMP-UP-AND-DOWN
    ‘The man jumps up and down’

This sentence can mean literally that the man is jumping up and down. In the figurative sense however the sentence means that the man is very happy:

**British Sign Language (BSL)**

(2) MAN INDEX\textsubscript{3} JUMP-UP-AND-DOWN
    ‘The man is very happy’

Diverse categories can be distinguished, but these seem mostly to apply to spoken languages. Two of these categories are discussed here: idiom and metaphor. Idioms are fixed expressions, and their meaning cannot be predicted on the basis of the separate parts (→ Idiomatic expression). Metaphors are forms of figurative language use in
which a referent, a characteristic of that referent, or something that the referent does, is compared to something else (→ Metaphor).

Schermer (2016b)

**Figure ground principle**

This is a principle that is true for locative sentences. Here the rule is, that not the subject argument is placed in first position in the signed sentence, but the largest, least mobile element. Example:

*Sign Language of the Netherlands* (NGT)

(1) **table book lie-on-cl:** (이는)

‘The book lies on the table.’

→ also Locative sentence and Sign order

**Figure of speech**

This is a deviation from normal language use in order to score a special effect. Examples of style figures are euphemisms, irony and rhetorical questions.

**Finger selection**

With finger selection is meant the choice for a certain handshape out of the five fingers of the hand. For instance, for the \( \uparrow \uparrow \)-hand and the \( \uparrow \uparrow \) -hand four fingers are selected, whereas for the \( \uparrow \downarrow \)-hand two are selected. In order to determine which fingers of a certain handshape are the selected fingers, the following three criteria are used:

1. They can make contact with body, head, other hand or other arm
2. They can be bent, closed or spread
3. They can open or close

→ also Hand internal movement and Handshape

**Fingerspelling**

In many signed languages words from the spoken language are spelled with a manual alphabet, also referred to as fingerspelling or ‘writing in the air’. Actually it is a code of the written form of the spoken language, where for each letter or syllable (Japan) a certain handshape is used. Signed languages make use of fingerspelling when a certain word, term or name has no equivalent sign, or when the signer or the conversational partner does not know that sign. Fingerspelling represents spoken language, just like a written language, and it is an often-used tool. That each handshape corresponds with a letter from the alphabet is related to the fact that many spoken languages use an
alphabetic script. Japanese sign language however, has not letter alphabet. The Japanese manual alphabet consists of a presentation of syllables because spoken Japanese uses a syllabic script (katakana and hiragana). A manual alphabet can be one-handed (e.g. for NGT) or two handed (e.g. for BSL).

→ also Fingerspelling in the hand

**Fingerspelling on the hand**

People who are deaf-blind often use fingerspelling in the hand. This system is directly derived from the common manual alphabet. The conversational partner presses or writes the letter in the hand palm of the deaf-blind person. The rule is that the right hand spells in the right hand. Although a trained person can feel the letters faster than the eye can follow, fingerspelling is a time consuming way of communication, because each word has to be spelled. An interpreter may often provide a summary of what has been said, which causes part of the information to be lost, like nuances, jokes, etc.

![Manual alphabet on the hand.](image)

**Figure 3.** Manual alphabet on the hand.

→ also Fingerspelling

**First language acquisition**

First language acquisition is a process that starts immediately after birth, or actually even before birth. As soon as a child is born, people in his direct environment begin to communicate with him. It is assumed that around the age of five the child has acquired the basis for his mother tongue, or primary language. In this acquisition process four
phases are distinguished, that will be discussed in separate articles: 1. Prelingual phase (0–1 year), 2. Early linguistic phase (1–2.5 years), 3. Differentiation phase 1 (2.5–5 years), and 4. Differentiation phase 2 (5–9 years).

Some children are offered two first languages from birth. These can be spoken languages, but also one spoken language and one signed language. This is called simultaneous language acquisition and simultaneous bilingualism, or bimodal bilingualism. It is possible that the child will acquire both languages to the same degree, but more often it is the case that one language is more dominant. Which language that is, is determined by several factors, for instance the country in which the child is reared (and its language policy), or the frequency of use of each language. For a child that is offered both spoken Dutch and Sign Language of the Netherlands, three possible situations can be described:

(1)  | Child          | Parents               |
     | deaf          | deaf (one or both)    |
     | deaf          | hearing               |
     | hearing       | deaf (one or both)    |

The moment from which each of the languages are offered to the child as well as the amount of input strongly influences the language level that can be acquired by the child. A hearing child with two deaf parents is raised in optimal linguistic conditions to acquire both languages as a first language. When the parents are bilingual, they can use sign language intensively from the start and also the spoken language. Besides this input of course the child is also often in contact with the spoken languages from other sources. The acquisition of two languages is very similar to the acquisition of one language. In the period in which the child has not yet learned to distinguish the rules of the two languages it happens that elements from both languages are combined, for instance an utterance with Dutch words and English word order. This phenomenon is called ‘transfer’ or ‘interference’, a term that is also found in the literature on foreign language acquisition. With bilingual children that acquire both a signed and a spoken language interference is also found from the spoken language and the signed language.

There are several theories on language acquisition, which will be discussed in separate articles.

→ also Connectionist theory, Functionalist theory, Nativist theory, Second Language Acquisition and Skinner’s theory


**Fixed lexicon**

This is another term for the frozen lexicon.

→ Mental Lexicon
Focus
Focus plays a role in the information structure of the sentence. The part of the sentence (or clause) with new information is called focus. Another term is comment.
→ also Information structure

Foreign language acquisition
This is a form of second language acquisition where the target language is learned in one’s own country.
→ also Second language acquisition

Formal register
In every situation there is an appropriate language register. Someone who is applying for a job will choose a more formal register than when he is joined by friends on a terrace. The choice for the signs or words will be different, but also the way in which the (sign) sentences are formulated.
→ also Pragmatic correctness

Form lexicon
It is assumed that our mental lexicon has two aspects: (1) A set of lemmas, which are abstract elements that are not phonologically specified and (2) Phonological forms that belong to the different lemmas. The first aspect is referred to as Meaning lexicon, the second as Form lexicon. How these concepts play a role in language production is described in the lemma Coding (→ Coding).
→ also Mental lexicon

Fossilization
This refers to the phenomenon that occurs when the language development of a second language learner becomes (to a certain extent) stagnated. Second language acquisition is a process of subsequent intermediate stages that are sometimes referred to as interlanguage.

It happens often that L2 acquisition stagnates, and progress is not or hardly made. The L2 learner sometimes remains ‘hanging’ in the intermediate stage, but it is also possible that the second language does progress but certain faulty forms keep being used. So fossilization can be observed in various degrees. The phenomenon often occurs in people who have learned a second language later in life. Fossilization in sign languages happens in those instances when the acquisition of sign language as a second language stagnates, and the L2 learner continues to make the same mistakes in the articulation
of signs and signed sentences. An L2 learner of Dutch, for instance, will never learn to
use the word er correctly, or continue to make mistakes in the choice of the articles de
and het ‘the’. Sometimes fossilization occurs in a very early stage. This happened for
instance in the spoken Dutch of many Turkish and Moroccan workers who emigrated
to the Netherlands, after puberty and who did not follow Dutch L2 courses and had
little input from Dutch in their environment.

**Fragment buoys**

Fragment buoys are spontaneously created buoys that have no lexically fixed form.
Their function is to demonstrate that a fragment (this can be a single sign) has a sig-
nificant role in that particular discourse. It is created by associating the meaning of a
sign with all or part of its final state of production. For example, the sign culture is
produced with two hands, where the strong hand (되었습니다) makes an arc around the weak
hand (주). The signer then leaves the strong hand in place, gazes at it and also points at
it with his weak hand, thus association the meaning ‘culture’ with the 한-hand in space.

→ also List buoys, Point buoys, POINTER buoys and THEME buoys

**Free morpheme**

This is a morpheme that can occur separately as a sign or word. In NGT for instance
two free morphemes can form a compound:

*Sign Language of the Netherlands (NGT)*

(1)  
sleep + room  → sleep^room  ‘bedroom’
head + course  → head^course  ‘main course’

→ also Bound morpheme

**Frequentative aspect**

Aspect is usually expressed in sign languages through modification of the verb. By rep-
etition of the movement of a sign, e.g. in the NGT verb watch with pauses, or holds,
in between a verbal sign is created with frequentative aspect: watch-continuously.
Another name for frequentative aspect is iterative aspect. A difference with durative
aspect is that then there are no pauses. Of course, the same meaning can be expressed
lexically with signs like again or every-time.

→ also Aspect and Durative aspect
Frozen lexicon
That part of the mental sign lexicon that contains the signs that have a fixed basic form and meaning, is called frozen lexicon.

→ Mental lexicon and Productive lexicon.

Function word/sign
A function word (also known as a grammatical word/sign) has little independent meaning, but rather expresses grammatical relationships. Examples of function words are articles, prepositions, conjunctions and auxiliaries. If one compares a sentence to a wall, then the function words/signs are the mortar that fixates the bricks of content words/signs.

Compared to spoken languages signed languages have few function signs. Some sign languages have signs for but and because. There are a few sign language that have signs for prepositions like with. ASL has signs for the conjunctions when and because. In NGT (and some other sign languages) there is an auxiliary aux-op that can be considered a function sign, because it has no lexical meaning but only a grammatical function, viz. as agreement marker (→ Auxiliary and aux-op). Serial verbs can also be considered as auxiliaries, on the basis of their function: these are agreement markers that together with the main verb occur in the same sign sentence. Their function is to carry the agreement of that main verb. This way the serial noun functions in the same way as the auxiliary aux-op.

→ also Content word/sign and Word class

Muysken (2008) and Bos (1994)

Functional learning theory
In the functional learning theory of Jerome Bruner (1915–) and Lev Vygotsky (1896–1934) language is considered to be a form of communication in a social cultural context. The adult plays an important part in the social supportive process during the language acquisition process of the child, by actively helping the child with the different aspect of the language. In this theory emphasis is put on general language stimulating factors outside the language that are contributed by the adults in the language acquisition of the child.

Vygotsky (1962, 1978)

Future tense
This is one of the tenses used in grammatical description.

→ Tense
Gapping

The deletion or leaving out of identical predicates in a coordinated construction is known as gapping. The phenomenon has the same effect in discourse as ellipsis (→ Ellipsis). In the lemmas Anaphoric references and Pronominalization the following examples were given:

Sign Language of the Netherlands (NGT)

(1) MAN INDEX\textsubscript{3a1} WOMAN INDEX\textsubscript{3a2}, THEY-TWO INSTITUTE WORK THEY-TWO
   ‘The man and the woman work at the Institute’

(2) INDEX\textsubscript{3a1} LINGUISTICS TEACH INDEX\textsubscript{3a2} DEAF CULTURE TEACH
   ‘He teaches linguistics, she Deaf culture

According to a number of native NGT signers who were presented with these sentences, the sign TEACH in the second part of the coordination in (2) cannot be omitted, i.e. in this NGT construction no gapping is allowed. This is in contrast to a similar construction in English (see translation in (2)). Please compare the next example pair:

Sign Language of the Netherlands (NGT)

(3) MAN INDEX\textsubscript{3a} WOMAN INDEX\textsubscript{3b}, THEY-TWO SHOP THEY-TWO
   ‘The man and the woman are shopping’

(4) INDEX\textsubscript{3a} COAT BUY, INDEX\textsubscript{3b} TROUSERS (BUY)
   ‘He is buying a coat, she trousers.’

In the second part of the coordination under (4) the sign BUY could be omitted. In a comparable construction in English it is also possible to (optionally) delete is buying.

→ also Coherence

Baker & Hengeveld (2012)

Gender

The biological sex (male or female) can play a role in language variation. Women sign and speak differently from men in certain respects. In Ireland, for instance, researchers found differences between the signing used in a Deaf school for girls and in a
Deaf school for boys. The same is found in Flanders (Belgium): because Flanders had separate schools for deaf girls and boys until the 1970’s lexical variation developed in VGT that was gender-bound. Some of the signs that are now common use in VGT originally were boys’ or girls’ signs.

→ also Language variation

itors Nijen Twilhaar (2014) for NGT

Generative linguistics

In generative linguistics it is assumed that every human being is born with a native language capacity, which enables him to subconsciously discover the grammar of the first language or mother tongue. With this grammar, which consists of a finite set of rules, a child from a very young age can produce infinitively diverse speech acts in his mother tongue(s). In generative linguistics the phrase ‘Plato’s problem’ is used to refer to a basic research question: How is it possible that a child, in such a relatively short period, can learn a system as complex as a first language? The term Plato’s problem is used for the problem to explain the ‘lack of input’ (→ Plato’s problem). The language input that is offered to a child that is acquiring that language is not sufficient to explain the language knowledge the child ultimately will have. The hypothesis of the native language capacity would explain the discrepancy between the language input and the language knowledge. This hypothesis would also explain why first language acquisition in children is such a quick and uniform process, whatever their intelligence.

Gestuno

This is a system of international signs that was composed and standardized in 1973 by a committee. The goal of Gestuno was to enhance communication between users of different sign languages. In its composition people tries to select the most transparent signs from diverse sign languages, so that the system would be easy to learn. The committee also published a book with approximately 1500 signs. The name Gestuno is from Italian and means: unity in sign languages. Gestuno has no concrete grammar.

→ also Artificial language

Gestures

People use certain hand gestures during speech to support their spoken language production, often without being aware of it. This non-verbal behavior is known in the literature as co-speech gesture, or simply gesture. This form of gesturing should be distinguished from conventional gestures that are not used to support speech and the meaning of which is usually well known.
An example of a conventional gesture is *good*.

*Figure 4. Conventional gesture for good.*

This gesture is used in many cultures and is made with an upturned thumb. There are also gestures in spoken languages that are more specific for one culture. Others have a meaning that is dependent on the culture it is used in, like the Jordanian gesture for *crazy*, which is made near the cheek with an open hand, and the tips of the fingers pointed upward. This gesture is also seen in the Netherlands, but there it means *tasty*. Such gestures are sometimes adopted by the local sign language and then become ‘real’ signs. This is called lexicalization of a gesture. Just like sign in sign languages, gestures are sometimes accompanied by associated facial expressions.

In the other category of gestures, co-speech gestures, are movements of the hand(s), arm(s) and the head during speech. From the different definitions that exist for this form of gestures it becomes apparent that co-speech gestures are more than movements as such. The movements can carry meaning and are made with a certain purpose. In this context it is not surprising that co-speech gestures and signs are often mentioned together. And yet these co-speech gestures need to be clearly distinguished from both conventional gestures and from sign language. It has been demonstrated that co-speech gestures are not a sign language in many different ways. For instance, contrary to sign language, gestures are non-combinatorial as are signs in sign languages; gestures cannot together form a more complex structure.

There is much research on gestures available. In the Max Planck Institute for Psycholinguistics in Nijmegen, the Netherlands, there is a large and very active group of gesture-researchers.


**Global aphasia**

In this form of aphasia very little language production is observed and a seriously impaired language comprehension.

→ also Aphasia
**Gloss**

Originally the word *gloss* refers to a notation that was written in a text, and which served to make a commentary to that text. In sign language research by a gloss is meant a word from a spoken language, often spelled in small capitals, that approximately agrees with the meaning of a sign. The gloss is the name or label (i.e. word from the spoken language) that is given to a sign. This name is chosen as much as possible in such a way that it reflects the basic meaning of the sign, but often it cannot express all the basic nuances of that sign. Glosses are used to write down signs and sign sentences. For example:

*Flemish Sign Language* (VGT)

(1) **NEXT WEEK JOHN COME**

‘Next week John will come.’

The glosses **next, week, john and come** represent the signs for *next, week, John* and *come*, but they give no information about the form of these signs.

**Goal**

With goal, the entity is meant that forms the goal (or aim) of the action that is expressed by the predicate. For example:

*Sign Language of the Netherlands* (NGT)

(1) **BOY INDEX3a SCHOOL INDEX3b-Goal 3aGO3b**

‘The boy is going to school.’

→ also Semantic role

**Grammatical coding**

This is one of the forms of coding that are required in order to express a sentence in a signed or spoken language. In grammatical coding the lemmas with their syntactic features are linked to the different concepts in the preverbal message. Thus a grammatical sentence is made that must receive a phonological coding in the next step.

→ also Coding

**Grammatical feature**

This is another term for morpho-syntactic feature.

→ Morpho-syntactic feature
**Grammatical role**

In addition to having a semantic role, a constituent can also have a grammatical role. In the sentences (1)–(5) the constituents with the Agent-role have the grammatical role of the subject: **boy woman**, **fire-man** and **children**. Another grammatical role is Object. In (2)–(4) **dog**, **book** and **door** are direct objects. In (3) **man** is an indirect object.

(1) [boy] soccer  
   ‘The boy [plays] soccer.’

(2) [boy] [dog] see  
   ‘The boy sees the dog.’

(3) [woman index3a] [man index3b] [book] 3agive3b  
   ‘The woman gives the man a book.’

(4) [fire-man index3a] [door index3b] [ax] 3abreak-down-with-ax3b  
   ‘The fire-man breaks down the door with an axe.’

(5) [children index3a] [house index3b] 3ago3b  
   ‘The children are going home.’

Comparable examples of grammatical roles can be given for many languages with one exception: many but not all languages have passive constructions. There has only been tentative research into passive constructions in signed languages and not much is known about their form. In the sentences *The boy sees the dog* and *The dog is seen by the boy* the dog has the semantic role of Patient. In both sentences the **boy** is the semantic Agent. The semantic roles of the arguments are fixed. However, these sentences show that the grammatical role of an argument can change: in the active sentence the **boy** is subject of the sentence and the **dog** direct object. In the passive sentence however, the **dog** is the subject, whereas the **man** is part of the adjunct by the **boy**.


**Grammatical word/sign**

This is another name for function word.

→ Function word/sign

**Grammaticalization**

Grammaticalization in spoken languages is often defined as a phenomenon in which autonomous words become grammatical markers. In both sign languages and in spoken languages a lexical element (a word or phrase with a lexical meaning) can in the course of time become a grammatical element. For example, the sign **finish** in NGT
originally only had a lexical function as in (1). Today, however, it can also be used with the grammatical function of an aspect marker. Its meaning then, as shown in (2) is not literally ‘done/finished/accomplished’ but it serves primarily as a function sign that marks the end of an action:

**Sign Language of the Netherlands** (NGT)

(1) *Lexical function of finish:*

> washing-up ready

‘The washing-up is done.’

(2) *Grammatical function of finish:*

> index₁ newspaper read ready, index₁ sleep

‘When I finish reading the paper, I’ll go to sleep.’

There are also other paths of grammaticalization. On the basis of data from a wide variety of sign languages, several researchers have convincingly argued that the paths taken by lexical items as they are transformed into grammatical elements are the same in signed languages and spoken languages. In more recent literature, however, the position is taken that sign languages have an additional possibility of developing grammatical markers directly from the gestures that are produced in the surrounding hearing community. In the following example from DGS the verb give is combined with the classifier handshape for long and thin objects handshape and can be seen as a grammaticalized gesture:

**German Sign Language** (DGS)

(3) *boy index₃ flower ₃give-cl(long-thin)₁*

‘The boy is giving me a flower’

→ also Aspect and Morphological change

Habitual aspect
This is another name for durative aspect.
→ Durative aspect
→ also Aspect

Hamburg Notation System for Sign Languages
Also known as HamNoSys, this is a notation system based on the Stokoe Notation System. The handshape, orientation, location and movement components of the sign can be notated with ca. 200 symbols, which constitute a Unicode font and are therefore electronically searchable. The resulting notations are more detailed (phonetic) than in some other writing systems, making them suitable for many kinds of phonological and morphological research studies as well as for descriptions of entries in sign language lexica. HamNoSys is however not so suitable for notating longer signed texts as it results in very complicated and difficult to read strings of symbols.
→ also Berkeley System, Notation system, SignWriting and Writing system

HamNoSys
HamNoSys is a notation system for signed languages and stands for Hamburg Notation System for Sign Languages.

Hand internal movement
With hand internal movements those movements of the fingers are meant when one handshape changes into another. This does not mean that any combination of two handshapes can form a hand internal movement. In hand internal movements only the position of the fingers can change, not the selection of the fingers, for instance in one-handed signs, e.g. NGT CHICKEN and TALK. This restriction is called the Selected Finger Constraint. There are also signs that combine a hand internal movement with a path movement. The NGT sign FLOWER for example combines a path movement with a hand internal movement → Complex movement).
Figure 5. NGT signs for *chicken* and *talk*.

→ also Movement and Path movement

**Handling classifier**

This is a handshape that can occur as a bound morpheme in (classifier) verbs and that reflects certain formal characteristics of the handled object in a signed sentence with a transitive verb. The classifier handshape that is incorporated in the verb *give* can indirectly represent the form of the handled object (how one is holding that object). So classifiers represent entities that are being held and/or moved; often (but not exclusively) by a human agent. For instance, when a thin object is meant, the #-hand is used. With a fairly small and round object a <hand is used.

**German Sign Language** (DGS)

(3) **BOY INDEX FLOWER GIVE-CL(long-thin)

‘The boy is giving me a flower’

→ also Classifier

**Handshape**

The handshape is one of the basic elements (or parameters) of a sign. According to recent studies there are approximately 30 meaning-distinguishing handshapes in NGT, and for ASL an estimated 40. Most sign language phonologists distinguish two relevant categories: the selected fingers (e.g. the ♥-hand (forefinger) and the †-hand (all four
fingers) and the position of the finger (bending or spreading of the fingers and the opening relation between the thumb and the selected fingers).

There are handshapes that occur in many signs and are easy to produce. These are called unmarked handshapes (→ Unmarked handshape). These often are also the possible handshapes of the passive hand in two-handed signs with an active and a passive hand. Marked handshapes in contrast are more difficult to make, and are acquired later in language acquisition, and also occur less often (→ Marked handshape).

→ also Allophonic handshape and Basic element


Handshape anticipation

This occurs in a slip of the hands, where the handshape of a following sign is also present in a preceding sign. Sometimes, however, it is hard to establish whether what is occurring is a slip of the hand or a form of assimilation, like the handshape assimilation in Swedish Sign Language that is discussed in the lemma Assimilation of handshape (→ see more under Slip of the hand). An example of such a slip of the hand is taken from DGS in the construction his/her parents, which is made first with one _sprites-hand and then with two _sprites-hand. In the slip of the hands the possessive pronoun is also signed with a _sprites-hand. The next (simplified) example is also mentioned in the literature as a slip of the hand in DGS. Please note that no self-correction occurs (xxx stands for the mistake; the target form is given between brackets).

German Sign Language (DGS)

(1) parents both xxx (sit), coffee-drink. xxx (boy) ask where my second shoe

‘Both parents are sitting (at the table), drinking coffee. The boy asks: ‘Where is my second shoe?’

The sign sit in (1) actually has a bent _sprites-hand. The sign coffee-drink has a _sprites-hand. In the slip of the hand sit (under the influence of coffee-drink) is also produced with a _sprites-hand. The sign boy in (1) in fact has a _sprites-hand. The sign ask has a _sprites-hand. In the slip of the hand the sign boy is also signed with a _sprites-hand. This possibly happens under the influence of ask and this is then handshape anticipation. Another possibility is that the mistakes occur because of the preceding sign coffee-drink that is also made with a _sprites-hand, in which case there is handshape perseveration. Of course in the second mistake both anticipation and perseveration is possible, because the slip of the hand may either be caused by coffee-drink or by ask.

→ also Assimilation of handshape and Slip of the hand

**Handshape perseveration**

This is a slip of the hand in signed languages, where the handshape of the preceding sign is also present in the following sign (→ Handshape anticipation for an example).

→ also Perseveration

**Hands-on signing**

In hands-on signing the signs from a sign language of the deaf are used for signing with deaf blind persons. In this form of signing, the deaf blind person loosely holds on to the hands of the conversational partner in order to be able to feel what the other person is signing. Another name for this is Tactical sign language. In this way, the deaf blind person can perceive most signs as clearly as normally sighted deaf persons perceive signing made in the normal signing space. In signs where mouthings or mouth gestures are also important, however, the sign can be adapted, e.g. the sign walking is adapted by making the sign on the recipient’s hand instead of in front of the body. It is also possible to localize a sign on the legs of the sitting conversational partner, instead of in neutral signing space. There are other systems of communication for Deaf blind people who cannot sign (→ Deaf blindness).

![Figure 6. Hands-on signing.](image)

Mesch (2001)
Head external relative clause

This is a relative clause in which the nominal head (the antecedent of the subordinate clause) is outside the relative clause. The sentences in (1) and (2) from DGS both show a relative clause that, in this form, has a restrictive meaning.

**German Sign Language (DGS)**

(1)  
\[\text{TOMORROW MAN}_{3a} (\text{INDEX}_{3a}) \quad [\text{RPRO-\text{-}H}_{3a} \ YESTERDAY \ \text{CAR} \ \text{BUY}] \ \text{MARRY}\]  
‘The man that bought a car yesterday, will get married tomorrow’

(2)  
\[\text{WOMAN INDEX}_{3b} \ \text{DOG} \quad [\text{RPRO-\text{-}NH}_{3a} \ \text{INDEX}_{1} \ \text{YESTERDAY} \ \text{FIND}] \ \text{WASH}_{3a}\]  
‘The woman washes the dog that I found yesterday’

The nominal heads (antecedents) MAN and DOG are outside the relative clause, which is shown by the fact that they do not fall under the scope of the non-manual grammatical marker of the sub-clause (raised eyebrows in combination with a tiny movement of the body, in the direction of the location that is linked to the nominal head). Furthermore, note in these examples that DGS has two different relative pronouns: RPRO-H for human entities (with classifier handshape for persons) and RPRO-NH for non-human entities (index handshape).

g→ also Compound sentence and Relative sub-clause

Pfau & Steinbach (2005)

Head-internal relative clause

This is a relative clause in which the nominal head (the antecedent of this clause) is in the relative clause itself. The sentences in (1)–(2) from LIS both show a restrictive relative clause.

**Italian Sign Language (LIS)**

(1)  
\[\text{[YESTERDAY MAN}_{3a} \ \text{CAR} \ \text{BUY} \ \text{PE}_{3a}] \ \text{TOMORROW} \ \text{MARRY}\]  
‘The man that bought a car yesterday, will get married tomorrow’

(2)  
\[\text{[YESTERDAY DOG}_{3a} \ \text{INDEX}_{1} \ \text{FIND} \ \text{PE}_{3a}] \ \text{WOMAN}_{3b} \ \text{WASH}_{3a}\]  
‘The woman washes the dog that I found yesterday’

Because the sentences in square brackets cannot occur independently, it is assumed that these are sub-clauses. The nominal heads (antecedents) MAN and DOG are in the relative sub-clause itself. This is evident from the fact that the scope of the non-manual
grammatical marker ‘raised eyebrows’ (\(\cap\cap\)) is over the whole section between square brackets, so also over the head. PE stands for a *manual* grammatical marker that is always in final position in the relative clause and relates to the head (PE because of the oral component /p/ that accompanies the sign).

→  also Compound sentence and Relative clause

**Head nod**

Head nodding can have various functions in sign language. It can serve to mark affirmation in a sentence (→ Affirmative head nod). It can also be used to affirm something with emphasis, but then the way it is done plays an important role. The head nod is then bigger, more pronounced.

**Head of a construction**

Constituents have an obligatory part, which is called the head (→ Constituent). This head of a word group determines what type of constituent it is. Morphological constructions, like compounds, can also contain a head. In generative linguistics it is assumed that Universal Grammar has a parameter for the position of the head in the construction, which subsequently during the first language acquisition process is filled in per language. For instance, in Dutch the head of a compound is in the right position. However, it is questionable whether this universal is also true for signed languages, because, for example, both in NGT and in VGT the head of a compound can be positioned both on the right and on the left, sometimes even for the same concept.

Compare the two following examples:

*Sign Language of the Netherlands* (NGT) and *Flemish Sign Language* (VGT)

1. **Right headed**
   - SLEEP^ROOM  ‘bedroom’
   - HEAD^DISH  ‘main course’

2. **Left headed**
   - NOSE^BLOOD  ‘bloody nose’
   - STONE^MALL  ‘brick’

In (1) a type of room or dish is described, in which the left part describes the right head. In (2) it is the other way around, although in VGT BLOOD^NOSE is not impossible (→ also Subordinate compound). It is also possible that (a part of) the right headed compounds in NGT and VGT are influenced by Dutch.

→  also Compound, Derivation and Flexion

**Hearing status**

Hearing status is used to refer to the degree a person can hear.

→  also Pragmatic correctness
**Hemisphere**

The two parts of the brain are called hemispheres. The human brain is the most complex organ. Our cognitive functions are situated here and it is the center of our sensory perceptions. The brain is covered by the skull and consists of approximately ten billion neurons (neural cells) and billions of nerve bundles that connect these neurons. On top is the great brain (cerebrum). Under that, in the back the little brain (cerebellum) is located, that is responsible for, amongst other things, our sense of balance. The grey, outer layer of the great brain is called the cortex and contains the neural cells. Under that lies the white mass that mainly consists of nerve bundles.

The great brain consists of two parts that are called the left and right hemisphere. The two parts are connected in the middle by a sheaf of nerve bundles that has the name corpus callosum. In the left hemisphere of the great brains two important areas are responsible for language: the Broca area and the Wernicke area, which lies a bit further back. Traumas or lesions in these parts of the brain lead to various forms of aphasia. Damage to other areas can also lead to language disorders. Somewhat further than Wernicke’s area lies the Gyrus angularis, which is an important link in the matching of visual and auditory information. If there is damage in this area, this usually leads to serious word retrieval difficulties in spontaneous language and in labeling objects. Problems may also occur in reading and writing.

Brain damage in similar areas of the left hemisphere in sign language users causes disorders that are just like Broca’s and Wernicke’s aphasia in spoken language. This shows that these languages must be situated in the same positions in the brain.

![Figure 7. Language areas in the brain.](image)
**Homesigns**

The phrase Homesigns refers to a form of communication used in individual families between a deaf child and its relatives. These signs often have idiosyncratic meanings and are often highly iconic. Homesign systems are not sign languages. This form of communication is usually only understood by people within the (extended) family. Homesigns consist of a set of flexible signs that are used in the home, and there is little or no actual grammar. When a large group of homesigners frequently meet, for instance in a school, then a sign language can emerge.


**Homonymy**

Both in homonymy and in polysemy several concepts are connected by one form. In homonymy the meanings do not have any connection, e.g. in the word *bear*, that not only can mean a sort of animal, but also ‘carry’. The two forms of *bear* and other homonyms often form separate lemmas in the dictionary. The two words accidentally share the same form. In polysemy however the meanings are connected, as in *plain*, which can have several meanings such as ‘clear’ and ‘true’. Here the different meanings are grouped together in the dictionary under the same lemma, because there are different meanings of one and the same word. Criteria to distinguish homonymy and polysemy however involve analytic problems and the distinction between these two remains affected by theoretical discussion.

According to some researchers there are also homonyms and polysemes in signed languages. Maybe this is true for some signed languages. The existence of homonymy and synonymy in for example NGT is open to doubt because both phenomena can be avoided by the use of mouthing.

→ also Polysemy

**Hyponymy**

In hyponymy there is a relation between the specific and general lexical item, such that the former is ‘included’ in the later. Examples of hyponymy are for instance *rose* and *flower* (the rose is a type of flower, so rose is a hyponym of flower), *oak* and *tree* (oak is a type of tree, so oak is a hyponym of tree). Spoken languages have comparable hyponyms.
Iconicity

Iconicity is involved when there is a relationship between the form of a sign or word and its meaning (→ also Motivated sign). Sometimes this relationship is not immediately evident to the language user who sees the sign for the first time, who only after learning the meaning of the sign will begin to understand the relation between form and meaning. Signed languages have different degrees of iconicity (→ Iconic sign and Transparent sign; → also Arbitrary sign).

Which sign form is used for a certain concept is not universal, but on the contrary, it is highly culturally bound. The sign for ‘water’, for example, is made differently in different sign languages. However, the form of these diverse signs depict different aspects of the concept ‘water’. As the relationship between the form has some relationship to the meaning of these signs, they all can be considered to have a certain degree of iconicity.

A sign can also change over time due to iconic considerations. An early sign for TELEPHONE was made with a turning movement with a fist handshape ( Insets) at the right side of the head. This sign was later replaced by a sign in which the hand depicts the form of a telephone receiver by placing the hand near the cheek. Still later, the sign for mobile phone appeared, which in NGT involves placing near the ear a hand representing the phone’s antenna.

The words of a spoken language have long been considered to be much more arbitrary in their relationship of form to meaning and hence less iconic. However, one does find in spoken languages a small group of words that are considered somewhat iconic in that they have some resemblance to the sounds associated with the concept, a phenomenon called onomatopoeia. In English, for example, the words like chickadee, chiffchaff and cuckoo might be related to the sounds these birds make. English verbs like hissing and growling are also sometimes considered to be onomatopoeic (→ also Motivated sign).

Some researchers (e.g. Frishberg 1975) have found that sign languages over time tend to lose their iconic aspects and become more arbitrary. More recently, researchers have been paying attention to the fact that signs which are currently considered non-iconic can, in certain contexts and for certain purposes, undergo a process of re-iconization (→ Re-iconization)

Iconic localization

On a lexical level signs can have different degrees of iconicity. On a syntactic level this phenomenon is also observed. In localization, for instance, iconic localization and arbitrary localization can be distinguished. In iconic localization a factual situation is presented in the space in front of the body. All entities in this situation can be found in locations that reflect their relation to each other in the real world.

→ also Arbitrary localization.

Iconic sign

This is a sign which shows a relation between its form and its meaning. An example is the sign for eat in many sign languages, where in front of the mouth an eating-movement with the hand is made. Sign languages know different degrees of iconicity. Signs like eat and drink are usually highly iconic. Also iconic, but to a lesser degree, are for instance NGT signs like milk or cat. In the sign milk the milking action is imitated, the sign cat depicts its whiskers, but without this information these signs cannot be guessed by non-signers. Some signs, however, are so strongly iconic that their meaning can be guessed by non-signers who do not know the meaning beforehand (→ Transparent sign).

Idiolect

A group of people can use the same language or dialect, but every individual, signer or speaker has an individual linguistic system, one's personal dialect, that is called an idiolect.

→ also Language variation

Idiomatic expression

Idioms are certain forms of figurative speech: fixed expressions, the meaning of which cannot be predicted on the ground of its separate parts, and thus have to be learned as a whole. Another name is idiomatic expression. For spoken languages there are numerous examples of figurative language use, like in the eye of the storm, kick the bucket and raining cats and dogs. In sign languages these idiomatic expressions have not been studied much so far, but for a few languages examples have been found. In NGT, for instance, there is an expression girl fish that means to flirt successfully with a girl (to score). In Flemish Sign Language the following idiom occurs: now telephone me, which means 'I am going to the bathroom'.

→ also Figurative language use and Metaphor
iLex

iLex has its roots in SyncWriter, and targets corpus-based sign language lexicography. It uses a server-client architecture, in contrast with other multimodal annotation tools such as ELAN (→ ELAN). Facilities for the use of the HamNoSys (→ HamNoSys) annotation system are embedded throughout the tool. Because of its limited documentation and complex setup, it is typically used in larger centres that collaborate with the sign language group at Hamburg University.

→ also ELAN and SignStream™

💻 http://www.sign-lang.uni-hamburg.de/ilex

Illocution

Illocution is the meaning of a language utterance as a speech act.

→ also Speech act

Imbedding

This is another term for subordination.

→ Compound sentence and Subordination

Imbedded sentence

This is another name for a subordinate clause or subordinated clause.

→ also Complex sentence

Imperative sentence

This is one of three sentence types that probably occur in almost all languages. Imperatives are, just like yes/no-questions, marked non-manually. In imperative sentences it is difficult to exactly indicate what these markings look like, because an order can vary strongly in degree. In any case the non-manual marker of this sentence type consists of a strong head nod and a certain facial expression (like furrowed brows). It is usual in these sentences to topicalize the object.

Sign Language of the Netherlands (NGT)

(1)  
   ___ t ___ imp
   BOOK, 2GIVE₁
   ‘Give me the book!’

In (1) the subject is not lexically expressed, but is marked grammatically on the verb GIVE with a bound morpheme: the beginning point of the movement on location 2
for the subject. Among others English and Dutch in imperative sentences leave the subject of the sentence out:

(2)  
\[ \text{English} \quad \text{Dutch} \]
\[ \text{Give me the book} \quad \text{Geef mij het boek} \]

→ also Sentence type

**Imperfective aspect**

When an action is described that is, as it were, still going on, this is called an imperfective aspect. This can be expressed in many sign languages by the repetition of the verb a couple of times, to indicate that the action is continuing. The facial expression and the body posture of the signer are different than in utterances where the action expressed by the verb (e.g. the smoking in Example (1)) is finished. (→ Perfective aspect).

*Sign Language of the Netherlands* (NGT)

(1)  
\[ \text{yesterday man cigar-smoke} \]
\[ \text{‘Yesterday the man was smoking a cigar’} \]

→ also Aspect

**Inchoative aspect**

Aspect can indicate the beginning or the course of an action. In the English sentence *John started laughing* the action shows an imperfective aspect, because the event has some kind of internal structure (it is still going on). Because the event is viewed as just beginning this is called inchoative aspect.

→ also Aspect

**Inclusion**

With this term is meant the inclusion in society of neglect groups on the basis of equal rights and duties. Inclusion and integration are sometimes seen as synonyms, but actually it is better to interpret these as concepts that complement each other in modern society. In the concept of integration the responsibility for adaptation lies mainly with the minority group, whereas with inclusion society adapts itself and takes steps to take away barriers that hinder social participation. Inclusion plays a role in all sorts of societal sectors.

**Inclusive education**

In inclusive education the school adapts to the pupil or student and his/her potential. Inclusive education, emphasizes the acceptance of diversity and equality. Advocates
of inclusive education support the idea to provide a child with special needs with specific support in a mainstream, regular school rather than place such children in a special needs school. Here too the difference between inclusion and integrations plays a role. Whereas in integrated education the child must adapt to the existing school environment, inclusive education desires the school to adapt to the child and his/her possibilities.

Inclusion also plays a role in bilingual education to deaf children, whether they have a right to education in their own language in a special school, or receive financial or other support in a mainstream school.

→ also Inclusion

**Inclusive interpretation of personal pronouns**

In many spoken languages (i.e. Dutch, German, English) the context makes clear which referents are meant by the personal pronoun *we*. There are two possibilities:

1. The speaker and the addressee(s).
2. The speaker and a third person, excluding the addressee(s).

In the first case we speak of an *inclusive* interpretation of *we*, including the addressee(s), in the second case of an *exclusive* interpretation of *we*, excluding the addressee(s). In an number of spoken languages there are separate pronouns for these two interpretations, for instance in Tokelau, a Polynesian language:

1. **Inclusive**
   - *ki taua/ki ta* ‘you and me’
   - *ki tatou* ‘you, me and the others’

2. **Exclusive**
   - *ki maua/ki ma* ‘me and someone else, not you’
   - *ki matou* ‘me and the others, not you’

Many signed languages have different signs for various meanings of *we*: *we-two*, *we-three*, *we-all*, *we-and-not-you*, etc. There are differences of inclusiveness and exclusion.

**Incorporation**

Incorporation is a phenomenon where a meaningful element, like a classifier handshape, a movement or a non-manual part of a sign is incorporated. For instance, it is possible to adjust signs like *hour*, *week*, *month* and *year* by incorporating a numeral. For instance, one could sign *four week*, by first signing *four* and next *week*. However, numeral incorporation is possible, and then only one sign is needed. The handshape of *week* (\(\text{\ding{195}}\)) is replaced by the handshape for the sign for 4 (4), with which the movement of the sign *week* is made.

Incorporation also occurs in spoken language. Then, two elements are not combined in the lexicon, as in derivation and compounds, but within the sentence. There
are languages in which the object occurs as a separate constituent with the verb, but can also be incorporated in the verb, which causes the verb and its object to form one constituent.  

Pfau (2016b), Zwitserlood (2012)

**Index**

Index is the Latin word for fore-finger and is used as a concept to indicate something. In signed languages the index is a pointing gesture that is commonly made with the forefinger (or index finger) and that has several different grammatical functions. One of these is the referral to present entities, like the speaker and the listener, or entities that are or have been placed in the syntactic space. Before one can refer with an index to an entity that is placed in the syntactic space, an index can be used to localize these entities. While pointing the signer usually directs his/her eye-gaze in the same direction as the pointing gesture. Each index is linked to its own location. In the sign for ‘I’, for instance, the signer points to himself, by directing the index-finger to his own body. The location on or near the body is called location 1. Pointing to location 1 is termed as index1 and is written down as INDEX1. The location near the addressee is called location 2. With index2 the signer points at and looks in the direction of the addressee and produces the personal pronoun for the second person singular ‘you’. The index to the locations slightly to the right/front (location 3a) and slightly to the left/front (location 3b), written down as INDEX3a and INDEX3b, are used for third person singular ‘he’ or ‘she’ or ‘it’. When two referents are localized closely together, one could distinguish these by marking them as INDEX3a1 or INDEX3a2.

**Indirect object**

The indirect object is a grammatical part of the sentence. The indirect object refers to an object that has a grammatical role that is only indirectly affected by the action of the predicate, in contrast to direct objects. The grammatical role of indirect object is often the beneficiary of the action, as in sentence (1) in man is beneficiary of the action of giving and thus the indirect object.

*Sign Language of the Netherlands (NGT)*

(1) INDEX1 man INDEX3a book _GIVE3a_  
‘I give the man a book’

**Indirect speech act**

This is a speech act in which no performative verb is used, as in a direct speech act.  

→ also Performative verb and Speech act
Inflection

Inflection can be found both in spoken and in signed languages. There are some similarities in both forms of languages, but there are also differences. For sign languages the following phenomena of inflection are important, and these will be discussed in separate articles: 1. Agreement, 2. Plural forms, and 3. Aspect. Inflection is an aspect that is immediately determined on the basis of the syntax, which is in sharp contrast to derivation. In plural forms the connection to syntax is less easy to discern, while aspect is more semantic in nature. There are two forms of inflection: contextual inflection and inherent inflection. In the former inflection is determined by the syntactic context, in the latter it is not.

→ also Agreement, Aspect, Contextual inflection, Inherent inflection and Plural forms.

Pfau (2016b)

Informal register

Each situation demands for a particular language register. Some sitting with his friends in a restaurant will use a more informal register than when he is applying for a job. The choice of signs or words will be different, but also the way in which the sentences are formulated.

→ also Pragmatic correctness

Information structure

There exists a certain cohesion between the structure of a sentence and its informative value, this is called information structure. In most languages new information occurs further on in the sentence, whereas known information is more up front. The part of the sentence with the new information is called comment or focus (→ Focus). The elements with the known information are called topic (→ Topic). In most spoken languages focus is thus situated near the end of the sentence, and topic is usually placed near the beginning of the sentence.

The information exchange in signed languages can be done in various ways. If, for instance, a signer wants to present new information with a new referent, then this referent needs to be introduced first. This can be done by localizing the referent in the syntactic signing space for instance with an INDEX after the sign for the referent. When later on in the conversation something is said about the referent, this referent can be referred to by an INDEX only, which is often considered to be a pronoun (→ INDEX and Pronominalization). Sign languages also use topicalization very often, with which the signer indicates that the fronted element (that contains known information, viz. the topic) is the subject of the conversation about which further information will follow.
In many sign languages constructed action (→ Constructed action) is used to transfer information in a specific form. The signer, as it were, impersonates another person (or animal or even an object) to express his thoughts, words or actions or to relay what is happening. By doing this the signer can take a certain body posture and facial expression, he can make use of body shift, look up or down to express a conversation between a grown-up and a child, or to express differences in status between two persons. It is thus possible to tell a story from the perspective of the protagonist of a story (→ Character perspective). Constructed dialogue (→ Constructed dialogue) is then comparable to the use of direct speech in spoken languages.

Baker & Van den Bogaerde (2012)

Inherent inflection
This is a form of inflexion that, contrary to contextual inflection, is not dependent on the syntactic context. A language user may chose to use the plural form of a noun, this is not dictated by the context, as in contextual inflection. In spoken languages, however, there is also a link with syntax: plural nominal forms cause the finite form of the verb to also have the plural form (→ Contextual inflection for an example). An example of inherent inflection in sign languages is aspect. This inflection, which is expressed on the verb, is not caused by one or more syntactic arguments in the sentence.
→ also Aspect and Inflection

Initialized sign
This is a sign that makes used of a handshape that corresponds to the first letter of the word equivalent in the spoken language. For instance, the sign for computer is made with a \-hand and the sign wine with a \-hand.

Innate language acquisition ability
This is the assumedly (by some linguists) innate competence to acquire and use language that every human possesses at birth and which comprises the general principles to which all languages adhere. The hypothesis of the native language capacity maintains that children are not born in a blank state, but from birth possess this competence, which is the same for every human being.

The basis for this view was developed by the American Noam Chomsky (1928–), one of the most influential linguists of the twentieth century, who is considered to be the founder of generative linguistics. His book Syntactic Structures (1957) forms the basis of this school of linguistics.
The hypothesis on the native language capacity is claimed to explain why children form the basis of their first language during the first five years of life, according to a fixed pattern and without explicitly being taught so. Of course the child needs language input for this. There is also a critical period during which the child must learn his first language (→ Critical period). Because it is assumed that the native principles are genetically anchored in a 'grammar' it is called Universal Grammar (UG). The native principles are called linguistic universals. The UG would have a number of open slots (parameters) that are differently filled per language during acquisition (→ Parameters).

One of the aims of linguistic research is to detect these universals. Such research can of course only be successful if as many languages as possible are studied. Research on sign language should make clear which universals are true for both sign and spoken languages, and whether or not there are specific universals for sign language.

→ also Plato’s problem


**Input**
This is the term used for the language offered to a child during the language acquisition process.

**Instrument**
This is the entity with which an action is done that is expressed by the predicate.
Example:

*Sign Language of the Netherlands* (NGT)

\[(1) \quad \text{JOHN INDEX} \_3a \text{ WINDOW} \_3b \text{ STONE}_{\text{instrument}} \_3a \text{ BREAK-WITH-STONE} \_3b \]

‘John broke the window with a stone’.

→ also Semantic role

**Intake**
With intake is meant the selection from the input that is made by the child during the language acquisition period.

**Integrative motivation**
This is the term that is used for (the motivation of) second language learners who want to learn the target language in order to become like the members of the target language community and thus be able to participate in their culture.

→ also Motivation
**Interference**
This is another term for the concept of transfer.
→ Transfer
→ also First language acquisition, Second language acquisition and Transfer hypothesis

**Interference Hypothesis**
This is another name for the Transfer hypothesis.
→ Transfer hypothesis

**International Sign**
This is a general concept that is not only used for the form of signing that sometimes is used as a means for common communication during international meetings. It concerns all forms of communication between deaf people with different sign language backgrounds that are used to communicate with each other. In large events a shared lexicon often emerges fast. In the West often BSL and ASL have a relatively large influence. Which signs are chosen depends, to a certain extent, on the user. International sign is definitely not International Sign Language, in the sense that is has its own fixed lexicon and a grammar of its own, like ASL, BSL or other national sign languages.

**Interpretation**
In the interpretation of linguistic output of children one could assume that the language production of the child is an exact replica of his linguistic knowledge. This is called *poor interpretation*. When one assumes that the language output of a child is not the exact reflection of his language knowledge, but that the child has far more knowledge about his primary language than appears from his language production, it is called *rich interpretation*. For example, when a child is using a sentence in telegram style, the adult, by making use of the context (e.g. the conversation and the world as experienced by the child) can imagine what the child might have meant. Then the adult makes use of rich interpretation.

**Interrogative sentence**
In all signed language interrogative sentences occur. There are two types: yes/no questions and wh-question (or question word questions).
→ also Yes/no question and Wh-question
**Intransitive predicate**

The term intransitive predicate is applicable to a one-place predicate.

→ One-place predicate

**Iterative aspect**

This is another name for the term frequentative aspect

→ Frequentative aspect
Jargon

With jargon is meant the language use that belongs to a specific group (members of professional interest groups, hobbyists, young people, etc.) and that is characterized by a terminology of its own.


Language acquisition

In language acquisition first language acquisition is distinguished from second language acquisition. These forms of language acquisition can be found in the separate entries.

→ also First language acquisition and Second language acquisition.

Language change

Like language variation, language change is a phenomenon that can be found in all levels of linguistics: lexicon, phonology, morphology, syntax and semantics. There is also pragmatic change. The various forms of language change, that are true for signed and spoken languages, are discussed in the relevant lemmas. Different factors can underlie language change, including linguistic or social reasons.

→ also Language Variation, Lexical change, Morphological change, Phonological change, Semantic change and Syntactic change

Schembri & Johnston (2012) and Schermer (2016a) in general, Fontana et al. (2015) for LIS

Language family

Languages usually are categorized in language families on the basis of their historical development. The languages in such a family have an ancestor language in common, so it is said that they are genetically related. For signed languages various language families have been established, which means that they are related. In order to determine these relationships, lexicostatistics are used (→ Lexicostatistics). The lexicons of different signed languages are compared on the basis of a sign list in order to find the overlap in lexicon in these languages. This way, for example, a relationship has been found between ASL and Langue des Signes Française (LSF).

For spoken languages about 300 language families can be distinguished. Some of these are quite large, other fairly small. Dutch and English, for instance, belong to the Indo-European language family (formerly called Indo-Germanic language family).

→ also Language typology and Lexicostatistics

Wittmann (1991)
Language of communication

Language of communication can refer to different concepts. It is the language that is used for official events. In the USA English is the official language of communication, as is Dutch in the Netherlands, or French, Flemish or German in Belgium. In international conferences English is often used as the language of communication. In education the language of communication is understood to be the language used in free interaction, so when no instruction is taking place. An example of a class situation in a bilingual school would be the lunch hour. For free interaction a lower cognitive or language level suffices (in contrast to the language level used during instruction); such moments in a bilingual situation can be used to offer the weaker language to the student.

→ also Language of instruction

Language of instruction

By this is meant the language that is used by the teacher not only to instruct or to convey information, but also to activate and stimulate the cognitive development of the pupils. Because the use of instructive language demands a lot of cognitive activity of the pupils, instruction should be provided in that language of the pupil that is most accessible to them. In bilingual education to deaf children sign language appears to be the most appropriate. It makes discussion of subjects possible on a higher level.

→ also Language of communication

Language pathology

The field in linguistics that studies the language production and perception of language users with disorders in language development or language use is called language pathology. The study of aphasia, for example, is part of language pathology.

→ also Neurolinguistics

Language politics

Language politics actively intervene with the natural process of language. This can occur in many different ways. Corpus planning, for instance, is concerned with the structure of the language and the activities in this field go from the development of grammar books and dictionaries to the development of a notation system for signed languages, and such. Status planning deals with the status of a language. In corpus planning the government does not play a role, which is not the case in status planning; there the government is needed e.g. for the recognition of a language. The government can adopt different positions towards a minority language (→ Minority language): the language can be suppressed by forbidding its use, it can be ignored or the language can be supported by its recognition and by stimulating its use.

Schermer (2012)
Language psychology

Often the terms language psychology and psycholinguistics are equated. Both disciplines study from a mainly experimental approach the cognitive processes that play a role in acquisition, perception and production of the language. There is much overlap in the two disciplines. And yet there is a need to distinguish them. Psycholinguistics is an area of linguistics that uses techniques and findings from both linguistics and psychology, but emphasizes in its research the storage and use of linguistic rules and phrases (texts, sentences, words, letters, sounds). Language psychology is psychology that focuses on the cognitive-psychological processes that are the basis of language use.

→ also Psycholinguistics

Harley (2008)

Language typology

Natural languages are usually categorized in language families on the basis of their historic development, but other categories are also possible. Languages can also be classified on the basis of structural similarities, separate from their historic development and family relations. This is called language typology. Classification can be made on the basis of consonant/vowel system, syllable structure, sign/word structure and basic sign/word order. The following example shows that such classifications are separate from family relations. English and Latin both belong to the Indo-European language family, but Chinese does not. When languages are considered typologically in the way they have flexion, English is more like Chinese than Latin.

For signed languages too linguists are trying to find a classification by studying the similarities and differences between the various sign languages.

→ also Language family and Lexicostatistics

Coppola, Crasborn & Zeshan (2011)

Language variation

The phenomenon of language variation can be viewed in different ways. When there is a multilingual situation in a certain region, this is considered to be language variation. It can also be the case that in that area several languages are used, or a standard language and one or more regional languages. Many countries have a large number of minority languages and also many regional languages.

One could also look at the linguistic variation in one language. This variation can occur on all grammatical levels (→ relevant lemmas). There is also pragmatic and phonetic variation (→ Phonetic variation and Pragmatic variation).
A large number of factors play a role in language variation. Three groups can be distinguished: linguistic factors, social factors and ‘practical’ factors. In the first group falls the variation that occurs because the sign or the word is placed in a certain linguistic environment. Relatively much research has been done on this form of variation in signed languages, see for more information the lemmas Phonetic variation and Phonological adaptations. In the second group there are many factors that play a role, both in signed and in spoken languages (→ Social factors). For examples in the third group → Phonetic variation.

Large signing space

A large signing space, like a small signing space, pertains to the size of the signs that are being made. A larger signing space is used on the stage, for example, where – analogous to a hearing person raising his voice – a signer will make larger signs. The large signing space is generally used when someone wants to sign to someone else over a big distance. Whether or not the large signing space is used thus depends on pragmatic factors.

→ also Signing space and Small signing space

Late deaf

The term late deaf is used for persons who gradually become deaf as they age.

→ also Deaf

Left dislocation

Left dislocation means that a constituent, usually a noun phrase, appears in sentence initial position and is repeated with a co-referential pronoun in the main clause (the comment). It is a form of topicalization (→ Topicalization). The usual order is presented in (1) and the sentence with left dislocation in (2).

Sign Language of the Netherlands (NGT)

(1) EVENING BROTHER INDEX₁³ (INDEX₁)³ VISIT₁
‘My brother will visit me tonight.’

(2) POSS₁ BROTHER INDEX₃ᵃ, EVENING INDEX₃ᵃ₃ᵃ VISIT₁
‘As for my brother, he will visit me Tonight.’

→ also Topicalization

Kimmelman & Pfau (2014)
**Left hemisphere**

The great brain or (cerebral cortex) consists of two parts that are called hemispheres. The left part of the brain is called the left hemisphere.

→ also Hemisphere

**Lemma**

In this dictionary the term lemma (plural: lemmas) refers to the item which occurs at the beginning of a dictionary entry. More generally this item is called headword. So the lemma of this entry is Lemma.

**Lexical change**

In signed languages lexical items often change over time. One no longer uses the iconic sign TELEPHONE, which depicts the device which hangs on the wall and whose handle you had to turn in order to dial. The currently used sign for TELEPHONE is made with a \(\nabla\)-hand in the form of the telephone handset. The even more recent sign for MOBILEPHONE is made in NGT with a \(\circ\)-hand where the index finger depicts the antenna of the first generation of cell phones. For some linguists, lexical change can be a very broad concept. For instance, when a word acquires a broader meaning, this is considered to be a lexical change. Words can also change to such a degree that this has consequences for the grammar. A word can for instance acquire a suffix-like feature which increases its combination possibilities with other words (→ Grammaticalisation). At the phonological level, the phonetic form of words can also change.

Here, the term Lexical change means a change in the lexicon as the result of the following:

1. The disappearance of words or signs without a demonstrable cause, or because concepts to which the words or signs refer are not widely used anymore, and
2. The appearance of new words or signs for new concepts, coined in their own language or borrowed or derived from another language.

**Lexicalization**

Lexicalization in signed languages often concerns signs which began as classifier constructions but over time have become conventionalized lexical terms. For example, the NGT sign MEET is made with two whole entity classifiers (used for example for two persons) that move towards each other. Originally the meaning of this construction was: ‘two persons are moving towards each other’. In the lexicalised form which developed from it, the sign means more generally ‘to meet’ and can refer to meeting between more than two persons, between groups, or on the internet. In the lexicalized form of MEET the movement component plays the important role it has in the classifier
form. Another example is the NGT verb happen (→ also Tense). No inflections for tense on verbs have yet been found in any sign language. The NGT sign, however, does have two different forms which distinguish between the present tense and the past tense, but because of the incidental nature of this phenomenon this is not considered to be a regular inflexion. In happen (unmarked and present), the hands circle around each other away from the body, while moving forwards away from the body. In happen-past the hands circle around each other towards the body, and the hands also simultaneously move back towards the body (→ also Timeline). As these two special forms are not the result of a grammatical rule but must be learned separately, these are considered to be lexicalized forms.

This is comparable to some lexicalized forms in spoken languages which must be learned, such as the gender of nouns in languages like Dutch, French and German. Another kind of meaning which must be individually learned in both spoken and signed languages is that used in many figurative idioms (e.g. It is raining cats and dogs). (→ Figurative language)

**Lexical sign**

This is another word for content sign.

→ Content sign

**Lexical variation**

In signed as well as in spoken languages lexical variation occurs very frequently. There may be many concepts for which the sign language user may use different signs. For instance, think of the many signs there are for the concept of wrist watch, which by the way demonstrates at the same time that a gloss (WRIST-WATCH) does not reflect the sign itself but only the written translation of a that concept. This sign is commonly made in NGT on the spot on the wrist where a watch is carried. A regional variation is the sign where apparently a watch is taken from a breast pocket of a jacket. Lexical variations can depend on many factors, like age, gender and social class or region. In regional variation often the signs only differ in form, their denotation and connotation is similar. An example of synonymous NGT signs that do differ in their connotation are the different signs for to die (→ see Pragmatic adequacy)

→ also Connotation, Denotation, Pragmatic adequacy and Synonymy

**Lexical word/sign**

This is another name for → Content word/sign.

→ also Function word and Word class
Lexicography
Lexicography studies the implementation of lexicological principles in practical dictionaries. The aim is to make the word information (meaning, form, pronunciation, use etc) as accessible as possible to the user in a responsible way. Comparable issues play a role in the making of sign dictionaries.

→ also Lexicology

Johnston (2003)

Lexicology
This is a subdivision of linguistics that focuses on the question how best to produce dictionaries on the basis of scientific insights. One of the questions that lexicology has to answer is which words and expressions are included in a dictionary and which information is to be provided. Similar issues play a role in the consideration of making sign dictionaries.

→ also Lexicography

Johnston (2003)

Lexicon
The term lexicon can be understood in different ways. The mental lexicon refers to the set of words or signs that are stored in the brain of every language user (→ Mental lexicon). The word lexicon is also used for a practical sign or word dictionary or glossary, in which one can look up the meaning and pronunciation/production of signs, terms or words. The subdivisions of linguistics that focus on the development of dictionaries are lexicology (→ Lexicology) and lexicography (→ Lexicography).

Dictionaries differ widely, both in structure and in themes. An important distinction is made between the monolingual alphabetical dictionary, in which one can find the meaning of a word, and the bilingual alphabetical dictionary, in which one finds the equivalent of a word in another language. Many of these dictionaries are general collections of words for everyday use. There are also many alphabetical lexicons for words used for a specific theme or domain, for example, for names of cocktail drinks, or for technical terms in the fields of medicine or musical, or for terms used in the bible or in Shakespeare’s plays.

Sign lexicons can also take various forms. In a monolingual sign lexicon, the sign is the basic lemma and is represented by its form (either by an illustration and/or videotape, sometimes additionally by some kind of sign form notation such as HamNoSys (→ HamNoSys) or SignWriting (→ SignWriting). The signs can be grouped and ordered on the basic of their form, so that in order to find a sign, one might have to know
whether it is a one- or two-handed sign, which handshape or movement is involved, etc. If the dictionary is truly monolingual, all explanations of the sign’s meaning and use are done in the (videotaped) sign language being described.

Much more common are bilingual sign lexicons, in which it is possible to search by the glosses in the written form of the spoken language (→ Gloss) or written keywords for the sign. The search procedure is then also alphabetical by associated word. The form of the sign can be depicted as in a monolingual dictionary, but explanatory material such as key words, basic meaning, and examples usually all use the written form of a spoken language.

The recent rapid developments in information and media technology have now made it possible to develop digital sign lexicons that more and more are tailored to the needs of the targeted users and in which ‘order’ is increasingly unimportant: in a computerized version, everything is findable, wherever it is placed.

A further dichotomy has been described for the sign lexicon. One part of the lexicon contains the signs that have a fixed form and meaning and has been called the frozen (or conventional) lexicon. The other part of the sign lexicon, which includes many classifier forms, has been termed the productive lexicon. The productive lexicon contains signs for which there is no conventional ‘citation form’ but whose form is determined individually and is context-dependent. For example, the conventional sign drive is considered to be in the frozen lexicon as it has a fixed citation form and is understood even with no context. However, for a signer who is telling a story about driving a car on a very bumpy road, a handling sign resembling DRIVE can be made in such a way that the bumpy movements of the car are simultaneously expressed.

http://www.spreadthesign.com/gb/members/multilingual
http://www.auslan.org.au/
http://www.signbsl.com/

**Lexicostatistics**

This is a field in linguistics that tries to determine the historic relationship between languages. It is also concerned with determining when languages emerged. This is done by statistical comparisons of the changes in the lexicons of the related languages. In this way it is possible to draw a pedigree of, for instance, Indo-European languages. This method is also used for sign languages. The lexicons of the various sign languages are compared using lists of signs in order to find out how the languages match. In this way the relationship between ASL and French Sign Language could be established.

→ also Language family
**Linear order**
When in languages linguistic elements (words, morphemes, phonemes) are ordered one after the other, this is called linear order, and there is sequentiality. In signed languages linear order occurs to a certain extent: the signs in a sign sentence are sequentially ordered. But sign languages are different from spoken languages in an important way because they also have a high degree of simultaneity (→ Simultaneity).

→ also Order of linguistic elements

**Lingua franca**
This is the language most commonly used for communication among people who have different first languages. English is a lingua franca used, for example, in many African countries and in the Philippines. In India, the lingua francas are English and Hindustani. A special example of a signed lingua franca was the Plains Indian Sign Language in North America. This language was used as a lingua franca between tribes of Indians with different spoken languages in an area of over 1 million square kilometers.

**Linguistic competence**
Linguistic competence refers to the knowledge of a language system in a language user.

→ also Competence

**Linguistic universals**
In generative linguistics, this term is used to indicate features that all languages share.

→ also Native language

**Linguistics**
Traditionally linguistics studies the following aspects of language: syntax (grammar), semantics (meaning), morphology (formal aspects), phonology and phonetics (sounds) and lexicon (vocabulary). These areas in linguistics, that are studied in sub-disciplines, are seen as separate modules within the grammar of a language, but in many ways it has been demonstrated that these areas collaborate to a high degree in the use of language.

The following field linguistics are distinguished: pragmatics, psycholinguistics and socio-linguistics. Neurolinguistics, which also extends to aphasiology, is important to mention as well as Patholinguistics, which studies languages disorders.

A linguistic description can be synchronic or diachronic. A synchronic language description shows what a (part of a) language looked like at a certain point in time. A
diachronic description indicates the changes in a (part of a) language over a certain period of time.

A language description can be a reflection of the linguistic reality. This is called a descriptive grammar (→ Descriptive grammar). In a prescriptive grammar, which is normative, certain rules are prescribed and certain variants are disapproved as being incorrect (→ Prescriptive grammar). There is also a pedagogic grammar, which is used in education as a handbook and which, for educational purposes, will resemble a prescriptive grammar to a certain extent (→ Pedagogic grammar).

**Lip reading**
This is another term for speech reading.
→ Speech reading

**List buoys**
List buoys are used by signers to make associations to between one to five (sets of) entities as an aide to discourse, i.e. they express the existence of a list of a certain length. Buoys are made with the weak hand being held stationary while the strong hand produces other signs. The index finger of the strong hand ticks of the first, second, third, fourth or fifth digit of the weak hand and by doing so lists the items to be discussed.
→ also Fragment buoys, Point buoys, Pointer buoys and Theme buoys


**L2-acquisition**
L2 is the abbreviation for second or foreign language acquisition.
→ Second language acquisition

**Loan sign**
With loan sign a sign is meant that is taken from another sign language, or a sign that partly or largely is based on fingerspelling. Examples are loan signs in NGT that are taken from another sign language, like tree, research (both from ASL), ginger (Chinese Sign Language) and genes (Swedish Sign Language).

Spoken Dutch most often borrows words from English, especially for terms in the field of information and computer technology. In all spoken languages loan words are fitted into the grammar of the borrowing language. A loan verb from English is often, and straight away, conjugated like Dutch verbs, and English nouns follow the diminutive rules from Dutch, etc. Some loan signs are partly or mainly based on fingerspelling. The following signs from NGT are based on the fingerspelling of Dutch words.


**Sign Language of the Netherlands (NGT)**

<table>
<thead>
<tr>
<th>Sign</th>
<th>Sign structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) BLUE</td>
<td>🕶-hand (♩-hand, + movement of the 🕶-hand)</td>
</tr>
<tr>
<td>(2) IDENTITY</td>
<td>(♩-hand) + movement to and contact with chest</td>
</tr>
</tbody>
</table>

**Loan word**

Words adopted from another language are called loan words. In the past, for instance, Dutch borrowed many words from Latin. Conversely, there are about 18,000 Dutch words that have been borrowed by almost 140 languages on all continents of the world: English *drug* (droog ‘dry’), *iceberg* (ijsberg), *snack* (snak), *tide* (tij), Japanese *biru* (bier ‘beer’), *garasu* (glas ‘glass’), *kokku* (kok ‘cook’), *masutu* (mast ‘mast’), *soppu* (sop ‘suds’ and soep ‘soup’), and very recently *kuappusukaatsu* (klapschaats ‘clap skate’); Italian *stoccafisso* (stokvis ‘stockfish’) and *kermesse* (kermis ‘fair’); Russian *bakbort* (bakboord ‘port’), *farvater* (vaarwater ‘waters’) and *kajuta* (kajuit ‘cabin’).

Haspelmath & Tadmor (2009), Van der Sijs (2010) for words all over the world borrowed from Dutch

**Localization**

Entities can be physically present and be referred to by simply pointing to them. But when the reference is not actually present, locations must be created for them in the syntactic signing space (→ Created location and Location of present participant). Localization refers to the signer’s placing of one or more absent referents in the syntactic space, for instance by means of an INDEX. This location can subsequently be used also by an INDEX to refer to the referent. This is a form of pronominalization, as the INDEX which one uses here has the function of a personal pronoun (→ Pronominalization for an example of such localization and referral with INDEX). It is also possible to use a classifier to refer to an object. In NGT and VGT, for example, one can make the sign *man* and then place a referent for ‘man’ in the syntactic space with a 🕶-hand classifier, as in Example (1).

**Sign Language of the Netherlands (NGT)**

(1) **MAN CL- 따른 3a VROUW CL- 따른 3b KIJKEN3b**

‘The man is looking at the woman.’

There is iconic localization and arbitrary localization (→ Iconic localization and Arbitrary localization).
**Location**
By locations (also called locus, plural form loci) those places in the signing space are meant where physically present referents (signer and addressee) and non-present referents are situated by the signer.

→ also Localization

**Location of articulation**
This is one of the basic elements of a sign: the location where a sign is made.

→ also Basic element

**Location of present participant**
When the entities under discussion are physically present (signer, addressee, third persons) this is called location of present participant. Another name is present referent. The reference to these entities then is deictic in nature.

→ also Deictic reference

**Locative sentence**
In this type of sentence the position of two referents relative to each other is given. Examples:

*Sign Language of the Netherlands* (NGT)

(1) **Table book lie-on-cl**

‘The book is on the table’

(2) **man bed lie-on-cl**

‘The man lies on the bed’

→ also Sign order and Figure-ground principle


**Locative verb**
Many sign languages have two types of agreement verbs: locative and directional. In a locative verb, the location component of the verb can be changed to refer to one element of the sentence (either the subject, or the direct/indirect object or adverbial adjunct). For example, to sign that someone is stroking the dog, the sign STROKE will be made in the place of the signing space where the dog has been localized. Here, the locative verb STROKE thus only agrees with the direct object DOG (See Example (1) and (2)): 
Sign Language of the Netherlands (NGT)

(1)  
\[
\text{t} \quad \text{DOG INDEX}_{3a}, \text{INDEX}_1 \text{STROKE}_{3a}
\]
‘I am stroking the dog’

The same VGT sentence usually has the following structure:

(2)  
\[
\text{t} \quad \text{DOG INDEX}_{3a}, \text{STROKE}_{3a} \text{ INDEX}_1
\]
‘I am stroking the dog’

Some locative verbs agree with the subject, for example the NGT verb begin. In Example (3) about two boys who want to play a game which one (Peter) will, as subject, begin, the signer first localizes the two boys in the signing space as 3a and 3b and then makes the sign begin in the location where the referent ‘Peter’ had been localized.

Sign Language of the Netherlands (NGT)

(3)  
\[
\text{PETER INDEX}_{3a}, \text{JOHN INDEX}_{3b}, \text{BEGIN}_{3a}
\]
‘Peter and John [are there]. Peter begins.’

The locative verb can also agree with an adverbial adjunct. This is the case in the NGT verb be-there as shown in Example (4):

Sign Language of the Netherlands (NGT)

(4)  
\[
\text{YESTERDAY, SCHOOL INDEX}_{3a}, \text{INDEX}_1 \text{BE-THERE}_{3a}
\]
‘I was in school yesterday’

Here the verb be-there is made in the location where the school is localized. The subscript 3a on the gloss represents the locative adjunct school.

In these examples agreement is maximally realized. In NGT and VGT it is also possible in certain conditions to leave out all agreement. In this case, the verb has the basic form with no modifications in the location component.

→ also Agreeing verb, Agreement and Directional verb

Locus

This is another name for location (plural = loci).

→ Location

Locution

By locution is meant the sentence type from a linguistic point of view, i.e. whether the sentence in form is, for example, a declarative, interrogative or imperative sentence.

→ also Speech act
**Manual affirmative marker**

This is a sign that sign languages use in combination with affirmative head nods. Although non-manual intonation is the most common way to express affirmation there are some languages, such as LIU and NGT, that together with the head nods use a manual marker for instance to respond to a negated statement by asserting the truth of what is being stated. In the following example from LIU the nodding spreads (→ Scope) over the entire sentence and is combined with a manual affirmative marker (AFF).

*Jordanian Sign Language* (LIU)

(1) \[
\begin{array}{c}
\text{TODAY MARKET GO-TO AFF INDEX}_1 \\
\text{hn}
\end{array}
\]

‘Today I indeed will go to the market’

→ also Affirmative head nod

*Hendriks (2004)*

**Manual alphabet**

In fingerspelling a manual alphabet is used, a set of handshapes with which the letters of the alphabet of a spoken language can be represented. Fingerspelling is not a language, and is used as a supplement to signed language. Some handshapes also belong to the sign language. There are various manual alphabets. Some are one-handed, others are two-handed. The way in which a manual alphabet is used is dependent on the writing system. The Dutch manual alphabet has a different handshape for each letter of the alphabet (Dutch uses an alphabetic writing system). Japanese does not use a letter alphabet, but has a syllabic writing system. Parallel to that there is also a Japanese manual alphabet with a representation of syllables. There are 47 basic hand forms in the Japanese manual alphabet and these can be extended with movements to indicate sound changes.

→ also Fingerspelling.

**Manual conjunction**

This is a sign that has the function of a conjunction, like the NGT signs BUT and BECAUSE.

→ also Complex sentence
Manual negation particle
A special sign is meant here, for example *not*, which many sign languages use to negate a sentence. The position of the particle can differ per sign language. There are sign languages that have more particles to express negation, like Jordan Sign Language.

→ also Negative sentence

Manual visual modality
Sign languages use the hands, face and body as articulators and they are perceived through our eyes. Therefore sign languages use the manual-visual modality.

→ Also Modality

Marked
A form, structure or rule in a language is considered to be marked when it is in contrast to what is commonly assumed to be the most typical form (which is considered unmarked). It is assumed that unmarked elements are easier to learn than the marked, both for L1 and L2 learners. When a language has a marked form, structure or rule, then it also has the corresponding unmarked variant, but the inverse is not true (i.e. there can be unmarked forms with no marked variants).

→ also Marked handshape, Unmarked handshape and Unmarked

Marked handshape
This is a handshape that, contrary to an unmarked handshape, is more difficult to make and therefore occurs less often. This handshape may occur, for example, only in initialized signs or signs that are based on fingerspelling. Some marked handshapes in NGT are the following:

Sign Language of the Netherlands (NGT)

(1)  

→ also Handshape

Matrix clause
This is a clause in which another sentence is imbedded as a constituent. Matrix clauses only occur when subordination is involved. Example:

Sign Language of the Netherlands (NGT)

(1)  

‘John knows that Peter is ill’
Here the matrix clause is **John** know.

Some languages like English can have complex sentences with several embedded clauses (See Example (2)).

**English**

(2) John heard [that Peter said [that his father is going to London]]

Here the main clause is **John heard**, which is the matrix clause for the imbedded object clause *that Peter said that his father is going to London*. In this object clause there is a further embedded object clause: *that his father is going to London*. The clause *that Peter said* is thus the (imbedded) matrix clause of the object clause *that his father is going to London*.

→  also Complex sentence

**Matrix predicate**

This is the predicate of the matrix clause.

→  Matrix clause
→  also Complex sentence

**Meaning**

Meaning can be considered on different levels in both signed and spoken language: sentence, word group, word and morpheme. These levels contain meaning, whereas a phoneme is meaningless itself although it can function to distinguish between meanings. On the level of the sign/word the following aspects of meaning play a role: Synonymy, Homonymy, Polysemy, Antonymy and Hyponymy, all of which are discussed in separate entries.


**Meaning lexicon**

It is supposed that our mental lexicon has two aspects: (1) A set of lemmas, which are abstract elements that are not phonologically specified and (2) The phonological forms that belong to the different lemmas. The first aspect is called the meaning lexicon, and the second the formal lexicon. The way these concepts play a role in language production is described in the entry Coding.

→  also Coding and Mental lexicon
Media tagging

In transcriptions raw sign data can be immediately ‘tagged’ in video media. The constant availability of the original signing helps to offset the disadvantage of the complete form of the signing not being reflected in the glosses or the notation systems used.

Boyes Braem (2012)

Mental lexicon

By mental lexicon the total set of signs or words are meant that is in the brain of every language user. It is assumed that the mental lexicon has two aspects: the meaning lexicon and the form lexicon. The meaning lexicon consists of a set of lemmas. These are abstract elements that are not phonologically specified. The form lexicon contains the lexemes to which belong phonologically specified forms. The ways these concepts play a role in language production is described under the entry Coding (→ Coding).

Researchers have been trying to discover how both signs and words are saved in the mental lexicon. One assumes that this is done by means of semantic networks. When a person produces a slip of the hand (→ Slip of the hand) a sign is retrieved from the mental lexicon that resembles the meaning of the sign that is being looked for. For example, a person wants to sign lorry, but instead produces train. Both signs refer to big vehicles. And yet this is not the whole story. In slips of the hand in signed languages one sometimes sees confusions of signs that are very similar in their phonological structure (their basic form elements). Research has also shown that first language users and second language users differ in such slips of the hands.

In spoken languages, slips of the tongue also offer interesting information. People sometimes use a wrong word that is not always a word per se but has the same initial sound as the correct word. Often two words are confused that overlap in meaning. For example, an English speaker asks for a tin opener when he actually means a nutcracker, one could say ‘fork’ while meaning ‘spoon’. This is evidence that words are also tied in semantic networks.

When children are acquiring their first language, whether it is a signed or a spoken language, they do not need to learn ready-made sentences by heart. That they can understand or produce themselves sentences that they have never heard before is possible because of their knowledge of the grammar and the (word or sign) vocabulary of the language. However, there are scores of complex words and syntactic constructions whose meaning cannot be derived on the basis of grammatical rules. Because the meaning of these constructions cannot be predicted, it is assumed that the meaning must be learned separately and stored in the mental lexicon. This is then called lexicalization.

**Mental rotation**
Scenes are usually described from the signer’s perspective. This requires the addressee to mentally reverse (rotate) the scene depicted in space by the signer, much like in spoken languages the addressee has to consider what is ‘left’ or ‘right’ from the speaker’s perspective.

→ also Perspective

📚 Emmorey (2000)

**Metaphor**
Metaphors occur in sign languages in different forms. In the use of spatial comparisons signs with a positive meaning often have an upward movement in the syntactic space (→ Good is up-metaphor). Signs with a negative meaning often show a downward movement (→ Downwards metaphor). Also in signs dealing with time there are spatial metaphors. In the timeline that runs across the shoulder, the future is before and the past behind the signer (→ Timeline). These could be called timeline metaphors (→ Timeline metaphors). Actually, this spatial image is also seen in spoken languages in the phrase the past ‘is behind us’ and the future ‘before us’, meaning that we have experienced something in the past and we are looking forward to the future. Such an image, however, is culturally defined. In some signed and spoken language the past and the future are represented just in the opposite way: the past is known so we can see that and is thus in front of us, whereas the future is unknown and thus invisible and lies behind us. There are also metaphors in sign language that are expressed by means of a changing handshape. In the NGT sign spring a closed hand changes into an open hand, where the image of the opening flower stands for the feature of spring that nature is blooming again.

In spoken languages metaphors a referent, or a feature of a referent of something that is done by the referent, is compared to something else: *Your room is like a pigsty, Her head was red as a beet, He is like a rock*. Sometimes there is a comparison with *like* or *as: Death is like a thief in the night and John is strong as an ox*. In sign languages the same is true. In BSL for example you can sign **PUT-ME-IN-MY-PLACE** by signing what a dog shows when it puts its ears down. Or you can sign something like **HANGING-ONTO-FACE-OF-CLIFF**, meaning that you are starting to panic.

→ also Figurative language and Idiomatic expression

Metathesis
This is a slip of the hand in sign languages where during the grammatical coding the phonemes of one basic element of two successive signs, e.g. location, are exchanged. An example of a case of location exchange is from ASL for the phrase JUST EATEN which is correctly made with a sign next to the head (l-hand) and subsequently a movement near the mouth with another handshape (B-hand). In the slip of the hand involved here, the signer switches the placelocations of articulation: the first sign is made at the mouth with a l-hand, the second near the head with a B-hand.
(→ also Slip of the hand for an example).

Method controversy
When in the second half of the eighteenth century deaf education was introduced in the whole of Europe, almost everywhere signs were allowed in the schools. Many years later a war of methods erupted, where the central question was whether deaf children were better off receiving purely oral education (where they learned to speak only through the use of spoken and written language of their country) or that signs and sign language should also play a role in their education. Under pressure of the oralists this battle eventually led at the end of the nineteenth century to the Resolution of Milan, which was accepted in the 1880 International Conference of Deaf Education (ICED). It was proclaimed that in education spoken language was preferred over the use of signs. The consequence was that most schools abandoned the use of signs.
(→ also Oralism)

Minimal pair
This is a phenomenon from phonology, which is used to distinguish phonemes in a language. The NGT signs summer and strange form a minimal pair, because two different realizations of the basis element place of articulation cause a difference in meaning.

Figure 8. NGT minimal pair.

The phonemic difference is in the basic element Location. Another example is the minimal pair applause and evidence. The phonemic difference here is in the basic
element Orientation, more specifically in the palm of the dominant hand. In applause the orientation of the hand palm is downward, in evidence it is upward.

In spoken languages a minimal pair is formed by two words with different meanings that are the same but for one sound. The sounds that are different have a distinctive function in meaning and thus show that they are phonemes:

**English**

(1) a. bad – mad  (2) a. bad – bid  
    b. bin – bid  b. bed – bead

In (1a) the consonants $b$ and $m$ are distinctive, in (1b) the $n$ and the $d$. In (2) the distinctive function of the four vowels in these words are presented.

→ also Basic element and Phoneme

**Minority language**

By minority language is meant each language that is used by a minority of the population in a certain area. The term is also used in linguistics for languages that are used by the majority of the population, but which in language policy (for instance by the government) is subordinate to other languages. But also without language policy a language with the most speakers can be a minority language: then it is the language with the lowest status of two or more languages.

**Modality**

The term modality refers to the way in which a language is produced and perceived. Signed languages are produced with the hands and perceived with the eyes and thus utilize what has been called the manual-visual modality. Spoken languages are produced with the voice and perceived by hearing and therefore use what is called the oral-auditive modality. A distinction is also made for spoken languages between the spoken modality and the written modality, and for sign languages between live (face to face) and recorded (filmed) modality, and written (e.g. HamNoSys).

**Modifier**

A modifier is a non-obligatory part of a constituent that gives a further specification of the obligatory head.

Example:

*Sign Language of the Netherlands* (NGT)

(1) \text{church}_{AC}[\text{thirty meters high}]_{AC} \quad \text{‘The church is thirty meters high’}
Here thirty meters is a modifier for the head high. Within this modifier, which is itself a nominal constituent with meter as head, thirty is a modifier to meter.

→ also Constituent and Head of a construction

**Monomorphemic sign**

This is another term for a simple sign.

→ Simple sign

**Morpheme**

The morpheme is the smallest element in the language that carries meaning. Two types are distinguished: free morpheme and bound morpheme. Both types occur in sign languages, both manually and non-manually. Please compare the following example:

*Sign Language of the Netherlands (NGT)*

(1) \[3a\text{TEASE}_1\]

‘He/She is teasing me’

(2) (…)

(…) HOUSE (…)

‘(…) little house (…)’

In (1) the free morpheme TEASE and two agreement morphemes (3a and 1) occur. In (2) there is the free morpheme HOUSE and a non-manual modifier in the form of ‘point of tongue’ as a bound morpheme.

→ also Bound morpheme, Compound, Derivation, Flexion and Free morpheme

**Morphological change**

Morphological changes both in signed and in spoken languages, are to do with the combinational possibilities of morphemes. An example of morphological change in sign languages is the grammaticalization of the sign FINISH, which originally only had a lexical function and can now also be used with a grammatical function (→ Grammaticalization).

In English for instance the word hamburguer (made up with the German suffix -er) had the meaning ‘inhabitant of the city Hamburg’. In English the hamburger was originally a Hamburger Beefsteak. From the moment the element ham was interpreted as ‘meat’ the element burger became a free morpheme: the second part of compounds: hamburger, cheeseburger, fishburger. The element burger is also used as a word: to eat a burger, and Burger King, the name for a global chain of hamburger fast food restaurants.
**Morphological restriction**

About this phenomenon in signed languages there is as yet no evidence. In the morphology of spoken languages there are a multitude of rules that refer to possible combinations of morphemes. This means that, vice versa, there are many restrictions too in word formation. One of the categories that raise restrictions to word formation is the morphological restriction. In English for instance, it is possible to attach the suffix \(-ify\) to adjectives to make verbs which mean something like ‘to make X’, where X is the adjective. So attaching \(-ify\) to \textit{clear} gives the verb \textit{clarify}, meaning ‘to make clear’. The morphological restriction, however, is that the suffix \(-ify\) cannot attach to a stem that already contains a suffix. So you cannot derive a verb by attaching \(-ify\) to for instance an adjective with the suffix \(-ive\), such as \textit{active}.

→ also Morphology

**Morphology**

Morphology is the sub-discipline of linguistics that deals with the structure of complex signs or words. The following categorization for signed and for spoken languages can be made. In the first place compound, derivation and flexion are distinguished (→ Derivation, Flexion and Compound). Then there is the phenomenon of incorporation (→ Incorporation); it is not yet established whether this is a phenomenon in its own right, or whether it can be considered one of these three aspects. Morphologically complex words are created by different procedures like affixation, reduplication and conversion (→ Affixation, Reduplication and Reduplication).

In the morphology of spoken languages there are numerous rules that are to do with the possible combinations of morphemes. This means that there are also many restrictions in word formation. These do not only occur in spoken languages, but also in signed languages. There are similarities and disparities. For instance, in order to pluralize the NGT sign bicycle reduplication cannot be used. This is a phonological restriction to \textit{flexion} (→ Phonological restriction and Pluralization). In linguistics, restrictions to word formation are grouped into four categories: 1. Lexical restriction, 2. Word class restriction, 3. Morphological restriction and 4. Phonological restriction (→ Phonological restriction, Lexical restriction, Morphological restriction and Word class restriction).


**Motivated sign**

Motivated signs are not arbitrary in that there \textit{is} a relationship between the form of the sign and its meaning.

→ also Arbitrary sign and Iconicity
**Motivation**

First language acquisition is a process that occurs naturally, it is something that ‘happens’ to us. The factor motivation does not play a role here. In second language (L2) acquisition however motivation can exert quite some influence on the learning process. Someone who is motivated and therefore initiates more contact with native speakers of the target language s/he is interested in will have more language contact and thus obtain more language input. Two forms of motivation are discussed in L2-research: integrative motivation and instrumental motivation. L2 learners with an integrative motivation would like to resemble the language users of the target language community in order to participate in their culture. L2 learners with instrumental motivation focus more on the goal of learning the language in order to perform certain tasks better. Some researchers assume that the first form of motivation lead to better results than the second.

Motivation is also used in connection with iconicity (see Motivated sign).

→ also Motivated sign

**Motor aphasia**

This is another term for Broca’s aphasia.

→ Broca’s aphasia

**Mouth actions**

With mouth actions the different actions of the mouth are meant which can accompany the manual part of a sign. In recent literature mouth signals are split in two categories:

1. Mouthing (spoken components related to the spoken language);
2. Mouth gestures (oral components not related to spoken language).

For oral components, a distinction is made between functions that add no extra meaning and those that add adjectival or adverbial information to a sign.


**Mouth gesture**

This term refers to a mouth movement as a non-manual part of a sign. The mouth movement is that part of the sign that is not articulated by the hands. The mouth gesture (or oral component) is not derived from the spoken language, like mouthings are, and is generally considered to be part of the phonology of a sign, but in recent literature oral components also play other roles. Four mouth-actions are distinguished, for instance one that does not add extra meaning and mouth actions that add adjectival or adverbial information to a sign.

→ also Basic element and Mouth actions
**Mouthings**

A mouthing is a (part of a) spoken component, derived from the spoken language, which can be a non-manual part of a sign. It is (usually) articulated without voice.

→ also Basic element and Mouth action


**Mouth picture**

This is another term for mouth gesture.

→ also Mouthings and Word picture

**Movement**

One of the basic elements of a sign is Movement (→ Basic element). There are two types of movement, viz. movements of the whole hand and movements of the fingers and wrist:

1. Path movement (→ Path movement)
2. Hand internal movement (→ Hand internal movement) and change in orientation (→ Change in orientation)

Hand internal movements, changes in orientation and path movements are simple movements. Complex movements, in contrast, consist of a combination of a path movement and a hand internal movement or a change in orientation (→ Complex movement).

When both hands are moving in the production of a sign, the hands will approximately make the same movements. This has to do with the workings of our brain, which is restricted in the coordination of two separate movements of the hands at the same time. In certain NGT signs like train and swim, both hands make a synchronous, symmetrical movement, in the NGT sign bicycle an alternating movement. There are also two-handed signs in which only one of the hands is moving, as in the NGT sign write.

→ also Two-handed sign


**Movement reduction**

This is a form of reduction where the movement of a sign is reduced.

→ Reduction
Multiple component model

This model is part of one of the best-known theories on working memory. It is based on the assumption that the working memory consists of different components that are responsible for different types of information.

→ also Working memory

Baddeley & Logie (1999)
Name sign

Persons can be referred to by their name sign, which functions as the sign language name for that person, alongside the person's official name. The form of this sign usually refers to the physical appearance of that person, or a hobby. Sometimes the handshape of the name sign corresponds to the first letter of his official name. The function of the name sign in many ways resembles the function of names as used in spoken languages, but the name sign is often restricted to use in the Deaf community and thus does not have the administrative function that names in the hearing world have. For instance, while using sign language people do not refer to others by their English name, unless you are introducing yourself for the first time or you do not have a name sign yet. Otherwise you would have to fingerspell your name all the time, so spell your name letter by letter in the manual alphabet.

Because a name sign coexists with the official name, a name sign could almost be considered a nickname. Just as nicknames in spoken languages, the name sign often refers to a certain characteristic, for instance appearance, hobby, habit or family name. It is also possible to find a combination of these aspects. A second similarity is that name signs, just like nicknames, do not form a closed class category. New name signs and nicknames can be formed continuously. This is contrary to family names or personal names that usually form a closed class, restricted by laws. A third similarity is that the non-arbitrary relation between the name sign and its meaning can disappear, just as with nicknames in spoken languages, because, for instance, the appearance of a person has changed. An important difference between name signs and nicknames in spoken languages is that the latter are made up for fun, whereas the name signs in Deaf culture have the same function as personal names in hearing culture.

Native language

This is the language that a person has spoken or signed from earliest childhood.

→ First language acquisition
Nativist learning theory
The nativist learning theory of Chomsky concerns first language acquisition and is an attempt to explain how children manage to acquire the complex system of their mother tongue in the first five years of their life. In this theory it is assumed that the explanation can be found in a specific native language learning capacity, in which the universal features of languages one way or the other are represented and with which the child can acquire his first language with the help of the language input in his environment. The Universal Grammar Theory about second language acquisition is also based on this learning theory.

→ also Generative linguistics, Plato’s problem and Universal Grammar Theory on L2-acquisition

Natural language
The different languages that have developed in the course of the centuries in the different human communities, and which are acquired by children as first languages, are natural languages. This in contrast to artificial languages. An artificial language is invented, at one point in time. Natural languages usually are divided in language families on the basis of historic developments, but other divisions are also possible (e.g. typology). On the ground of modality various types of natural languages can be distinguished, viz. signed languages and spoken languages, and also tactile sign language, which is used by the deaf-blind (→ Tactile sign language).

Negation suffix
This is a bound morpheme that in sign languages is used to negate the verb. In ASL it is possible to attach such a morpheme to verbs like eat, feel and see. Examples:

American Sign Language (ASL)

(1) see^zero
   ‘not see anything’

The bound morpheme zero is a one-handed sign where the fingers form a zero. ISL has a similar bound negation morpheme (→ Allomorph for examples).

→ also Allomorphism and Derivation

Negative head shake
In order to negate a sentence in e.g. NGT, a non-manual grammatical marker is used in declarative and interrogative sentences, usually a negative headshake.
Sign Language of the Netherlands (NGT)

(1) neg
    index1 car buy index1
    ‘I am not buying a car’

There are also sign languages where the negation is formed non-manually by a strong backward movement with the head. Some sign languages use a special sign for negation: the manual negation particle. The headshake and the particle are language specific. Both the position of the particle and the headshake can differ per sign language. Also, the headshake can refer to the whole sentence or to different parts of the sentence. In (1) the negations’ scope covers the whole sentence. In the next example only the object falls under the scope of the negation:

Sign Language of the Netherlands (NGT)

(2) neg aff
    index1 car buy index1 bicycle buy index1
    ‘I am not going to buy a car, but a bicycle’

Because here the scope of the negation is restricted to the object a contrast is created: I am not going to buy a car but a bicycle.

In the above examples negative declarative sentences are shown. Imperative and interrogative sentences can also be negated.

Pfau & Bos (2016)

Negative transfer

This term refers to the process of second or foreign language acquisition. The more the second language resembles the first language, the more aspects the language learner will be able to use in the second language – however he will also use aspects that do not belong in that second language. In this case this is called negative transfer. For instance, a hearing person learning a sign language shows positive transfer in those aspects that are similar in both languages, e.g. the spoken component. In Dutch the question words are placed in sentence initial position, whereas in NGT the question sign is usually placed at the end of the sentence. The L2 learner can make mistakes in the position of the question signs, by placing it in initial position in the NGT sentence. This then is negative transfer.

→ also Positive transfer and Transfer hypothesis

Neologisms

Neologisms are new words or signs, or the use of existing ones with another meaning. Children acquiring a first language, or learners of a new language sometimes coin new
words for concepts for which they do not know the name. They might also use an exist-
ing word in a new way. Young people often use neologisms, e.g. the English word ‘cool’
to mean ‘fantastic’ or ‘modern’. Artists or poets also often invent new words, but these
neologisms do not necessarily become more widely adopted. For a neologism to gain
a permanent place in the lexicon of a language, it is necessary for it to get a widespread
use in the language community over a longer period of time.

Neurolinguistics

Neurolinguistics studies the connection between language and the human brain. This
discipline is interested in the processing and acquisition of language in the brain and
the cognitive processes that underlie these. It investigates which circuits, networks and
mechanisms in the brain are involved in the understanding and production of words,
signs and sentences. Other questions are to what extent the languages processes in
our brain are specific or expressions of more general brain functions like memory,
perception and such. Neurolinguistics is not restricted to the healthy brain, as in psy-
cholinguistics, but also studies the languages processes that occur in the brain of people
with a language disorder. This is a broad field, which overlaps with patholinguistics
(dyslexia, specific language impairment (a language disorder which is not caused by
another development disorder like hearing impairment or an acquired brain disorder),
aphasia, etc).

→ also Patholinguistics and Psycholinguistics

Neutral space

This is the space where part of the signs are articulated in their basic form. A basic sign
form is made in the space in front of the body (before the chest or the stomach), the
neutral space, or on or near the upper body (chest, shoulder, forehead, cheek etc). The
neutral space is thus linked to linguistic (phonological) features.

→ also Basic form and Signing space

Nominal constituent

This is the sign or word group of which the head is a noun. In the next NGT exam-
ple MAN is the head of the nominal constituent, and is accompanied by the optional
modifier OLD.

Sign Language of the Netherlands (NGT)

(1) \[ \text{ncMAN old nc STREET WALK} \]

‘The old man is walking down the street’
The next example is from spoken English. Here *house* is the head and *big* is the modifier.

*English*

(2) He bought \textsubscript{NC}[a big house] \textsubscript{NC} → also Constituent

**Nominal predicate**

This is the nominal part of the predicate in the form of a nominal constituent.

→ also Constituent function and Predicate

**Non-agreeing verb**

This is a verb in signed languages that does not agree with other sentence parts. This is the case with many body anchored verbal signs. Examples of non-agreement NGT verbs are *understand*, *love* and *forget*. In order to indicate the relationship between the arguments, a number of sign languages make use of an auxiliary that functions as an agreement carrier but in itself has no meaning. Its function is to express agreement. In NGT, this is the auxiliary *aux-op*, which usually is in sentence final position and is accompanied by the mouthing /op/ ‘on’. The sign is made with a \textsubscript{B}-hand, where the tip of the finger is always pointed toward the location of the object.

*Sign Language of the Netherlands* (NGT)

(3) \textsubscript{t} INDEX\textsubscript{1} MOTHER INDEX\textsubscript{3a}, INDEX\textsubscript{3a} UNDERSTAND \textsubscript{3a} AUX-OP\textsubscript{1} \textbackslash

‘My mother understands me’

→ also Agreeing verb

**Non-manual grammatical marker**

Certain grammatical aspects in a signed sentence are not made by the hands, but are expressed through for instance, raising the eyebrows or tilting the head or pushing the chin forward. These are called non-manual grammatical markers. Examples of such markers are e.g. the marker for sentence type, for negation and affirmation or topicalization. Thus the difference between a declarative sentence *the man reads a book* and the yes/no question is not expressed by changing the sign order in the sentence, but by raising the eye brows to indicate that it is a yes/no question:

(1) MAN INDEX\textsubscript{3a} BOOK READ INDEX\textsubscript{3a} \textbackslash

‘The man is reading a book’
In other sentence types or grammatical aspects of a sentence such markers can also be used. In glosses the symbols for these markers (compare the marker y/n in (2)) are accompanied by a line of which the length corresponds with the scope of the marker.

**Non-manual modifier**

This is a non-manual bound morpheme that is realized simultaneously with the sign, with adjectival or adverbial marking. This is called a bound morpheme because this modifier cannot occur by itself, but only in combination with the sign that is modified by it. The modifier is a signal on the level of morphology. In this respect it does not differ from the non-manual grammatical marker, which is a signal on a syntactic level, and from the non-manual part which functions on a phonological level. Examples:

*Sign Language of the Netherlands* (NGT)

Adjectival marker

(1) 
INDEX₁ HOUSE₉small SEE
‘I see a small house’

(2) 
INDEX₁ BALL₉big SEE
‘I see a big ball’

Adverbial marker

(3) 
JOHN BOX SMALL₉very SEE
‘John sees a very small box’

(4) 
JOHN BOX BIG₉very SEE
‘John sees a very big box’

(5) 
JOHN DRIVE₉longtime
‘John drives a long time’

In Examples (1)–(2) the non-manual marker has an adjectival meaning: in (1) ‘point of tongue’ indicates that the house is very small and in (2) ‘puffed cheeks’ show that there is a very big ball indeed. In (3)–(5) is shown that a non-manual modifier can also have an adverbial function. In (3) the sign BOX is followed by the sign SMALL and
in (45) by big. The sign for small is made extra small and the sign for big extra large. But by means of the non-manual modifier (point of tongue in combination with strong facial expression) the diminutive size or extra-large size is also indicated. So here is an adverbial marking of an adjective. (5) shows an example of an adverbial marking of the verb. To indicate that somebody is driving for a long time the sign drive is made with a longer held movement and slower. The sign is simultaneously accompanied by the non-manual modifier ‘puffed cheeks’.

**Non-manual part of a sign**

This is the part of a lexical sign that is not articulated by the hands: the facial expression, the movement or posture of the head of the upper body and mouth movements (mouthings and mouth gestures).

 obed also Basic element

**Non-restrictive relative clause**

In a non-restrictive relative clause, further information is provided about the complete set of individuals that is being talked about in the main clause. Example:

**English**

(1) The boys, who were shouting this morning in class, were punished

In this sentence, the non-restrictive relative clause describes group of boys involved with the expansion being that they were shouting.

Non-restrictive relative clauses also occur in signed languages, however only very little research has been done on this type of clause, in contrast to research on restrictive relative clauses ( obed Relative clause).

 obed also Head external relative clause, Head internal relative clause and Restrictive relative clause


**Non-reversible constituents**

When in a signed sentence two constituents occur, one of which can only hold the semantic role of Agent, these are called non-reversible constituents. In the next few examples the non-reversible constituents are man and apple. Only man can have the semantic role Agent.
Sign Language of the Netherlands (NGT)

(1) MAN APPLE EAT

Flemish Sign Language (VGT)

(2) MAN EAT APPLE

→ also Sign order

Vermeerbergen, Nijen Twilhaar & Van Herreweghe (2013)

Non-verbal predicate

This is a predicate with an adjectival or nominal constituent:

(1) INDEX₁ BROTHER [SICK] INDEX₃a
    ‘My brother is sick’

(2) INDEX₁ BROTHER [DOCTOR] INDEX₃a
    ‘My brother is a doctor’

→ also Predicate

Notation system

Signs do not have a standardized written form. In order to represent signs, notation systems are used. For L2 learners notation systems can support the learning process of new signs. The notation of a sign generally indicates the four basic parameters: Location, Handshape, Orientation (palm of the hand and fingers) and Movement. For the components in each of these parameters, a set of symbols is available: in front of the chest, before the head and such (Location), \( \hat{\circ} \)-hand (Handshape), palm up or palm towards the body (Palm orientation), fingers to the left or right (Finger orientation), movement to the left, repeated movement and such (Movement). Also non-manual features can be represented in a notation system. Two widely-used notation systems are the Stokoe system and HamNoSys (Hamburg Notation System for Sign Language).

Notation should not be confused with transcription. In notation, the forms of the signs are represented on a phonetic or phonological level with special symbols. In a transcription of sign sentences and longer texts, usually glosses are used. The glosses primarily give an indication of the meaning of a sign sentence. Other systems, such as the Berkeley Transcription System (BTS) show the morpho-syntactic features of the signing. See Figure 9 for an example of both systems. Some researchers use a combination of glosses, a form notation and notation of morpho-syntactic features. Such a combination has been increasingly popular with the development of media-tagging computer software like ELAN, SignStream™ and iLex.
**Sign Language of the Netherlands**

**SUMMER**

Location: Forehead

Handshape: A-hand

Palm orientation: Downward

Fingerorientation: Upward

Movement: Horizontal to the right

![Figure 9. Example of the KOMVA notation system and NGT glosses.](image)

Transcription with glosses

(6) INDEX, FATHER COFFEE DRINK

‘My father is drinking coffee’

→ also HamNoSys, ELAN

📖 Crasborn et al. (2015) and Neidle et al. (n.d.)

**Nucleus**

The nucleus is the core of the syllable. In spoken languages, it is a vowel or a diphthong; in signed languages it is the movement of the sign.

→ also Syllable

**Number**

Number is the characteristic of a word (a verb or a noun) that indicates if it is in the singular or plural form.

**Number incorporation**

Number incorporation is the sign language phenomenon in which a number handshape is incorporated in a nominal sign, for example in the expression THREE-WEEKS.

→ also Incorporation
Object
In linguistics, with object a constituent is indicated that has a particular grammatical role. We distinguish direct object and indirect object. Example:

*Sign Language of the Netherlands* (NGT)

(1) \text{INDEX}_1 \text{MAN INDEX}_{3a} \text{BOOK} \_1 \text{GIVE}_{3a}

‘I give the man a book’

Here \text{INDEX}_1 is the subject, \text{BOOK} the direct object and \text{MAN INDEX}_{3a} the indirect object. For the English sentence the same is true: *I* is the subject, *a book* direct object and *the man* indirect object.

→ also Grammatical role

One person one language strategy
When two parents have different languages it is assumed that the bilingual development of their children is best supported, when they each use their own mother tongue with their child. This is called the one-person one-language strategy.

One place predicate
This is a predicate with one argument. An example of such a predicate is the verb *laugh*.

(1) \text{WOMAN LAUGH}

‘The woman laughs.’

In this example the only argument is the subject \text{WOMAN}. A one-place predicate is intransitive.

→ also Valency of the predicate

One sign sentence
This is a signed sentence which consists of one sign only, which is often produced during the early language period in language acquisition.

→ also Early linguistic phase
One word phase
This is the phase in first language acquisition when the child begins to produce utterances consisting of one word or sign.
→ Early linguistic phase

Onomatopoeia
This is another term for a sound-imitating word. Onomatopoeia can be compared to an iconic sign.
→ also Iconicity

Onset
This is the beginning of a syllable. In spoken languages all consonants that occur in the syllable before the nucleus (vowel or diphthong) belong to the onset. For sign languages it is assumed that the initial location of the sign belongs to the onset. For instance, in the NGT sign FLOWER the onset is the initial position 'left or right in front of the chest'.
→ also Syllable

Open class
Signs and words belong to a closed or to an open class. A class is open when it is easily extended with new forms, like lexical signs in sign languages or with nouns in spoken languages (→ Function word/sign for examples).
→ also Closed class

Open handshape
Handshapes can be distinguished from each other by the features open and closed that refer to the distance between fingertips and thumb. Open handshapes are e.g. the following:

Figure 10. Examples of open handshapes.
→ Handshape

Oral-auditive modality
Spoken languages are articulated by mouth, lips and voice and are perceived auditorily. They make use of the oral-auditive modality.
→ also Modality
**Oral component**

This is another term for mouth gesture.

→ Mouth gesture
→ also Basic element and Mouth actions

**Oralism**

This is the practice where people are of the opinion that the deaf should be exclusively educated orally, viz. with the spoken language (speaking, reading and writing), without the use of signs or sign language. There was a time when the oralists were very influential and education indeed only took place orally, not only when teaching a spoken language, but also in subjects like geography or biology. The oral method imposed large restrictions to the communication with deaf children and on information transfer. It even happened that children who used signs in the classroom were slapped on their hands by their teachers, or were forced to sit on their hands. This, however, did not prevent the deaf, in spite of the oppression, from using sign language amongst themselves. As the realization dawned that sign languages are real full-fledged languages, the oralist gradually seemed to lose ground. However, with the emergence of the cochlear implant they are regaining ground fast.

**Order of acquisition**

This term relates to the order in which the language learner learns the different parts of grammar.

→ also Language acquisition

**Order of linguistic elements**

In spoken languages linguistic elements (phonemes, morphemes, words) in general have a linear order, which is called sequentiality. In signed utterances the signs of course also have a certain linear order, and the same is true for compounds (→ Linear order). Both on the level of the sign and the sentence however, there is more often simultaneity in signed languages (→ Simultaneity).

Simultaneity also occurs in the use of tones in tonal language and in intonation of other spoken languages.

Orientation
This is the basic element of a sign that refers to the position of the hand in space, represented by means of the direction in which the palm of the hand and the fingers are pointed.

→ Basic element

Overextension
Initially a child may use one sign or word for more than one concept. Suppose he has learned the sign or word cat/cat. When on television, for instance, a furry animal appears with four legs (dog, lion, tiger, puma, etc.) the child could refer to these animals with cat or cat too. The phenomenon of linking too many concepts to one linguistic form is called overextension. These adaptations are in the field of semantics, and word meaning.

Overgeneralization
Children, who are acquiring the morpho-syntactic rules of a language, do not know yet all the exceptions to the rules and often apply these too broadly. This phenomenon is called overgeneralization. Well known examples from the English past tense are *goed and *wented for went (where * is used to indicate the ungrammaticality of the form). Especially in the use of verb signs overgeneralization often occurs. When a signer wants to indicate that he wants to give an apple to his conversational partner, the movement goes from the signer (subject) to the addressee (indirect object):

Sign Language of the Netherlands (NGT)

(1) INDEX\textsubscript{1} \textsc{apple} \textsc{give-cl:(\textless\textgreater)}\textsubscript{2}
\textquote{I give you an apple}

Here the movement of the verbal sign give is from first (subject) to second person (indirect object). Sometimes children make such movement inappropriately. In ASL the sign LIKE is made on the body. Children sometimes make a hand movement in this verb in the direction of the toy or food that is in front of them.

Overlap
Overlap occurs when people interrupt each other, which results in them signing or talking at the same time over a stretch of time. The degree to which overlap occurs is restricted by culture and register: In informal situations there is more acceptability for overlap than in formal situations.

→ also Turn taking
PALM-UP

The sign palm-up occurs in many different sign languages, and has various functions. The most common one is that of a General Question Sign, indicating I-don’t-know or doubt in general, but it can also have a pragmatic function as an evaluative marker or an auto-comment. Its main function is to prosodically mark the end of a phrase domain.

Van der Kooij, Crasborn & Ros (2006)

Pantomime

Pantomime is an art form where one or more persons depict a situation or a story, traditionally without speech, using only their hands, facial expression and body language. Because pantomime is language independent, a mime performance can usually be understood by everybody. People who see a sign language for the first time might think that they are watching pantomime and conclude that sign language is a form of pantomime. However, there are substantial differences.

Sign languages have a grammar of their own, whereas pantomime does not consist of elements that are governed by language rules. Also, signed languages are incomprehensible for people who have not learned them. Sign languages have a restricted signing space in which the signs are made. Pantomime has no such restriction: one can walk around the stage, for example, in order to express that the person one is depicting is taking a walk. In sign language, one remains in place and uses the sign for walk in the syntactic signing space. The speed of movement and the pace of information exchange are considerably faster than in the average pantomime performance.

Sutton-Spence & Boyes Braem (2013)

Parameter

This is another name for basic element. It is also the name for open slots in Universal Grammar that can be filled per language during the acquisition period.

→ Basic element
→ also Native language facility
Paraphrasis
This is an alternative description of a word in a text. Repetition of a sign or word can be prevented by choosing an alternative. For example, in a signed story about a mayor it is possible to substitute the sign mayor by a name sign, or with synonyms and paraphrases like first citizen, or head of the municipality, etc.

→ also Coherence

Passive hand
In some two-handed signs both hands move, in other signs only one hand is active. The non-moving hand is called the passive hand. The moving hand is the active hand.

→ also Active hand, Preferred hand and Two-handed sign

Past tense
This is one of the tenses used in grammatical description.

→ also Tense

Path movement
Path movements are the movements of the whole hand through space (for example, from points A to B). It is possible to make a complex movement by combining a (simple) path movement with a (simple) hand internal movement or a (simple) change in orientation.

→ also Change in orientation, Complex movement, Hand internal movement and Movement

Patient
The term patient refers to the semantic role of the entity that undergoes the action of the predicate. In the example below, the sign cat is the semantic patient of the action verb stroke.

Sign Language of the Netherlands (NGT)

(1) cat index3patient john stroke3a
‘John is stroking the cat’

→ also Semantic role
Pedagogical grammar
A learners’ grammar is meant as such: it contains an overview of the rules of a language for educational purposes. For didactical reasons such a grammar will to a certain extent resemble a prescriptive grammar. Examples are sign language DVDs and books with a description of the grammatical rules of a sign language.

Perception
With perception is meant the process of decoding and understanding signed language, spoken language or written language. In sign languages it concerns visual perception and therefore more diverse types of information need to be processed than in auditory perception, which is involved in the perception of spoken language. In perceiving sign language one has to simultaneously process different channels of information like facial expression, the handshape and the position of the fingers in the syntactic space.

The first step in understanding a signed utterance is to see a sign, and recognize it as such, independent of phonological idiosyncrasies of the signer. Next, you have to segment the utterance in the different signs it consists of, and subsequently you have to ‘find’ its meaning in your mental lexicon (→ Mental lexicon), this is called lexical access. These three steps can also occur simultaneously.


Perfective aspect
This is another term for the concept of completive aspect, when an action has been completed.

→ Completive aspect
→ also Aspect and Imperfective aspect

Perfective marker
Although aspect is frequently shown in sign languages by modifications of the verb, it can also be expressed by a sign or a combination of signs. For instance, the NGT sign finish is used to denote a completive aspect to the action, thus serving as a perfective aspect marker.

→ also Completive aspect and Grammaticalization

Performance
Language competence is the knowledge of the language and rules for language use (→ Competence). The actual production of language utterances is called Performance.
**Performative verb**
Verbs like inform, promise, ask, etc, are called performative verbs. These verbs directly indicate which speech act is being performed (i.e. declaration, promise, question, etc.).

→ also Speech act

**Perseveration**
In the context of slips of the tongue or of the hand, this occurs when an earlier segment replaces a later segment (see Example (1) and (2)):

*English*

(1) Target: He pulled a tantrum  
    Slip: He pulled a pantrum

In the following example from German Sign Language the sign coffee-drink is made with a $\heartsuit$-hand. The sign boy in fact has a $\clubsuit$-hand. In the slip of the hand the sign boy is also signed with a $\heartsuit$-hand, in which case there is handshape perseveration (→ Handshape anticipation for another possibility to explain the adaptation of the handshape).

*German Sign Language (DGS)*

(2) parents both sit, coffee-drink. boy ask where my second shoe  
    ‘The parents are sitting together, they drink coffee. The boy asks: ‘Where is my second shoe?’

→ also Slip of the hand and Slip of the tongue

**Person**
With person is meant the three classes of personal pronouns: first, second and third person singular or plural.

**Personal style**
This refers to the style of language use that is characteristic for each individual. This style belongs to his/her idiolect and it can refer to the signs (lexicon) that are used, but also to phenomena on the level of phonology, morphology, syntax and semantics. Within this personal style variation can also occur (→ Phonetic variation).

→ also Ideolect and Language variation
**Perspective**

In the field of signed languages perspective is used for the point of view one takes. When a signer describes a situation in the signing space as it is in reality, by default he takes his own point of view or perspective. The conversational partner usually then perceives a mirror view of the depicted situation (→ Mental rotation). If the story contains a protagonist, the sign referring to him/her can be localized on location 3a, for instance, which is on the right of the signer, but on the left to the conversational partner. However, it occurs often that the signer changes the perspective of the story by changing roles. The signer becomes, as it were, the person whose thoughts or signs or words he wants to relay. Thus it is possible to tell the story from the perspective of the protagonist by pretending to be that person (→ Character perspective). As a consequence the location in space that is used to refer to that person temporarily changes position: no longer in location 3a, but in location 1, which is the signer in the role of the protagonist.

→ also Information structure and Role taking

**Phoneme**

In sign language, the *realization* of a basic element is called a phoneme. A phoneme is the smallest element of a language that, at least in spoken languages, is itself meaningless, but functions to distinguish between meanings. A phoneme is therefore also sometimes called a distinctive element. A variant for the NGT sign *summer* consists of the following phonemes: forehead (parameter: Location), ✋-hand (parameter Handshape), slanted downward (parameter Palm orientation) and horizontally to the right (parameter Movement). The Dutch word *summer* has five phonemes.

One makes use of the phoneme’s ability to make distinctions between meanings in order to discover what are the phonemes of a language. This is done by trying to find minimal pairs of signs which differ in meaning but have almost the same form components. The NGT signs *strange* and *summer* are a minimal pair, as they only differ in the parameter Location (chest for *strange* and forehead for *summer*). Examples of minimal pairs in English are *bead/bid* and *ball/wall* (→ Minimal pair).

Sometimes, however, the different variations of the same basic element do not distinguish meaning and in this case are considered to be allophones. Allophones occur both in signed and in spoken languages (→ Allophone).

Phonemes do not carry meaning themselves in spoken languages. However, in many sign languages, for example in many signs meaning ‘eat’ or ‘drink’, the Location phoneme is the mouth. This is not surprising as eating and drinking are acts that involve the mouth. Moreover, the basic element Movement is realised as typical movements made while eating or drinking. Thus one could propose that signs that are to
some degree iconic make it difficult to claim that, unlike in spoken languages, phonemes in signed languages are always meaningless.

A phoneme in a spoken language consists of so-called distinctive features that indicate the manner and location of articulation. Comparable to these in signed languages are the different handshape features in the phonemes of the basic element Handshape (→ Distinctive feature).

→ also Basic element and Iconicity


**Phonetic form**

This is the form in which a sign is realized. It is assumed that language users store one abstract form of each sign in their brain: a basic or phonological form. Different signers will realize this form in their own way, in such a way that there exist minimal phonetic differences between these phonetic forms. But also of one and the same signer the phonetic form of a particular sign will show tiny discrepancies. The phonetic form has infinitive variations. So even though there is a phonological basic form, there is no phonetic one. There are too many interactive factors that prevent prediction of a phonetic variant in every detail.

→ also Basic form and Phonetic variation

**Phonetics**

Phonetics in sign language research deals, on the one hand, with the visual *perception* of sign languages and on the other, with the physical characteristics that play a role in the *production* of sign languages, e.g. for the manual component, the muscles of arm, hand and fingers. The movements that are a result of the activation of muscles can be described at three levels. Firstly a description is needed of which muscles are involved in which sign and what they do; secondly which joint does what; and thirdly which parts of the body are active.

Phonetics for spoken language focuses on the way speech sounds are formed, transported and processed. Here, three sub-disciplines are distinguished: articulatory phonetics, which studies in what ways the articulatory organs work to produce the speech sounds; acoustic phonetics (which is interested in the physical features of sounds, as complexes of air pressure variation) and auditory phonetics (that studies the way the listener processes the sounds heard, with an emphasis on the relation between the physical features of speech sounds and the understanding of them).

Crasborn (2012)
Phonetic variant

Just as each sound separately sounds different from the mouth of different speakers, just so each hand looks different in a certain handshape, for instance the $\circ$-hand. The articulation of a sound or a handshape can even differ from moment to moment in one person. So it is true that there are an infinite number of phonetic variants in both signed and spoken languages. A phonetic variant cannot be predicted in every detail. Some phonetic variations are called allophones (→ Allophone). In the realization of other basic elements phonetic variants can also occur (Movement, Location, etc.).

→ also Phonetic form and Phonetic variation

Phonetic variation

In signed languages as well as in spoken languages there is a rich variation in the area of articulation. How a particular sign is articulated, or how a certain sound is pronounced can vary per individual, but also within one and the same person there is constant phonetic variation. Someone can utter the word benefit, and when that person speaks more rapidly, this often sounds like benfit.

In sign languages the same sign can also be articulated slightly differently. It is assumed that both in signed languages and in spoken languages the underlying form is constant, while the realization of that underlying form varies infinitively, between signers as well as within the same signer. This phonetic variation can be determined by various factors, which can be grouped in three main groups: linguistic factors, social factors and ‘practical’ factors (that have to do with whether someone is tired, or is holding something in his hand, etc.)

→ also Co-articulation, Linguistic variation, Phonetic form and Social factors

Phonological adaptation

Sometimes the contextual influence can be so big that there is no co-articulation (a form of phonetic variation), but phonological adaptation. The following phenomena are discussed in separate articles: assimilation, reduction and deletion. Spoken languages have a fourth phonological adaptation: epenthesis where a sound is inserted. Compare, for example, the word film in English, which is sometimes pronounced with an epenthetic schwa between the l and m, fillem. It is still unknown whether sign languages also show epenthesis.

In co-articulation the realization of a certain basic element (e.g. Location or Handshape) remains within the same phoneme as the basic form of the signer. Co-articulation is a form of phonetic variation, which involves a slight adjustment in articulation. The location of articulation in the syntactic signing space of the NGT sign
for *good* is a bit lower when the sign is made separately, than in the sign combination *good evening*. This is because the initial position of the NGT sign for *evening* is a bit higher in the syntactic signing space. Both realizations stay within the same phoneme for location. Assimilation however is a phonological adaptation, where the realization of a basic element leads to phoneme other than in the basic form of the sign.

→ also Assimilation, Co-articulation, Deletion and Reduction

**Phonological change**

Phonological change occurs both in signed and in spoken languages. One of the phonological changes in sign languages is related to the tendency to achieve more symmetry in two-handed signs. The old ASL sign *depend* has two different handshapes: a *B*-hand and a *W*-hand. In the new sign we see two *B*-hands. This change has to do with a form restriction on two-handed signs: when both hands are active, the two handshapes must be the identical. There are also changes in the basic element Location. An example for NGT is the sign *taxi*. This sign used to be made over the head, but now it is produced in front of the chest. Signs change over time towards the neutral space, which causes some loss of iconicity.

**Phonological coding**

This is one of the forms of coding that is necessary in order to utter a signed or spoken sentence, where phonological forms need to be matched to the lemmas.

→ also Coding

**Phonological form**

This is another name for basic form, citation form or underlying form.

→ Basic form

**Phonological loop**

This is the component in working memory that is responsible for the storage of auditive information, like words and numbers, that fades within seconds. The term is derived from the fact that the information in that phonological loop fades within seconds, unless we reactivate that information by repeating it to ourselves. Its capacity appears to match the amount of information that one can articulate in a certain period of time. Here the *time* that is takes to produce the information is pertinent, and not the amount of information. This became apparent in a Chinese study, in which evidence was provided that on average, a speaker of Mandarin Chinese could memorize one digit more in working memory than for instance an English speaker. The explanation
is that Chinese numerals consist of short sounds, which entails that more information can be retained in the phonological loop.

→ also Visual-spatial loop and Working memory


**Phonological processes**

Here are meant the diverse adaptations in form that can occur when signs or words are combined in sentences: assimilation, reduction and deletion.

→ also Assimilation, Deletion and Reduction

Van der Kooij & Crasborn (2016)

**Phonological restriction**

In sign languages phonological restriction is a combination of phonological features. For instance, in order to pluralize the NGT and VGT sign for **book**, reduplication can be used. Then the movement in **book** is made twice or three times, which results in **books**. It is impossible to make a plural form of the sign **bicycle** in this way. This is related to the fact that this sign already has a complex movement, and for reduplication this movement would have to be repeated, which would be unclear. So this is clearly a phonological restriction of the basic element Movement, in particular one to do with *inflection*. Another restriction on the basic element is found in two-handed signs in which both hands move. The movement of the two hands is the same, that is to say symmetrical or alternating. A different movement of the two hands is not possible.

There are also phonological constraints on handshapes. These are manifested by allophonic handshapes, like the hooked \(-\)hand in signs where the fingers are directed towards the torso (→ Allophone). Phonological restrictions on handshape changes are seen in hand internal movements (→ Hand internal movement).

In spoken languages a phonological constraint can restrain word formation. In English for example the suffix *-al* can only be attached to verbs that end in a stressed syllable to form abstract nouns from verbs: *arrive*-*arrival*, *refuse*-*refusal*, but not *chatter*-*chatteral*, *develop*-*developal*. So some morphological processes (here: affixation) are restricted to bases with certain phonological characteristics.

**Phonological simplification**

In child language there are numerous adaptations on a phonological level that are referred to with the general term phonological simplification. These adaptations are to do with the motor control of those parts of the body that are involved in the production of language. In signed languages it concerns the motor system to make signs, in spoken languages the articulatory organs to produce speech.
Deaf children, for instance, produce certain handshapes earlier in the correct way than others. These unmarked handshapes are easier to produce and occur very often in sign languages. Children often use these handshapes as substitutes for more difficult handshapes. In many sign languages these unmarked handshapes are the \( \text{pp} \)-hand, the \( \text{p} \)-hand, the \( \text{a} \)-hand, the \( \text{w} \)-hand, the \( \text{t} \)-hand and the \( \text{r} \)-hand. These are the same handshapes that form the passive hand in two-handed signs with one active and one passive hand.

Studies on the acquisition of ASL have shown that there is a developmental order for mastering the movements of a sign. Children first learn up and down and to and from movements, then circular movements and, after that, combinations of movements. Motor control starts at the shoulder joints, which control movements of the whole arm and are close (proximal) to the trunk of the body. Control then slowly progresses further away from the body, to the more distant (distal) wrist and finger joints. The phenomenon that the movements of a sign are made closer to the trunk of the body is thus called proximalization. As proximalization is found in the early phase in the general motor development of children, it is not surprising that it also marks an early phase in the sign language development of children.

In spoken language phonological adaptations are usually omissions, for instance in German *Port* ‘sport’ for *Sport, Gabe* ‘fork’ for *Gabel, Hun* ‘dog’ for *Hund, Mate* ‘tomato’ for *Tomate*. Substitutions also occur: in German *Donne* ‘sun’ for *Zonne* and *Gant* ‘goose’ for *Ganz*. Substitution is partly due to the fact that the sounds of a language are acquired by children in a certain order which is specific to the language. One sound is more difficult to learn than another and a certain combination is easier than another one. Children acquire the consonants /p/ and /t/ before /k/ and /k/ before /l/ and /r/. The vowels /i/ and /a/ are acquired before /o/ and /o/ before /ü/.

**Phonological substitution**

In phonological substitution something went wrong in the phonological coding. When two signs A and B strongly resemble each other in their phonological structure (their basic elements) it is possible that by mistake sign B is selected from the formal lexicon instead of the correct sign A.

→ also Slip of the hand

**Phonological variation**

Phonological variation in sign languages is seen in signs where sometimes a spoken component is used and sometimes not. Another form of phonological variation is a difference in handshape. For instance, the NGT sign *strange* can be made with a \( \text{a} \)-hand or a \( \text{w} \)-hand. The NGT sign *correct* is produced with either a \( \text{a} \)-hand or an \( \text{w} \)-hand.
An example of phonological variation from spoken English is the different pronunciation of words such as *bath*, *grass* and *dance*. Speakers in the north generally pronounce these words with a short vowel, those in the south use a long vowel. It is unknown if there is a regional factor causing the variation in the above examples from NGT.

**Phonology**

The phonology of signed languages focuses on the different basic elements of which a sign consists (→ Basic elements), on which realizations of these basic elements can be distinctive in meaning and which rules can be applied to the elements of a sign in the context of other signs (→ also Phonological adaptation)

Crasborn (2012) and Brentari (2012)

**Phonotactics**

By phonotactics is meant the ordering of phonological features. All languages have constraints concerning the combination of phonemes. These constraints are language specific. In spoken languages, the phonotactics only pertain to the linear order of phonemes. Thus in Dutch, the combination of *mk* at the beginning of a word is impossible (e.g. *mkan*), whereas this combination is allowed in Swahili (e.g. *mkono* ‘arm’).

In signed languages, phonotactics concerns the possible combinations of phonological features in both one-handed and two-handed signs. For example, when in a two-handed sign both hands are moving, as in the NGT sign *train*, the feature Movement must be symmetrical for both hands. Note that this is a phonotactic rule that relates to the *simultaneous* combination of the feature Movement in both hands. Another example is that in hand internal movement, not all *sequential* combinations of Handshapes are possible. Observe the NGT signs *talk*. In this sign one handshape changes into another; only the position of the fingers may change but not the selection of the fingers.

→ also Hand internal movement, Phonological restriction and Two-handed sign

![Figure 11. NGT sign for talk.](image-url)
**Pidgin**
A Pidgin is a simplified language system that develops when people with different language backgrounds have to communicate with each other over a longer period of time, for instance in a collaborative situation. A pidgin is a mixture of languages, and is primarily an auxiliary communication in specific situations. There are no native speakers of Pidgins. (Children who are exposed to a Pidgin generally develop a creolized form of the language.)

→ also Creole language

**Plain verbs**
Plain verbs are often body-anchored signs that cannot be modified through argument agreement or location agreement. They occur in most signed languages described so far, and consist of the following verb types: psych verbs (examples are from Israeli Sign Language, e.g. happy, love, suffer), verbs of mental activity (think, dream, understand), verbs of perception (hear, taste, see), verbs of saying (speak, answer, explain), change-of-state-verbs (blush, get well).

Meir, Padden, Aronoff & Sandler (2007)

**Plato’s problem**
Plato’s problem is a term used by Chomsky in his work to indicate the main research question of generative linguistics: how is it possible that a child can acquire such a complicated system as a language in a relatively short time, without instruction? In general the term refers to the problem of explaining the ‘lack of input’. This problem does not exist anymore when there is an explanation for the discrepancy between the knowledge one has and the obvious shortage of relevant input on the basis of experience. Plato’s problem goes back to the moment when Socrates proved that an uneducated slave appeared to have knowledge of geometry. Plato’s explanation for this is that humans have native knowledge. This knowledge is gained in previous lives. This vision on human knowledge is also seen in rationalism. Chomsky uses the term Plato’s problem to indicate that the language input offered to a language acquiring child is not sufficient to explain the ultimate linguistic knowledge of the child. The hypothesis of native language capacity would then explain the discrepancy between the language input and the linguistic knowledge. Chomsky’s view and thus of generative linguistics fits neatly in rationalism.

→ also Native language capacity
Pluralization

Pluralization is the formation of the plural, a process in which a singular form of a substantive noun is changed into a plural form. Languages have different procedures to do this. Sign languages also have a variety of means to indicate plurality.

One way is the use of a numeral sign in combination with the noun (e.g. two house). In some sign languages it is possible to incorporate the numeral in the sign for the noun (→ Incorporation).

A second way to form a plural is the use of signs meaning many or different in combination with the noun.

A third possibility is reduplication. Here the noun or a part of it (for example, the movement) is made several times in order to indicate plurality. In this way in NGT, the plural for books and contacts is made. In many sign languages, among them BSL, NGT, and VGT, the plural of the sign child be made by repeating the whole sign a few times, with each repetition being placed in a slightly different location.

DGS, like other languages, has an interesting restriction on nouns that already have a repeated or complex movement (like bicycle) not being allowed to use reduplication as a form of Pluralization. This is clearly a phonological restriction that occurs in analogous ways in spoken languages. In order to express that there are, for example, several bicycles that are lined up next to each other, DGS uses reduplicated classifier constructions. While this use of classifier forms does indicate plurality, it cannot be considered a plural form of the noun itself, as is the case in the three examples presented above (→ Reduplication).

While the formation of plurality in spoken languages is in many ways different from the formation of plural in signed languages, there are also similarities. Both types of languages, for example, use reduplication for pluralization. Among the many spoken languages that have this possibility is Malaysian. The plural of the Malaysian word meaning ‘ship’, kapal, is kapal-kapal. In other languages, not the whole word is repeated, but only a part of it. In many languages the plural can also be formed by adding a suffix to the single form. The morpheme in English, for instance, is -s, in Dutch -s and -en. There are other forms of plurality, e.g. the lexical item children in English.


Point buoys

Point buoys represent a point in space or time, and are produced with a B-hand or a W-hand. They resemble Pointer buoys in that also a B-hand is used, but Pointer buoys point toward an important element in the discourse (→ Pointer buoys). Point buoys
serve as a prop in relation to which the strong hand acts, and through its physical presence, it helps in structuring the signing space.

→ also List buoys, Fragment buoys, Pointer buoys and Theme buoys

Vogt-Svendsen & Bergman (2007) and Gabarró-López & Meurant (n.d.)

**Pointer buoys**

The Pointer buoy is a weak hand sign (B-hand) kept directed towards some conceptualized entity as the other hand continues signing about it. So it points towards an important element of real space in the discourse (rather than representing it). It differs from the list buoy (→ List buoys), theme buoy (→ Theme buoy) and fragment buoy (→ Fragment buoy) in that it does not acquire any new significance via blending.

→ also List buoys, Fragment buoys, Point buoys and Theme buoys


**Polarity of a sentence**

Languages have various types of sentence (→ Sentence type). Each sentence type can be affirmed or negated. Because of the contrary nature of affirmation and negation this is called the polarity of a sentence.

**Polymorphemic sign**

This is another term for complex sign.

→ Complex sign

**Polysemy**

Both in polysemy and in homonymy multiple concepts are linked to one form. With polysemy the various meanings are connected, but not in homonymy. There is however some doubt about the occurrence of polysemy and homonymy in at least some signed languages (e.g. Homonymy).

→ also Homonymy

**Poor agreement**

Whether agreement is called poor or rich depends on the number of forms in the verbal paradigm for agreement. The agreement of the locative NGT verb CARESS can be called poor, because the paradigm is rather restricted.
Sign Language of the Netherlands (NGT)

(1) CARESS\textsubscript{location-where–the-object-is-localized} ‘(…) caress (…)’

The sign for caress is always made on the location where the direct object is situated, here indicated by location-where–the-object-is-localized (in subscript).

For spoken languages the same distinction can be made: the agreement system in English can be called poor in comparison to the Spanish system. English, for instance, only knows the forms sing and sings for the verb to sing, whereas in Spanish this verbal paradigm knows six forms.

→ also Agreement and Rich agreement

Poor interpretation
In a poor interpretation the assumption is that the language production of the child is an exact reflection of his linguistic knowledge.

→ also Interpretation

Positive transfer
When a certain element in the target language corresponds with an element in the first language, or another previously learned language, positive transfer can occur. This part of the target language will be easier or faster to learn. The more the second language resembles the first language, the more the language learner will be able to transfer to the second language; this is called positive transfer. A learner of a sign language will show positive transfer for those aspects that resemble each other.

→ also Negative transfer and Transfer hypothesis

Postlingually deaf
People who become deaf after the acquisition of a spoken language are said to be postlingually deaf.

→ also Deaf and Prelingual

Pragmatic adequacy
When you are meeting with friends you will sign or talk differently than when you are, for example, applying for a job. Your choice of signs or words will be different, but also the way in which the sentences are formulated. During a job interview the register will be more formal, whereas the conversation with your friends will be informal. Each situation thus requires a certain register: the language use is adapted to that situation.
When expressing your condolences at a funeral, the formal sign pass-away will be used; it would be inappropriate to use the sign die (a cutting sign across the throat). When a person chooses the correct register for a particular situation, this is called pragmatic adequacy. Here the use of the signing space can also play a role. In certain situations it is possible to whisper or to yell in signs. When whispering, the signs appear to be articulated more with the wrist and fingers than with the arms or shoulders. This phenomenon is called distalization (→ also Signing space). In yelling the opposite occurs: Proximalization. Another factor that plays a role is the hearing status of the conversational partners. When a hearing person is not very fluent in sign language, the other person will adapt his register, for instance by simultaneously speaking, or signing slower and more clearly. A phenomenon that is hard to separate in formal or informal register is euphemisms (→ Euphemism).

Pragmatic change

Besides changes in various grammatical levels there are also changes in pragmatics of language use. An example is that nowadays people often greet each other on the street with hello instead of the more formal good morning or good afternoon. An example of pragmatic change in NGT could be the fact that more signs are made with one hand, even when the other hand is actually free (not holding a coffee cup, for instance). This way of signing could be considered ‘sloppy’ and inappropriate in some situations.

Pragmatic rule

Language use is a form of social behavior. With an utterance a person can actually do a number of things, like declare, promise, ask, demand etc. Each linguistic utterance thus also is a Speech act. Compare the following NGT examples.

Sign Language of the Netherlands (NGT) German Sign Language (DGS)

1. _______ doubt + y/n
   INDEX2 NEW HAIR-STYLE LIKE
   ‘Do you like your new hair-style?’

2. _______ irritated
   GARBAGE-CAN PAVEMENT BE-PRESENT
   ‘The garbage can is still standing on the pavement’

3. _______ ironic
   THIS MORNING HIGHWAY NICE-AND-EASY
   ‘It was easy going this morning on the highway’
The sentence in Example (1) has the linguistic form of a yes/no question. The linguistic form is its *locution*. However, in this sentence, it is assumed that the person actually wanted to express the idea that s/he did not really like the new hair-do very much. The meaning of the speech act is called *illocution*. In sign languages as well, the illocutionary facial expression that accompanies the utterances will be consistent with the illocution (see in (1) ‘doubt’ and (3) ‘ironic’ nonmanual expression).

The sentence in (2) has a declarative locution, but as a speech act could be interpreted as a request (or order) that the addressee fetch the garbage can. Here too the facial expression will leave no doubt as to the meaning of the sentence. Example (3) is more subtle, as the signer says something opposite to than what is actually meant. The locution of sentence (3) is the declaration that the going was nice and easy on the highway. However with appropriate nonverbal facial signals, the speech act would use the device of irony to indicate that the traffic had, in fact, been horrible. Example (3) remains a declaration at the locutionary level, but by the use of irony the illocutionary force carries a different message than carried by the signs alone.

The relationship between locution and illocution can be direct or indirect. A direct speech act directly reflects the meaning of the signer or speaker For example, if a friend has come to Pete, who is ill, to ask if he wants to go play football, Pete could reply to the question directly as in (4). Peter could also answer indirectly as in (5).

*Sign Language of the Netherlands (NGT)*

(4) **INDEX₁ CANNOT BECAUSE ILL**

‘I cannot because I am ill’

He could also answer indirectly:

(5) **INDEX₁ ILL**

‘I am ill’

Either way, the friend will understand what Pete means (→ Conversational implicature).

There are verbs, called performative verbs, that explicitly express the illocution in direct speech acts (*inform, promise, ask* etc.) and are used as in Example (6).

*English*

(6) **I promise that we will go to the circus tomorrow.**

Speech acts only have the desired effect when they comply with one of four conversational maxims. When a little boy tells his father to immediately clean the garage, then this language act is not correct, because the little boy is not in the social position to order his father around. It is also not possible, for instance, to promise something that is not wanted by someone. For example ’I promise to give you a beating.’ Such utterances can be said to not comply with the cooperation principle.
→ also Cooperation principle
Hoza (2007) and Campbell (2001), Baker & van den Bogaerde (2012)

Pragmatic variation
Variation occurs not only at the phonological and grammatical levels of language, but also in our pragmatic use of it. The way in which one orders something at a counter, or answers the telephone, greets someone or says goodbye can depend on one’s age or gender, or the situation.
→ also Pragmatic adequacy

Pragmatics
We can understand our native language and produce utterances thanks to our knowledge of the language system (linguistic competence), our knowledge of the rules for language use (communicative competence) and our knowledge of the world. Pragmatics concerns the rules for language use of a particular language and tries to find the system that plays a role in interaction in discourse situations. In this field, signed languages and spoken languages highly resemble each other. In both types of languages the users comply with the rules that enable optimal communication. However, there are also differences for instance in the area of attention strategies.

In the next Example (1) the form of INDEX₂ (حركة- hand) shows that the situation is formal, otherwise the informal handshape حركة-hand would have been used. Knowledge about formality versus informality is part of the pragmatics of a language.

Sign Language of the Netherlands (NGT)

(1) ______________ y/n
COFFEE WANT INDEX₂? (with حركة- instead of حركة-hand)
‘Would you like some coffee?’

Baker & Van den Bogaerde (2012, 2016) and Baker et al. (2016)

Predicate
A predicate shows a relation with other constituents or specifies a characteristic of a constituent. The predicate of a sentence is the lexical verb (in a simple sentence with a verbal predicate) or the nominal part of the nominal predicate. Compare the following sentences, where the predicate is placed between square brackets. The mother and the brother are localized in location 3a, respectively.
Sign Language of the Netherlands (NGT)

(1) INDEX₁ MOTHER [LAUGH] INDEX₃ₐ
‘My mother laughs’

(2) INDEX₁ BROTHER [ILL] INDEX₃ₐ
‘My brother is ill’

(3) INDEX₁ BROTHER [DOCTOR] INDEX₃ₐ
‘My brother is a doctor’

In the first sentence the verbal sign laugh is the predicate (a verbal constituent), in the second example the predicate is the adjectival sign ill (an adjectival constituent). In the third sentence the nominal sign doctor forms the predicate. This is called a nominal predicate.

Predicate clause
Here the predicate has the form of a sub-clause.

Preferred hand
This is the hand that people use for common day activities. For somebody who is right handed the right hand is the preferred hand. A left-handed person prefers to use his left hand. The preferred hand plays various roles in the production of signs.

Preferred language
Their first language people usually learn from their parents and their extended family, and traditionally, in the western world, from their mother. For that reason the first language is also called mother tongue. Deaf children sometimes acquire sign language as their first language if their parents are also deaf. However, since 95 percent of deaf children have hearing parents, they do not always learn sign language from their parents/mother. In that case sign language is called their preferred language.

Prelingual
This term is used in spoken language acquisition research for the period until the first birthday, around which many hearing children are producing their first words. The term ‘prelingually deaf’ has been used in the past for persons who are born deaf or who become deaf before they acquire the basics of the spoken language that is available to them. This period is set for deaf children as around age 3;0 by some researchers, by others around age 5;0. Other researchers are against the use of this term altogether,
preferring to use ‘early deaf’ with the argument that deaf children of deaf parents can learn sign language from their parents and so learn a language from birth, and are thus prelingual only until they start to produce signs (usually a little earlier than hearing children produce their first words).

→ also Deaf

**Prescriptive grammar**

In a descriptive grammar the language use of native speakers or signers of a language is described, without any value judgments about variants in the sign, word or sentence level. In a prescriptive grammar certain variants of a sign or word that might be included in a descriptive grammar are rejected. Prescriptive grammars are usually used for teaching purposes with the aim of showing its users how to use the language. In this sense they are primarily normative and prescriptive. For English, for example, the b-sentences in (1) and (2) are considered in a prescriptive grammar to be incorrect variants of the a-sentences. In a descriptive grammar, the a- and b-sentences would both be included and considered variants.

**English (UK)**

(1)  
  a. Who did you give the book to?  
  b. Who did you give the book to?

**English (USA)**

(2)  
  a. I did not have either her address or her phone number.  
  b. I did *not* have *neither* her address nor her phone number.

**Presens**

This is the Latin name for present tense.

→ also Tense

**Present tense**

This is one of the tenses used in grammatical description, e.g. John walks.

→ also Tense

**Preterite**

This is another term for the linguistic concept simple past tense, for example John walked. This is the past tense without any aspectual regard, which contrasts to non-preterite forms as John was walking, John has been walking, etc.

→ also Tense
**Preverbal message**

This is one of the forms of coding that are necessary before a sentence can be produced in a signed or a spoken language. It is the first phase of production, when the language user, in his brain, prepares a message consisting of concepts.

→ also Coding

**Pre-verbal period**

This is the phase between 0–1 years in first language acquisition. In the second part of the first year until approximately the first birthday the child will vocalize and babble. Until approximately the eighth month universal babbling occurs: this form of babbling is produced both by deaf and hearing children. Then, until the twelfth month, language specific babbling is used. Hearing children gradually produce only those sounds that belong to their mother tongue. Babbling can occur until after the first birthday. In language specific babbling a difference in deaf children can be observed, because they cannot hear the sounds of the language that is spoken in their surroundings. During this period they usually make hand movements that are interpreted as sign babbles by some researchers. Furthermore they point at objects and persons. Because hearing children also do this, it is assumed that these points do not yet have the grammatical function of index.

→ also Babbling and First language acquisition

**Priming**

This is a somewhat wider concept than context effect. It is called priming when a certain sign or word is recognized quicker when just before in the context, a sign or word has been used that has similarities in meaning (context effect). Assume that someone says that he has just seen a cock in his garden. This sign cock or the word cock will be recognized quicker by the conversational partner when earlier in the story, for instance, the sign henhouse or the word henhouse had been mentioned, than if it had not been mentioned. By the use of this previous sign/word (henhouse) possibly the sign cock or the word cock was already activated in an earlier stage, which leads to quicker recognition when the sign/word (cock) is actually used later on. It is also called priming when the term airport is mentioned in a certain context, and later the concept strip is correctly interpreted as the long airstrip where airplanes take off and land. The interpretation of ‘strip’ as in taking off clothes is already suppressed by priming.

→ also Semantic network
Pro-drop

Pro-drop is the omission of the personal pronoun as a consequence of (rich) agreement. In many sign languages pronouns can be omitted. This phenomenon is called pro-drop: the pronoun is dropped. In NGT, for instance, pro-drop is possible when rich agreement makes clear what is the subject or the object. Here follows an example with the verb visit.

**Sign Languages of the Netherlands (NGT)**

(1) \[ \text{y/n} \]
\[ \text{INDEX}_1 \text{ BROTHER TON INDEX}_{3a}, \text{KNOW INDEX}_2 \]
‘Do you know my brother Ton?’

(2) \[ \text{TOMORROW } \text{INDEX}_{3a} \text{VISIT}_1 \]
‘Tomorrow he will visit me’

In sentence (1) *my brother Ton* is introduced and localized in space by \( \text{INDEX}_{3a} \). Subsequently in (2) both the subject and the object pronoun are left out, because the sign *visit* begins at location 3a (Ton) and ends in location 1 (signer). The term pro-drop is used for omission of the subject and the object, although the terms subject-drop and object-drop also occur. Please note that in NGT subject-drop is not obligatory. Object-drop is such a common phenomenon in NGT sentences with agreement that is might be considered obligatory. Usually the object pronoun only occurs in these sentences for emphasis.

Spoken Dutch hardly ever allows pro-drop, but a language like Spanish does. Spanish is called a pro-drop language. Examples:

**Spanish**

(3) \[ \text{Voy} \]
‘I go’

(4) \[ \text{Estoy en casa} \]
‘I am at home’

In a spoken language like Spanish the omission of the subject is also due to rich agreement. The subject can be realized, but then only when emphasis is necessary, so there is a slight change in meaning. The situation of object-drop in NGT is similar to the Spanish subject-drop in view of whether or not they are mandatory (Heleen Bos, personal communication).


**Pro-drop language**

In some languages pronouns can be omitted because of rich agreement. These are called pro-drop languages.

→ also Pro-drop
**Production**

With production the process of planning and executing signed or spoken language is meant. When someone has planned what he wants to express articulation follows. While producing sign language diverse muscles are activated in the arm, the hand(s) and the fingers in order to perform those movements necessary to produce signs. In spoken languages the articulatory organs are activated that are necessary to produce spoken language.

*Crasborn & Van der Kooij (2016)*

**Productive lexicon**

This is the part of the sign lexicon that consists of signs of which form and meaning are determined by the context. Classifier constructions are usually considered to belong to the productive lexicon. The productive lexicon is often put in contrast to the frozen or conventional lexicon.

→ also Frozen lexicon and Mental Lexicon

*Schembri & Johnston (2013)*

**Progressive aspect**

Aspect can indicate the beginning or the course of an action. In the English sentence *John was laughing* the action shows an imperfective aspect, because the event has some kind of internal structure (it is still going on). Because the event is viewed as extending over time it is called progressive aspect.

→ also Aspect

**Progressive assimilation**

In progressive assimilation the production of the basic element of a sign is influenced by a preceding sign, e.g. in the DGS sign for *abbot: monk^boss*. The sign *monk* is made on top of the (back of the) head. In the separate sign *boss* the extended thumb is brought up in front of the body. In the compound *monk^boss* the movement in the sign for *boss* is not only downward, but the start position of this sign is on the side of the head, near the end position of the sign *monk*. So here both progressive assimilation of location and movement occurs.

→ also Assimilation and Regressive assimilation

*Leuninger (2001)*
Pronominalization

This is the phenomenon that a (personal) pronoun refers to an entity mentioned earlier in the conversation. In (1) two entities (a man and a woman) are localized in the syntactic space. Subsequently it is possible to refer back to these locations (see (2)).

**Sign Language of the Netherlands (NGT)**

1. **man index\(_{3a1}\)** woman index\(_{3a2}\), they-two institute SLD work they-two
   ‘The man and the woman work at the Institute SLD’

2. **index\(_{3a1}\)** linguistics teach, index\(_{3a2}\) deaf studies teach
   ‘He teaches linguistics, she Deaf studies’

(2) is an example of pronominalization. This phenomenon also occurs in spoken languages (→ Anaphoric reference).

→ also Deictic reference and Localization


Pronoun copy

In sign languages, a subject pronoun copy occurs when the subject is repeated at the end of the sentence with an **index** personal pronoun form. The phenomenon is restricted by the type of verb that is used in the sentence, occurring most often in sentences in which there is no agreement between the verb and the subject. Example:

**Sign Language of the Netherlands (NGT)**

1. **boy index\(_{3a}\)** dog buy index\(_{3a}\)
   ‘The boy buys a dog’

2. **index\(_{3a}\)** dog buy index\(_{3a}\)
   ‘He buys a dog’

3. *boy index\(_{3a}\)** dog buy boy
   ‘The boy buys a dog’

Bos (1990, 1993, 1995) for NGT

Proximal

This is an anatomic term that is used in phonetics of sign linguistics to indicate the distance of the arm or the hand (or their movements) relative to the torso of the signer. Movement from a joint closer to the shoulder joint is called a proximal (nearby) movement. Such a movement is more proximal than a movement from the elbow joint.
A movement of the elbow is, in turn, more proximal than a movement of the wrist and/or the fingers, which are considered more distal to the trunk (see Figure 12 below).

→ also Distilization and Proximalization

![Figure 12. Proximal to distal distance to the torso.](image)

→ also Proximalization

📖 Napoli, Sanders & Wright (2011), Baker et al. (2016)

**Proximalization**

This is a form of phonological simplification in which the movement of the sign(s) is produced closer (more proximal) to the torso. The concept is important in the motor development of children, who initially produce signs from the shoulder joint and only later sign more distal (further away). Therefore this phase in motor development is also a phase in sign language acquisition. The term proximalization is also used for shouting in sign language. In contrast to distalization in whispering, where signs are made more with the wrists and fingers than from the shoulder, in shouting proximalization occurs, because then more signs are made with the whole arm, so with the shoulder joint.

→ also Distal, Distalization, Phonological simplification, Pragmatic adequacy and Proximal

**Pseudo argument**

In NGT or VGT (and many other sign languages) there are sentences like **TODAY RAIN** ‘It is raining today’. Such a sentence shows that the verb **RAIN** has no arguments. In the English or Dutch equivalent a sort of subject appears (**it** or **het**), but this is not linked to an entity. Because there is no referent for this subject it is not considered to be an argument. The words **it** and **het** are considered dummy-words for this so-called pseudo-argument. Compare:
Sign Languages of the Netherlands (NGT) and Flemish Sign Language (VGT)

(1) Today rain

English or Dutch

(2) It is raining today
(3) Het regent vandaag ‘It is raining today’

→ also Valency of the predicate and Zero-place predicate

Psycholinguistics

Psycholinguistics studies the psychological processes that form the basis of natural languages, looking at their acquisition, perception and production and the working of memory. The language user is central. Psycholinguistics looks at both the comprehension of language, especially the way a language user achieves a coherent interpretation of a speech act or text, as well as the production of language. Psycholinguists try to determine the process in which people create a message and ultimately express it in a signed or spoken language. Psycholinguistics is an interdisciplinary field: techniques and findings from both linguistics and psychology are used. There is also a more applied field of psycholinguistics, which focuses on empirical research with experiments which can include brain scans, MRI-scans, PET-scans etc. Neurolinguistics also deals with these subjects but differs from (theoretical) psycholinguistics, by its special interest in the circuits, networks and mechanisms in the brain that are involved in the comprehension and production of signs, words and sentences. These studies look not only at the language processes in the healthy brain, but also in the impaired or damaged brain.

→ also Language pathology, Neuro-linguistics and Psychology of language

Emmorey (2002) and Harley (2008)
Question intonation
In a yes/no question in spoken English the tone (often) rises at the end of the sentence. This is called rising intonation. It is also possible to keep the word order of the declarative sentence and by means of interrogative intonation indicate that it concerns a yes/no question. Compare:

English

(1) John is buying a book (declarative sentence)
(2) a. Is John buying a book? (yes/no question)
    b. John is buying a book? (yes/no question)

Many sign languages use non-manual grammatical markers for the construction of these types of sentences.

→ also Yes/no question

Question word question
This is one of the two types of questions (the other type being yes/no question). In this type of question the answer is dependent on the type of question word that usually occurs at the end of the signed sentence (who, what or when and such). As the most often-used question words in English begin with a ‘wh’ (where, who, why, when), these forms are also known as Wh-questions.

A non-manual grammatical marker (often ‘frown and raised eyebrows’) accompanies the wh-question. This type of question can additionally be marked with a general question sign often glossed as pu (palm up). In the declarative sentence in (1) both arguments (index₁ father and house) as well as the adjunct (tomorrow) can be questioned, as shown in Examples (2), (3) and (4). The question word (here: who, what and when) in all these examples is followed by pu.

Sign Language of the Netherlands (NGT)

(1) TOMORROW INDEX₁ FATHER HOUSE BUY
    ‘Tomorrow my father is buying a house’
In NGT the question words are often in sentence final position, but also in sentence initial position. In VGT the questions word can either be at the beginning or at the end of the sentence, but both at beginning and end is also possible (→ Wh-doubling). Besides the lexical question sign these sentences also have the before-mentioned non-manual grammatical marker, which is represented by ‘wh’ in the examples.

→ also Yes/no question, Wh-question
Reactivated iconicity

This term is used when of a lexicalized sign (e.g. the sign tree in ASL) the componential parts are evoked in a novel way. The ASL sign tree is fully lexicalized in that the arm (representing the trunk) and the hand (representing the branches) is a schematized articulation, as the actual referent may have none of the features suggested by the form. The trunk might for instance not be straight, and there may not be five branches at all. And yet a signer might point to the arm and thus indicate (only) the trunk, or point to one of the fingers indicating one of the branches. This way the different parts of the sign tree (see Figure 13) can be evoked again. Other terms also used for this phenomenon are 're-iconization', 'de-lexicaliation', or 'revitalized dormant iconic features'.

Figure 13. ASL sign for tree.


Recipient

This is the semantic role of the receiving entity of actions that are expressed by the predicate of the sentence. Example:

Sign Language of the Netherlands (NGT)

(1) JOHN INDEX3a MARY INDEX3bRecipient BOOK3aGIVE3b
   ‘John gives Mary a book’

→ also Semantic role
Recognition of sign languages
There is no uniform way in which sign languages are officially recognized, since each country interprets this in their own way. There are countries where the national sign language is an official language of the state, while the sign language in other countries has only a protected status in education. Many states of the USA have educational laws that recognise American Sign Language as a ‘foreign language’. Other states recognize ASL as instruction language in educational settings. Flanders has officially recognized Flemish Sign Language, which entails that the Flemish government recognises this sign language as the language of the Deaf community in Flanders and that the government expresses her appreciation for VGT.

In the Salamanca Statement of UNESCO (1994, article 21) sign languages are explicitly mentioned as the medium of communication of deaf people, and it explicitly states the right of deaf children to have access to education in their national sign language.

Reduction
In sign languages reduction occurs. In the NGT sign parents, for instance, reduction on the phonetic/phonological level happens: reduction of movement. The total length of the movements of this compound is more or less the same as the length of each separate sign (here: father and mother).

Reduction also occurs in spoken language. In the English word telegraph for instance the full vowel in the first and third syllable is reduced to schwa in the related word telegraphy.

Reduplication
Reduplication is the phonological process in sign languages with morpho-syntactic consequences, where a part of the noun (e.g. Movement) is copied. In some sign languages the repetitions are each made in a different location (→ Pluralization).

Many sign languages use reduplication to form the plural of nouns. In some nouns the movement of the single form can be repeated in order to form the plural. This way for instance the NGT form of books is formed.

Reduplication can also be used to indicate the spatial location of multiple objects. For example, in order to express that there are various bicycles parked next to each other, NGT and VGT use reduplication of the verb with the incorporated classifier handshape for bicycle. First the sign bicycle is produced and subsequently three times, next to each other, the verb park is made with a vertical hand with the fingertips pointing out, which is used as the incorporated classifier for bicycle. When you want to indicate that three books are lying next to each other on the table, first the sign book
is made, then the sign three, and then three times next to each other the verb lie-on is made, with the incorporated classifier handshape for book (hand). This way is also used to express, for instance, that three apples are lying next to each other, but then with a hand. The verbs of location lie-on and stand can incorporate different classifiers.

Some spoken languages also use reduplication for the formation of plural. In Malay, for instance, kapal (ship). The plural of ship in this language is kapal-kapal.

→ also Pluralization

Reference
Deictic and anaphoric reference are distinguished.

→ Anaphoric reference, Deictic reference and Localization

Referent
This is the entity in reality (human, animal, thing, but also abstract things like ‘idea’), to which a certain language form refers to in signed or spoken languages. Take for example the next NGT sentence:

**Sign Language of the Netherlands** (NGT)

(1) TONIGHT LIBRARY INDEX₁ INDEX₂ SEE

‘Tonight I will see you in the library’

The person who is addressed will know exactly which specific library in the real world the signer is referring to, because they will have agreed to meet there before or because there is only one library.

Referential sign
In the early linguistic phase the child starts to produce signs that have a fixed form and refer to a constant reference. These are called referential signs.

Referential word
Referential words are used to refer to entities. Usually these are references to previously mentioned entities. By using a referential word these entities need not be mentioned again. Often pronouns are used for this function, both in signed and in spoken languages.

→ also Anaphoric reference, Coherence and Cohesion
Regional background

This term is used to indicate the area where a person has grown up. This concept plays an important role in linguistics, in particular in language variation. Especially the language forms that show variation in comparison to comparable forms in other regions. For NGT and VGT, for instance, the regional variation can mainly be found in the lexicons. Signers from different regions often use different signs for the same concept (lexical variation).

→ also Language variation

Vermeerbergen, Nijen Twilhaar & Van Herreweghe (2013)

Register

This term concerns the way in which someone will adapt his language use to a particular situation. Having a drink with friends demands another register (informal) than a job interview (more formal register). An intimate register in sign language can be used between Deaf lovers which is phonologically adapted to the close space they have between them. Also, spoken and written texts differ in register.

Johnston & Schembri (2007) and Hoza (2007)

Regressive assimilation

When in a signed language a phonological feature (phoneme) is made the same as a feature in the following sign, this is called regressive assimilation. Another possibility is that the phonological feature may change, but not resemble the following feature. An example of the latter is the NGT sign pole^lamp (lamppost). The sign pole is made with a downward movement. The compound pole^lamp consists of the signs pole and lamp, in that order. Because the sign lamp is articulated higher, the movement of the sign pole is reversed from downward to upward, so that the whole can be articulated with a smooth movement. This is adaptation of the basic element Movement, so assimilation of movement. This compound has a variant lamp^pole. In this compound there is no regressive assimilation.

Re-iconization

This term is used for the aspect that standard signs in the standard or frozen lexicon, which originate in the structures of great iconicity, show a “degenerated” iconicity, which can be reiconized at any time (→ Reactivated iconicity).

Cuxac & Sallandre (2007) and Boyes Braem (2012)
Relative clause

This type of subordinate clause is a rather complicated phenomenon in sign languages, and so far has only been extensively studied for ASL, DGS and LIS. Furthermore, this research has mainly been done on a special kind of relative clause – the restrictive relative clause. An example of a restrictive relative clause from DGS is given in Example (1) (rpro-m₃a is a relative pronoun in DGS; → Relative pronoun):

**German Sign Language (DGS)**

(1) \[ \text{TOMORROW MAN (INDEX₃₈) [rpro-m₃a YESTERDAY CAR BUY] MARRY} \]

‘The man who bought a car yesterday is getting married tomorrow’

The subject here is a man who is further specified in the relative clause (between square brackets in Example (1)), as the one who bought a car yesterday, after which it is announced that this man is getting married tomorrow. If the man had already been mentioned earlier in the conversation, the information structure would have been different. Then the information that is presented in the relative clause, would be giving additional information to the information that he is getting married. In this case this would have been a non-restrictive relative clause. To illustrate this difference a less complex example of such a relative clause can be given. If a unique entity is provided as antecedent of the relative clause (such as the Eiffel tower in Paris) the restrictive reading is not possible, only the non-restrictive reading. Example (pl stands for non-manual grammatical marker ‘pursed lips’):

**German Sign Language (DGS)**

(2) \[ \text{1889, EIFFEL TOWER [INDEX₂ KNOW PARIS INDEX₃₈] BUILD} \]

‘In 1889 the Eiffel tower – you know, in Paris – was built’

→ also Complex sentence, Head external relative clause and Head internal relative clause

Pdfau & Steinbach (2005) and Pfau (2016a) for DGS

Relative pronoun

This is a pronoun that introduces a relative clause. Not all sign languages use a relative pronoun to introduce the relative clause. One language that does is DGS:

**German Sign Language (DGS)**

(1) \[ \text{TOMORROW MAN (INDEX₃₈) [rpro-h₃₈ YESTERDAY CAR BUY] MARRY} \]

‘The man who bought a car yesterday is getting married tomorrow’
DGS has two relative pronouns: rpro-h for a human antecedent (man in (1)). Here a classifier handshape (\(\hat{\phi}\)-hand pointing upward) for persons is used (see (1)) and rpro-nh for a non-human antecedent (dog in (2)) by means of an indicative gesture (\(\hat{\phi}\)-hand pointing forward; see (2)).

The following are examples of relative pronouns from Dutch:

**Dutch**

(3) De man die daar loopt is mijn buurman
   ‘The man who is walking there is my neighbor’

(4) Het huis dat daar staat is door mijn vader gebouwd
   ‘The house that stands there was built by my father’

In Dutch, the relative pronoun agrees in gender with its antecedent. In (3) the gender of noun *man* is non-neuter, so the relative pronoun is *die*. In (4) however, the gender of the noun *huis* is neuter and therefore the relative pronoun is *dat*. In English there is no word gender, however the antecedent shows a different kind of agreement with its relative pronoun. Here the semantic feature [human] is relevant. If the antecedent is a human, as *man* in (5), the pronoun is *who*. If the antecedent is non-human, as *dog* in (6), the pronoun is *that*.

**English**

(5) The man *who* is walking by is my neighbor
(6) The dog *that* is walking by is my daughter’s dog

→ also Head external relative clause and Relative clause

Pfau (2016a); Pfau & Steinbach (2005)

**Restrictive relative clause**

In a restrictive relative clause a set of entities about which something is said in the main clause, is restricted. Example:

**English**

(1) The boys *who were shouting this morning in the classroom*, are punished.

If this sentence means that only the boys who were shouting were punished, not the other boys, the relative clause in (1) is a restrictive relative clause: the set of individuals (boys) is restricted by the clause to a subset: those boys that were shouting. Only those boys are punished.
Restrictive relative clauses also occur in sign languages but have not been extensively studied (→ Relative clause for examples).
→ also Head external relative clause, Head internal relative clause, Non-restrictive relative clause and Relative clause

Reversible constituents
When in a sign sentence there are two constituents that both can fulfill the semantic role Agent, these are called reversible constituents. In the next examples, the reversible constituents are boy and grandma. Both can have the semantic role Agent, depending on the sign order used. Also, agency can be indicated by non-manually topicalizing the subject, or first constituent. In the next two examples, (1) shows SOV order, and (2) SVO order, which are typical for these languages.

Sign Language of the Netherlands (NGT)
(1) boy grandma hug

Flemish Sign Language (VGT)
(2) boy hug grandma

→ also Sign order

📖 Laudanna & Volterra (1991)

Rhetorical question
This is the posing of a question when no answer is expected as the signer/speaker already knows the answer and usually is about to provide it him/herself. Rhetorical questions are thus stylistic deviations from the usual way of saying something, in order to achieve a particular effect. Functionally, a rhetorical question is an emphatic declaration in the form of a question. Examples:

English
(1) Did we not all fail in this matter?
(2) Don’t you want your children to get a good education?

American Sign Language (ASL)
(3) boy scared why, room dark

In the ASL example both the ‘question’ and the ‘answer’ are provided for emphasis and to introduce new information.

💻 http://www.seattlecentral.edu/faculty/skennedy/ASL102/Lecture%20Notes/asl_102_rhetorical_questions.htm
→ also Information structure
Rhyme

Rhyme is usually understood to mean the repetition of similar sounds in the final syllables of lines of songs or nursery rhymes or poems. Compare the following example, which is the first stanza of the poem *I wandered lonely as a cloud* by William Wordsworth.

(1) I wandered lonely as a cloud
    That floats on high o’er vales and hills,
    When all at once I saw a crowd,
    A host, of golden daffodils;
    Beside the lake, beneath the trees,
   Fluttering and dancing in the breeze.

Here the rhyming last words are: *cloud-crowd, hills-daffodils, trees-breeze*.

Rhyme also plays an important role in phonology. In spoken language it is understood as the constituent of a syllable comprising the nucleus (which is the non-consonantal part of the syllable) and the coda (which is the final sequence of consonants). So the rhymes in the poem above are: *oud-owd, ills-ils, ees-eeze*. The rhymes are spelled differently, but their pronunciation of course is similar. The last vowel of *breeze*, for instance, is not pronounced.

Rhyme is also a notion in sign language. It contains the movement and the final location of the syllable.

→ also Syllable

Rich agreement

Whether agreement is considered poor or rich depends on the number of forms in the verb paradigm. Rich agreement means that the agreement paradigm of a verb includes different conjugations for each person, singular and plural. Some verbs in signed languages have rich agreement. The verb meaning ‘give’ is directional in many sign languages and is an example of rich agreement:

Many signed languages

(1) $\text{1\text{GIVE}}_2$ ‘I give you’
    $\text{2\text{GIVE}}_1$ ‘You give me’
    $\text{1\text{GIVE}}_3$ ‘I give him/her’
    $\text{3\text{GIVE}}_1$ ‘S/he gives me’
    $\text{2\text{GIVE}}_3$ ‘You give him/her’
    $\text{3\text{GIVE}}_2$ ‘S/he gives you’
    $\text{3\text{GIVE}}_3$ ‘S/he gives him/her’

For spoken languages the same distinction between poor and rich can be made: agreement in Spanish is rich compared to agreement in English which only has the forms
*sing* and *sings* for the verb *to sing*, whereas Spanish has six forms: *canto, cantas, canta* (1st–3rd person singular) and *cantamos, cantáis, cantan* (1st–3rd person plural).

→ also Agreement and Poor agreement

**Rich interpretation**

The language production of a child is assumed not to be an exact representation of its linguistic knowledge – i.e. the child has far more knowledge about its native tongue than would appear from its language production. When a child says *Mummy ball*, this could mean for instance ‘Mummy, I want to play with the ball’, ‘Mummy, please fetch the ball’ or ‘Mummy, that is a ball’ or ‘That is mummy’s ball’. A Rich interpretation of the content of the utterance would thus be more than what is expressed by the form uttered by the child.

→ also Interpretation

**Right hemisphere**

The great brain consists of two halves that are called hemispheres. The term right hemisphere refers to the right part of the brains.

→ also Hemisphere

**Role-taking**

This is a way to convey information in a specific way. The signer takes on, as it were, the role of another entity to express its thoughts, utterances or actions. There are several manners of role-shift. For instance, the signer can change his body posture and facial expression and is thus able to tell a story from the perspective of the protagonist(s) (→ Character perspective). This turn of the torso is often used to indicate that the signer takes on the role of an entity, and is called body-shift. Role taking entails a temporary shift of locations. The location where the original entity has been localized is associated, for the duration of the role taking, with the location of the signer.

→ also Character Perspective, Constructed action, Constructed dialogue, Information structure and Perspective
**Sandwich constructions**

Verbs sandwiches are constructions in which a verb appears twice: once in its usual position and again in sentence-final position. Nowadays two types are recognized: the aspectual verb sandwich construction (1) and the lexical verb sandwich construction (2). In the latter the second verb is a classifier construction.

**American Sign Language (ASL)**

1. `student name s-a-l-l-y type her term paper type_asp:cont (...)`
   'A student named Sally is typing her term paper (...)'
   (Fischer & Janis 1990:280)

2. `elizabeth eat r-i-c-e eat-with-chopsticks++ (...)`
   'While Elizabeth is eating her rice with chopsticks (...)'
   (Fischer and Janis 1990:284)

Fischer & Janis (1990), Matsuoka (1999)

**SASS**

This used to be a much used abbreviation for Size and Shape Specifiers.

→ Size and Shape Specifier

**Scope**

The linguistic definition of scope is as follows: that part of an expression that is governed by a given operator. Example (1) illustrates the scope of two non-manual markers in ASL. The scope of the non-manual marker for topicalization (t) is over CAT, the scope of the non-manual marker for negation (neg) is over DOG CHASE (→ also Topicalization and Negation).

**American Sign Language (ASL)**

1. `t neg cat, dog chase`
   'As for the cat, the dog did not chase it.'

Liddell (1980)
Second language acquisition

When someone learns a language after he has acquired his first language, this is called second language (L2) acquisition. The assumption is that around the fifth birthday the basis for the first language (mother tongue) is acquired; so second language acquisition occurs after the age of five in the learning of a new language. If someone is acquiring two languages before the age of five at the same time, these are considered two first languages. This process is called simultaneous acquisition (→ Simultaneous language acquisition). Other names for L2-acquisition are consecutive language acquisition, successive language acquisition and sequential language acquisition.

L2-acquisition is used for two ways in which another language can be learned after the native language. If the language is learned in someone’s own country this is foreign language acquisition, for instance, the learning of English in Germany, France and the Netherlands. But if foreigners come to England and learn English there, it is called second language acquisition. This can occur naturally, through interaction with native English speakers of course, or via classroom instruction which is sometimes called second language learning.

L2-acquisition is a process that can be compared to L1-acquisition. It has been demonstrated that the order in which a second language is learned shows many similarities with the way that language is acquired as a first language. However, there are also differences that stem from factors like age and language aptitude. The degree to which the native language and the target language resemble each other also plays a role. The more they are alike, the easier the L2-acquisition is (→ Language typology).

There exist several theories about the way second language acquisition proceeds. Globally there are two categories. The first category beliefs that there is a fundamental difference between the two processes. L2-acquisition supposedly is a cognitive process that evolves explicitly and is comparable to learning how to count, how to play football and how to play an instrument. According to the second category, the process of L2-acquisition is comparable to first language acquisition. The process is thus implicit: just as in first language acquisition the learner receives sufficient input from the environment and with the help of a creative language learning mechanism a second language develops without explicit instruction from the environment. In the research on L2-acquisition there are different theories that fit into the dichotomy described above. These are the transfer hypothesis (category 1), the creative constructive hypothesis (category 2), the Universal Grammar theory (category 2) and connectionism (category 2) (→ Connectionism, Creative constructive hypothesis, Universal Grammar theory about L2-acquisition).

→ Transfer

Selected Finger Constraint
When a hand internal movement is made, the position of the fingers can change, but not the selected fingers involved. This constraint is called the Selected Finger Constraint.
→ also Hand internal movement and Movement

Selected fingers
This is a phonological term from sign linguistics that refers to the fingers of a hand-shape that
1. can make contact with the body, the head or other hand and/or arm (e.g. the forefinger in a sign) or with a finger/fingers of the same hand (e.g. the index finger and the thumb in the А-hand,
2. can take a certain position (bent, closed or spread), and
3. can move (open and close).

Self-correction
When making a mistake in spoken or signed languages the language user is often aware of having made a mistake, in which case the mistake is repaired by producing the correct utterance, a self-correction. An example from the radio (November 2008) (Heimans is a Dutch firm where Mr. Bouwhuis works):

Dutch
(1) Mr. Bouwmans, hahaha, Mr. Bouwhuis from Heimans
→ also Slip of the hand and Slip of the tongue

Semantic change
Semantic change on the sign or word level is found, for instance, when signs or words have undergone an extension of meaning. Originally the Dutch word milieu meant ‘surrounding where someone has grown up’. Later the meaning ‘environment of man and animal’ was added. Semantic changes can thus lead to semantic variation (here: polysemy). An example from NGT is the sign TELEPHONE that originally belonged to the concept of the telephone with a horn. Nowadays this sign is used for all forms of telephones, although a new sign has been formed for mobile phones.

Semantic network
A semantic network refers to a set of signs or words that form a coherent network on the basis of similarity in or association of meaning. That signs and words in our brain are organized in such a network is not only apparent from mistakes, when a wrong
sign or word is retrieved from the mental lexicon (→ Slips of the hands and Slips of the tongue), but also from the effect of priming on sign and word recognition (→ Priming). There a certain sign or word is recognized sooner when earlier in the sentence of the story a sign or word occurs with which its meaning overlaps or is narrowly associated.

→ also Psycholinguistics

**Semantic role**

A semantic role is the relationship that an element has to the verb or situation in a sentence. (It is also known as thematic role). The entities that are referred to in a sentence can be related to the action or situation in different ways. An entity can perform the action (in which case it is in semantic role of Agent), or can undergo the action (role of Patient), can be the recipient of something (role of Beneficiary). Other possible roles are that of the instrument with which the action is performed, or the goal of the action. In the next sentences five of such roles are indicated after the entity in square brackets.

*Sign Language of the Netherlands (NGT)*

1. \([\text{boy}]_{\text{Agent}} \text{ play-\text{football}}\)
   ‘The boy plays football’

2. \([\text{dog index3a}]_{\text{Patient}} [\text{boy}]_{\text{Agent}} \text{ stroke3a}\)
   ‘The boy strokes the dog’

3. \([\text{woman index3a}]_{\text{Agent}} [\text{man index3b}]_{\text{Beneficiary}} [\text{book}]_{\text{Patient}} \text{ give3b}\)
   ‘The woman gives the book to the man’

4. \([\text{fire brigade index3a}]_{\text{Agent}} [\text{door index3b}]_{\text{Patient}} [\text{axe}]_{\text{Instrument}} \text{ smash-with-axe3b}\)
   ‘The fire brigade smashes the door with an axe’

5. \([\text{child index3a}]_{\text{Agent}} [\text{house index3b}]_{\text{Goal}} \text{ go3b}\)
   ‘The child goes home’

In the sentences (1)–(5) all of the entities that perform the action have the semantic role of Agent. In the sentences (2)–(4) the entity that undergoes the action has the role of Patient. The receiving entity in (3) has the role of Beneficiary. In (4) the entity with which the action is performed has the role of Instrument. In (5) the entity that forms the goal of the action has the semantic role of Goal.

Similar examples can be given for English as in Examples (6) and (7). From a syntactic viewpoint, (7) is a passive sentence in which the semantic patient occurs at the beginning of the sentence. Passives in signed languages have only begun to be studied and there is no consensus yet whether or not they exist and in which form they might occur.
Semantics

Semantics is a field in linguistics that concerns the meaning of lexical units (signs or words) and of larger units, like sentences. The term can also refer to the semantic rules of a language (for instance: the semantics of English, or of Spanish Sign Language).

Semantic substitution

This is a slip of the hand or tongue where a lemma is chosen that in meaning is similar to the target lemma. In signed language, for example, a person might produce \textit{train} instead of \textit{lorry}.

\[ \rightarrow \text{also Slip of the hand} \]

Semantic variation

One concept can be referred to by different words or signs by the language users. This is an example of lexical variation (\[ \rightarrow \text{Lexical variation} \]). Although referring to the same concept these words or signs can have different connotations (\[ \rightarrow \text{Connotation} \]), often related to the social class of the language user (\[ \rightarrow \text{Synonymy} \] for an example). It is however also possible to link the same form (sign or word) to different concepts. This is called semantic variation. In relation to this notion the terms homonymy and polysemy are used.

\[ \rightarrow \text{also Homonymy, Polysemy and Synonymy} \]

Sensory aphasia

This is another term for Wernicke’s aphasia.

\[ \rightarrow \text{Wernicke’s aphasia} \]

Sentence type

The following three sentence types occur in almost all languages: Declarative, Interrogative (yes/no question and wh-question) and Imperative.

\[ \rightarrow \text{also Affirmative sentence, Declarative sentence, Imperative sentence, Interrogative sentence and Negative sentence} \]

\[ \text{Pfau & Bos (2016)} \]
**Sequential approach**

Schools have to develop policy about which language(s) are to be used as language(s) of instruction in different educational settings. Decisions have to be made as to which languages are used when in the curriculum. For example, schools for the deaf can decide that sign language will be the initial language offered and after it is mastered, the spoken/written language is offered. This ordering of languages in the educational setting is called the Sequential approach. In Western countries, however, this approach has been offered less and less in deaf education in recent years due to technological developments, like cochlear implants, which puts the emphasis on learning the spoken language first.

→ also Bilingual education and Simultaneous approach

**Sequentiality**

This is a term used to describe the linear order of linguistic elements.

→ also Linear order

**Serial verbs**

Simple sentences with a verbal predicate usually have one main verb. An exception to this are constructions with two main verbs in one sentence where the second is a so-called serial verb. Such verbal constructions occur often in Creole languages, like Negerhollands and Tok Pisin. In this type of construction the two verbs share a semantic argument, although there is no marker for coordination (→ Coordination) or subordination (→ Subordination). Compare the following two examples.

*Sao Tomense creool*

(1) *Komplá sapé da mu*
   Buy hat give me
   ‘Buy a hat for me’

*Negerhollands*

(2) *As ju kan fan som fligi gi mi*
   If you can catch what flies give me
   ‘When you could catch some flies for me’

In (1) *sapé ‘hat’* is simultaneously the object of the verb *komplá ‘buy’* and the serial verb *da ‘give’*. In (2) the same is true for the object *som fligi ‘some flies’, which is the object of the verb *fan ‘catch’* and the serial verb *gi ‘give’.*
In such languages the second, serial verb can also be conceived as a sort of preposition (which is related to the absence of prepositions in most creoles), with which the second or third argument of the first verbs is introduced. In that view both serial verbs serve as prepositions to express the beneficiary (in both examples ‘me’) and they are thus comparable to the preposition ‘for’ in English. The use of these verbs could be considered a compensation for the lack of prepositions or as a step forward in a possible development of prepositions (on the way to grammaticalisation).

In NGT similar constructions occur with two main verbs, only then the function of the serial verb is different, namely as agreement carrier for the first main verb. The serial verb here has a function comparable to the auxiliary aux-op (→ Auxiliary and aux-op). The serial verb does not add anything either to the meaning of the other main verb nor to the meaning of the sentence. In NGT usually the following signs act as serial verbs: go, give, take and call. These are also the most frequent examples of serial verbs in spoken languages, except that instead of call, say is used. The sign call in NGT is often also used in the meaning of ‘say’ or ‘warn’. Here are some examples from NGT:

**Sign Language of the Netherlands (NGT)**

(6) \(\) neg + wh

WHY INDEX\(_2\) BEFORE SAY \(_2\) CALL\(_1\)

‘Why didn’t you tell me before?’

(7) \(\) y/n

CAN INDEX\(_1\) MONEY BORROW \(_2\) TAKE\(_1\)

‘Can I borrow money from you?’


**Sign babbling**

From about the age of eight months, sometimes a little earlier, deaf children regularly make hand movements without a fixed meaning that, according to some researchers, are the precursors to the first real signs in a similar way that vocal babbling is a precursor to first spoken words.

→ also Babbling

**Signed English**

This is a commonly used term for the communication form that combines spoken language with sign language. It has equivalents in other languages, such as Signed Spanish, Signed Dutch, Signed German, etc. Some people use the term to describe the pedagogical Sign system used by some teachers in classroom with the aim of making
the spoken language more accessible to their deaf pupils. Other people have used the term to describe a more naturally occurring mixture of sign language and spoken language which researchers would call a contact language. This is a form of sign and spoken language mixing that occurs when signers communicate with persons who do not sign fluently, but is also sometimes used by fluent signers themselves in some formal situations.

→ also Sign supported speech and Sign system

**Signing space**

The signing space is the space in which sign language is articulated. It extends as far as the stretched arms can reach in front of, alongside of and above the body of the signer (see Figure 14). Within this space, signs can be made close to or in contact with the signer’s body or be made in neutral space in front of the body. The signing space can be enlarged or decreased, depending on pragmatic factors (→ Whispering Space, Large signing space and small signing space). The term Syntactic space is used as a synonym for signing space.

![Figure 14. The signing space.](image)

While the description of signing space given above seems to be valid for many sign languages, it is not universal, as it does not fit some village sign languages (→ Village sign languages).

**Sign order**

Research has shown that, just as for spoken languages, basic orders of elements can be determined for sign languages. This is done on the basis of a declarative sentence with a predicate (V) and two nominal arguments (subject S and object O). The most
frequent basic orders in sign languages and spoken languages are SVO, SOV and VSO. NGT, LIS and Indo-Pakistan Sign Language, are SOV languages. Other sign languages, like ASL have an SVO basic order.

It is assumed that the basic order predominantly rules in sign sentences with so-called reversible constituents (as in ‘John hit Jack’) because these constituents can also be reversed in meaning. (→ Reversible constituents) It is important that these reversible sentences can be clearly and correctly interpreted, something which can be achieved best through a fixed order. In sentences with non-reversible constituents (‘John ate the apple’) (→ Non-reversible constituents) this fixed order supposedly is less important, as such sentences can only be interpreted in one way, even if the two arguments switch places in the sentence. In VGT there is variation in the order of the surface structure, which is not caused by regional differences, but by differences in age. Older signers of VGT use less SVO order in sentences with reversible constituents than do younger signers.

In some sign languages there is an alternative order for locative sentences (→ Locative sentences). In these sentences, often in initial position is the argument that refers to the biggest, least mobile referent, even when this is not the subject argument. This is an application of the figure-ground principle (→ Figure-ground principle).

Adjuncts can also take a specific position in the sentence (→ Aspectual adjunct).

→ also Syntactic variation


**SignStream™**

SignStream is an annotation system which enables a user to annotate a segment of video by entering information into distinct fields.

→ also Annotation, ELAN, iLex and Media tagging

**Sign system**

A sign system is a form of communication in which a spoken language is used as the basis but with additional visual support from signs of the (local) sign language. A sign system is predominantly used by hearing people in their communication with deaf people. These systems are often used in the deaf schools as an aid in teaching the deaf children the spoken language. A distinction is made between free and strict forms of sign systems. In a free sign system, the spoken language is used with supporting signs. For example:
Free sign system

(1) The woman lives in London (spoken English)
    WOMAN LIVE LONDON (supporting BSL signs)

This system is used in spontaneous communication. In educational settings sometimes a more strict sign system is used in which all important elements of the sentence, or even grammatical morphemes are signed. For example, while reading a written English text aloud (to or by children) the article ‘the’ can be indicated by a specially invented sign. In a lesson on the conjugation of the verb in English, a fingerspelled -s (British Sign Language) can be used. It is also possible to use a system-specific sign for the preposition in. The English sentence in (1) can thus be represented in a strict form of a sign system as follows:

Strict sign system

(2) The woman lives in London (spoken English)
    THE WOMAN LIVE-S IN LONDON (supporting signs)

For comparison, a version of the following sentence might occur in many signed language:

(3) WOMAN INDEX LONDON LIVE
    → also Sign supported speech

Sign Supported Speech

Sign supported speech is a form of sign and word combination, in which the grammar of the spoken language is followed, but signs are simultaneously produced. This can be done in a ‘free’ sign system (→ Sign system) or in a ‘strict’ sign system for educational purposes. It is often used in contact between hearing and deaf people, and especially in education as a support system while teaching the children the spoken (or written) language. Some primarily orally educated deaf people prefer a form of sign supported speech, especially if they never really acquired a signed language.

SignWriting

SignWriting is a system to notate signs and signed utterances. It has been developed since 1974 by Valerie Sutton, having been initially based on a system for notating dance. The symbols used are abstract depictions of the hands, the face and the body. SignWriting is meant for daily use but has also been used in research studies. It is well-known in more than forty countries, but used extensively in only a few (among them, the USA, Spain, Sweden, Belgium, Germany and Italy).

→ also Writing systems
Simple movement
This is a single movement, which can be a path movement, a hand internal movement or a change in orientation movement. This is in contrast to a complex movement, such as a path movement that is combined with internal movements and/or orientation changes.

→ also Change in orientation, Complex movement, Hand internal movement, Movement and Path movement.

Simple sentence
A simple sentence has only one predicate. In the DGS sentences in (1)–(2) the predicate is shown in bold. In (1a) and (1b) bake and swim are verbal predicates, (2a) healthy is a nominal predicate (→ Predicate), as is doctor in (2b).

German Sign Language (DGS)

(1)  a. TOMORROW SCHOOL POSS₁ DAUGHTER CAKE BAKE.
    ‘Tomorrow my daughter will bake a cake at school.’
  b. POSS₂ FATHER SWIM.
    ‘Your father is swimming.’

(2)  a. VEGETABLE HEALTHY.
    ‘Vegetables are healthy.’
  b. POSS₁ BROTHER DOCTOR.
    ‘My brother is a doctor.’


Simple sign
This is a sign that consists of one morpheme (also called monomorphemic sign). Some NGT examples are: house, man and train.

→ also Morpheme

Simultaneity
One of the most striking and important features by which signed language are distinguished from spoken languages is their extensive use of simultaneity. Sign languages, like spoken languages are organized linearly/sequentially (in compounds, and in a sentence). There is also some utilization of simultaneity in some spoken languages, for example in use of tones in tonal languages or intonation in others.
The simultaneous organization in sign languages is evident at the sign level. Each sign is made up of a number of basic elements that are mostly realized simultaneously in the articulation of the sign. Simultaneity occurs on sentence level by, for example, the possibility of distinguishing a declarative sentence from a yes/no question by the simultaneously produced non-manual grammatical marker (e.g. raised eyebrows) in the question form. Examples of simultaneity at the morphological level are found in signs like that meaning ‘little house’ for which the manual components for the basic sign house are combined with a non-manual marker for ‘small’ (e.g. protruding tip of the tongue). Having two hands available as articulators in signed languages can also result in simultaneity, for example by depicting with separate hands the position of two elements in locative sentences. This is often used in whole entity classifier constructions, for example to express the relative position of a person and a car by a $\text{₁}$-hand classifier for the person, and a vehicle-classifier for the car. The figure below illustrates two possible locations: the person is next to the car and the person is in front of the car.

![Figure 15. Manual simultaneity.](image)


→ also Linear order

**Simultaneous approach**

Schools involved in the education of deaf children must decide for their curriculum which language(s) to use for instruction and when to use them. The term Simultaneous approach is used if both signed and spoken language is used from the first year.

→ also Bilingual education and Sequential approach

**Simultaneous bilingualism**

This refers to the situation in which a young child acquires more than one first language at the same time.

→ also First language acquisition
**Simultaneous language acquisition**

This term is used when a child simultaneously acquires more than one language as a first language.

→ also First language acquisition

**Size and Shape Specifiers**

This was a term used for what are now called tracing classifiers, or contour signs. Actually there are other terms that are being used more and more in German-speaking countries which are based on the six ‘Image-Creation-Techniques’ (Bilderzeugungstechniken) for iconically based signs as described developed by the University of Hamburg researchers.

→ also Contour signs

Zwitserlood (2012)

**Skinner’s learning theory**

The approach of the behavior psychologist, B. F. Skinner (1904–1990) to language acquisition considers language to be behavior just like any other behavior. It assumes that all children, like many animals, are born with a native sensitivity to being rewarded. Preferred behavior is rewarded by the social environment, which causes this behavior to occur more often. This behavioral approach involving conditioning was applied to both first and second language acquisition. In L2 learning, this theory was especially influential in the past by contributing the Transfer hypothesis.

→ also Transfer hypothesis

Skinner (1957)

**Slip of the hand**

In signed language when someone makes a production mistake this is called a slip of the hand (for spoken language → Slip of the tongue). Such a mistake can take place on different levels. During grammatical coding a wrong sign can be retrieved from the mental lexicon, like in the example from DGS (// indicates a self correction). This mistake was made while retelling a story.

German Sign Language (DGS)

(1) (…) train // lorry (…)

A phonological coding can also go wrong. It sometimes happens that signs whose basic elements strongly resemble each other in their phonological structure are exchanged. This is phonological substitution. The signs for fashion and hotel have no meaning relation in DGS, but they look very much alike, the only difference being in the movement. So it could happen that someone will sign fashion instead of hotel. Other
forms of slip of the hand are handshape anticipation (→ Handshape anticipation), handshape perseveration (→ Handshape perseveration) and substitution of handshape or location (→ Metathesis).

Recent research on 64 forms of slip of the hand in hearing second language learners of NGT has shown that most slip of the hand are phonological, and that most often it is the Handshape component that is involved.

Sometimes it is difficult to establish whether one is dealing with a slip of the hand or a form of phonological assimilation (see the example of handshape assimilation in Swedish Sign Language that is discussed in the entry Assimilation of handshape). Both of these phenomena take place subconsciously but with the difference that in slips of the hand the signer often corrects him/herself, which is never the case in assimilation. A second difference is that assimilation is systematic whereas slips of the hand are random and accidental. In order to decide whether one is dealing with assimilation or slips of the hand, it is thus important not only to look at a sufficient number of language facts, but also to take care that the data come from different informants.

→ also Slip of the tongue


Slip of the tongue

In spoken languages a speaker can make a mistake called a slip of the tongue. Such a mistake can occur on different levels of the language. If the order of words or parts of words can be exchanged, this is called metathesis. Example (1) shows English slips at the phoneme level:

**English**

(1)  
aks for ask  
calvary for cavalry
  the queer old dean for the dear old queen

It is also possible for semantic substitutions to occur, in which case a word or sign is accidentally produced the meaning of which is similar to the target lemma. Example:

**English**

(2)  
Can I have a spoon, please, ehm – no, a fork?

Slips of the tongue are studied as a part of the theory of speech production. These slips are probably not just errors in the articulation, but rather they can be attributed to incorrect programming in the brain.

→ also Slip of the hand
Small signing space
A signer will use smaller signs, with smaller movements in order to, for example, attract less attention while signing (analogous to when a hearing person might speak softly). The use of this reduced signing space thus depends on pragmatic factors. The equivalent term whispering space is used to explicitly indicate the signing space used during whispering in a signed language.

→ also Large signing space, Signing space and Whispering space

Social background
Social background refers to the social class to which a person belongs. This factor can play an important role in language variation.

→ also Language variation

Social factors
Social factors can, alongside linguistic and pragmatic factors, play an important role in language variation. The seven social factors most commonly taken into account are the following: 1. Social background, 2. Ethnic background, 3. Regional background, 4. Age, 5. Sex, 6. Conversational situation and 7. Personal style.

→ also Age, Ethnic background, Gender, Language variation, Personal Style, Regional background and Social background

Sociolinguistics
Sociolinguistics is the field that focuses on the relationships between language use and social environment. It is based on the assumption that language variation is influenced by the social context in which they are used. Sociolinguistics covers various research areas including the use of language in different social classes, the language of the young, language attitudes towards the standard language as well as to dialects.

→ also Language variation

Spatial verbs
Spatial verbs (sometimes also called locative verbs) are a major class of verbs in most sign languages. These verbs do not agree with the syntactic subject or object in the sentence, but rather with the location where an object or a person is placed, or the direction in which the verb moves. Example (1) involves the spatial verb FIND:

**Sign Language of the Netherlands** (NGT)

(1) table CL\textsubscript{3b}(left hand) ball(right hand) put\textsubscript{ball-under-table3b} baby FIND\textsubscript{3b}
Speech reading

Speech reading (or lip reading) is ‘reading’ the sounds from the lips/mouth of the speaker. This is usually done in combination with information that is obtained non-verbally, like facial expression and body language, as well as knowledge of the context of the utterance. Both deaf and hard-of-hearing persons often depend on speech reading in their communication with hearing persons. Not everything that is said, however, can be seen on the lips. Approximately 35% of spoken language can be accessed by speech reading. The sounds a and o can be observed clearly by the shape of the mouth, but this is not possible with the sounds k and g. Also, differences between sounds made by both lips (p, b and m) cannot be distinguished. In order to know whether someone is saying pat, bat or mat, the context of the whole sentence – or perhaps the whole conversational topic – is needed. Speech reading is made more difficult when the speaker is not articulating clearly, or when lips are partially concealed by a moustache or a beard.

Spoken component

A spoken component is another name for mouthing.

→ Mouthing

Standardization

Standardization is a process in which one variety of a language or some aspects of it become the variety most commonly used by a group. Standardization generally gives status to the language, often resulting in it being used in most important areas of public life.

→ also Standard language

Standard language

This is the language in a state or nation that is used in the public domain that is in all important areas of public life, such as government, administration, law, education and the media.

Strong hand

People have a preferred hand when signing: right-handed people prefer their right hand, and left-handed people their left hand. When producing one-handed signs, signers commonly use their preferred hand. The preferred hand has also been called the dominant hand. The concept strong hand has a somewhat broader meaning, in that it is not only the dominant hand for one-handed signs, but also in symmetrical signs,
like the two-handed NGT sign train. In these cases, it is the preferred hand and the other hand (the weak hand) can be omitted.

→ also Dominant hand, Preferred hand, Two-handed sign, Weak drop and Weak hand

**Style**

Style can mean the individual way in which someone uses language, independent of the situation. This form of *style* is related to the Idiolect, which is a use of language that is unique for an individual language user. A speaker or signer can also use different styles of language, depending on the context, situation and addressee. In this sense, style is related to the register in which the communication is made. Style has also been used for the way in which someone expresses him/herself in writing – i.e. a telegram style, a clear style, a businesslike style, a flowery style etc.

→ also Ideolect and Register

**Subject**

A grammatical subject is a word, phrase, or clause that performs the action of or acts upon the verb in the clause. It can have the semantic role of agent, but not necessarily so. The subject agrees with the verb in person and number. The grammatical subject of the sentence in the next example is placed between square brackets:

*British Sign Language*

(1) [**boy**] laugh

‘The boy is laughing’

Crystal (2008)

**Subject pronoun copy**

A subject pronoun copy occurs when the subject is repeated at the end of the sentence with an personal pronoun form.

→ also Pronoun copy

**Subordinate clause**

A subordinate clause is a sentence that, in contrast to a main clause, cannot occur by itself, but only as a constituent part of another sentence (the main clause or another subordinate clause). See examples from NGT in which the subordinate clause is indicated in square brackets.
Sign Language of the Netherlands (NGT)

(1) JOHN KNOW [PIET ILL]
   ‘John knows that Piet is ill’

(2) y/n MARIE ASK [YESTERDAY CHARLES ILL]
   ‘Marie asks whether Charles was ill yesterday’

Examples (1)–(2) are both complex sentences with a subordinate clause which is a constituent of the main clause. Both subordinate clauses are syntactically direct objects. In the next example of a DGS sentence (3), the subordinate clause is subject together with ‘the man’.

German Sign Language (DGS)

(3) ∩∩ ∩∩ & eg-3a TOMORROW MAN (INDEX3a) [RPRO-M3a YESTERDAY CAR BUY] MARRY
   ‘The man who bought a car yesterday is getting married tomorrow’

Subordinate compound

In a compound form, two signs or words are joined together to form another sign or word with a meaning which is different from that conveyed by the components by themselves, as in the English compounds ‘bedroom’, or ‘smalltalk’.

The following examples are of sign language subordinate compounds. They are termed subordinate because the right part of the sign (the head of the compound) is specified by the left part. This is in contrast to coordinate compounds (→ Coordinate compounds).

(1) SLEEP^ROOM (NGT and VFT) ‘bedroom’
(2) MONK^BOSS (DGS) ‘abbot’

In NGT and VGT the reverse is also possible, namely that the right part specifies the left part:

(3) NOSE^BLOOD (NGT and VGT) ‘bloody nose’
(4) BOX^STONE (NGT and VGT) ‘brick’

While in VGT BLOOD^NOSE is also possible, in most languages there is only one possibility for most compounds. It is not yet known why in some sign languages, like NGT and VGT, both possibilities in compounds are found.

→ also Compound
Subordinate conjunction
A subordinate conjunction occurs in initial position of an imbedded sentence. Another name is subordinating conjunction. An example would be ‘because’ in the sentence ‘We did not go camping, because of the weather.’

→ also Complex sentence and Conjunction

Subordination
This is another term for imbedding. Subordinate clauses are a constituent of another sentence. In all languages, different types of subordinate clauses occur. These are all discussed in the separate entries.

→ also Adverbial clause, Complement clause, Complex sentence, Imbedding and Relative clause

Substitution
Substitution is a replacement and is a concept often found in acquisition studies. Signing children produce unmarked handshapes correctly earlier than they do marked handshapes. These unmarked handshapes are easier to produce and children therefore use them as substitutes for more difficult handshapes (→ Phonological simplification). The term Substitution is also used for certain forms of slips of the hand (→ Phonological substitution).

Successive bilingualism
This is the situation in which someone has learned one or more other languages after acquiring his first language. Another name for this is Consecutive bilingualism.

→ also Second Language Acquisition

Successive language acquisition
This is another term for Second language acquisition – i.e. the learning of a second language after first language acquisition. Another term for this is Sequential bilingualism.

→ also Second language acquisition and Sequential bilingualism

Sudden deafness
When a person, after language acquisition becomes deaf from one moment to the next, this is called sudden deafness.

→ also Deaf
**Syllable**

A syllable is a phonological unit in spoken languages that consists of an obligatory core (a vowel or diphthong), preceded and followed by one or more optional consonants. This obligatory core is called the nucleus. All consonants that occur before the core form the onset of the syllable. The nucleus, together with the following consonants, forms the rhyme of the syllable. A syllable such as *sport* thus has the following structure: onset (sp) and rhyme (ort) in which the nucleus (o) and coda (rt).

Some researchers claim that sign languages also have syllables and that most signs consist of one syllable, which has a structure that consists of an initial location (L₁), a movement (M) and a final location (L₂).

\[(1) \quad \text{Syllable} \quad L_1 \overset{M}{\longrightarrow} L_2\]

This structure can be compared to the combination of onset, nucleus and coda in spoken languages. A simple example is the NGT sign *flower* of which the citation form is shown in the following example.

**Sign Language of the Netherlands (NGT)**

\[(2) \quad \text{FLOWER}\]

- **L₁**: in front of the lower torso
- **M**: complex movement, consisting of a path movement + hand internal movement (from \((\text{)})\) to \((\text{)})
- **L₂**: in front of upper torso


**Symmetry condition**

The symmetry conditions state that if both hands have the same (synchronized or alternating) movement, they must also have the same handshape and orientation. Examples for the first group are NGT signs *decide* (same movement) and *cycle* (alternating movement).
Sign Language of the Netherlands (NGT)

**Figure 16.** Two-handed signs in which both hands move.

→ also Movement and Two-handed sign

**Synchronic language description**

This is the description of a language or a part of a language as it was at a certain point in its history. This is in contrast to a Diachronic description, which looks at how a language changes over time.

→ also Diachronic language description and Linguistics

**Synchronous movement**

In some signs, like NGT train and swim, the movement of both hands is simultaneous movement, in which case it is described as a synchronous movement.

→ also Movement

**Synonymy**

Synonymy, a phenomenon that occurs both in signed and spoken languages, is concerned with the various forms that are linked to the same concept, for instance bike to bicycle in English. Although synonyms refer to the same referent (i.e. their denotations are the same), they often differ in their connotation and are often used in different situations. This difference is not so obvious, or even is absent as, for example, in *that is a nice range/selection of flowers*. The context given here gives no preference for *range* or *selection*, so either word will do.

An example of synonyms in NGT are die (a sign that resembles the cut-throat movement near the throat) and pass-away (a sign that is made in front of the body by flipping over the two hands from left to right; see the lemma Change in orientation for a picture). These two signs have, however, different connotations and are appropriate in different contexts. This is not the case for the two NGT signs for newspaper.
Only when two variants occur in the same language this is called synonymy.

Crystal (2008)

**Syntactic change**

Syntactic change so far has mainly been described for sign order in signed languages (e.g. for VGT → Sign order).

An example from spoken languages is the change in word order in English. It is assumed that Old English was a SOV language. Modern English has SVO order. Another example from English is the change in the negative construction. In Modern English, negation is expressed by lexical items like *not*, *do not*, *never* and *no*. In Old English, the main element for negation was *ne*, which usually occurred before the (auxiliary) verb as in Example (1).

(1)  Ac hie *ne* dorston þaer on cuman  
     But they *not* dared there on come  
     ‘But they dared not land there’

In Old English, unlike in modern English, a double negative was also considered grammatical. In (2) the negation element *na* (a construction of *ne* + *a*: *not* + *ever* = ‘never’), is combined with another negative *ne*.

(2)  Þæt he *na* síþan geboren *ne* wurde  
     That he never after born *not* would-be  
     ‘That he should never be born after that’

**Syntactic space**

This is the space in which signed utterances are articulated. The syntactic space is linked to linguistic (syntactic) factors. This is often used as a synonym of the term signing space. However, sometimes the term Signing space is specifically used for the location where signs are made in their basic/citation form, in which case the concepts Syntactic space and signing space do not overlap.
**Syntactic variation**

An example of syntactic variation in English is

(1)  
Give it me  
Give it to me  
Give me it

In NGT syntactic variation as in (2) and (3) can occur:

**Sign Language of the Netherlands (NGT)**

(2)  
**jongen index3a** **meisje index3b** **duwen3b**  
'The boy pushed the girl'

(3)  
**jongen index3a** **meisje index3b** **duwen3a** **aux-op3b**  
'The boy pushed the girl'

Often language variation is determined by regional or social factors. Regional variation in signed languages often occurs in the lexicon, as well as gender variation, for instance in Irish Sign Language.

**Syntax**

Syntax is the subdiscipline of linguistics that focuses on the structure of sentences. The term can also refer to the grammatical rules of a language (e.g. the syntax of German, or DGS).
Tactile sign language
This is a form of sign language that deaf-blind people use to communicate. In tactile
signing, the addressee’s hands make contact with the hands of the signer, thus it is also
known as Hands-on signing.
→ also Deaf-blindness and Hands-on signing
Mesch (2001)

Target Language
A target language is the language that a person is learning as a second language. In the
field of interpreting, it is the language into which one is translating from the source
language (→ Source language).

Telegram style
The child acquiring its first language makes its first sentences in a short, telegram style.
This reduced form of language usually consists of a sentence of mainly content words.
All function words are usually omitted, as are inflections.

Temporal adjunct
This is an adjunct that indicates the time when an event takes, took, or will take place.
In many sign languages, temporal adjuncts like YESTERDAY, TODAY, TOMORROW, LAST
YEAR, etc (→ Time) occur in initial position of the sentence.
→ also Sign order

Tense
Along with aspect and mood the term tense is used to refer to the way in which the
grammar marks the time in which the action intended by the verb takes place. In
descriptive grammar a distinction is made between present, past and future tense. In
many languages, it is possible to indicate tense by means of verb inflection. Examples
(1)–(3) from English show tense expressed by means of a finite verb (in bold) in pre-
sent, past and future tense:
English

(1) John visits his grandmother.
(2) John visited his grandmother.
(3) John will visit his grandmother.

It is also possible in many languages to place the event in time by lexical items, as in the examples below:

English

(4) John visits his grandmother today.
(5) John visited his grandmother yesterday.
(6) John will visit his grandmother next week.

In some languages, tense is not expressed through verb inflexion at all. Mandarin Chinese, for example, can only express tense lexically, by the use of adverbial words or word groups (last week) and clauses (When the rain stopped).

So far no sign languages have been described that use verb inflexion to express time. Instead, tense can be indicated by adverbial signs, like now, yesterday and tomorrow, by sign groups (last week) and sentences (index1 cook finish) ‘When I’m done cooking), as well as by the use of one of several different kinds of timelines. Examples:

Sign Language of the Netherlands (NGT) and Flemish Sign Language (VGT)

(7) yesterday children ice cream eat
‘Yesterday the children had an ice cream.’

(8) last week john ill
‘Last week John was ill.’

(9) \[ index1 cook finish, index1 home go \]
‘When I am done cooking, I am going home’

The NGT verb happen does has two different forms, which distinguish between present tense and past tense. However this is a phenomenon found in only one verb and can thus not be considered an inflexion. In happen in present time, the two hands turn around each other forward, away from the body. In the past tense, happened, the hands turn around each other backwards, towards the body.

→ also Lexicalization
**THEME buoy**

A THEME buoy indicates that an important discourse theme is being discussed and its function is a reminder of the theme the signer is talking about. It has a $\leftarrow$-handshape pointing upwards as long as the discourse theme is discussed.

→ also Fragment buoys, List buoys, Point buoys and Pointer buoys


**Three-place predicate**

This is a predicate that has three arguments (subject, direct and indirect object).

*Sign Language of the Netherlands (NGT)*

(1) $\text{GIRL INDEX}\text{INDEX}\text{DVD GIVE}\text{BOY INDEX BOY INDEX}$

‘The girl gives a DVD to the boy.’

In this sentence the subject is $\text{GIRL INDEX}$, the direct object is $\text{DVD}$ and the indirect object is $\text{BOY INDEX}$. A comparable example can be given for VGT, but in this sign language the structure of the sentence is different. One of the possibilities is in Example (2):

*Flemish Sign Language (VGT)*

(2) $\text{GIRL DVD GIVE BOY INDEX}$

In English, three-place predicates also occur:

*English*

(3) [the girl] gives [the boy] [a dvd]

A three-place predicate is also called a transitive predicate.

→ also Valency of the predicate

Sze (2008), Ch. 4 for Hong Kong Sign Language

**Timeline**

Timelines are used in many sign languages to indicate time in different ways. Research has indicated that several timelines can be distinguished. For NGT there are five:

A1 front-back timeline: near the shoulder
A2 front-back timeline: near the stomach
B left-right timeline: near the stomach
C up-down timeline: from the face down
D down-up timeline: in front of the body
In most European sign languages and in ASL, the space in front of the body is used to situate an event in the future. (→ Timeline metaphor)


Timeline metaphor

In signed languages, signs that have a particular meaning are linked to a corresponding movement in the syntactic space, making use of spatial metaphors. Spatial metaphors are often involved in signs that pertain to time. For example, in many European sign languages and in ASL, the space in front of the body is used to situate an event in the future. This seems to be a cultural concept not shared by all sign languages. In Brazilian Sign Language, the space in front of the body is used to indicate the past, while the future is placed behind the body. Presumably this is based on the idea that the past is known, can be seen as it were, whereas the future is unknown and from this point of view is a ‘non-visible’ timeline’.

• also Figurative language use.

Topic

In information structure, the part of the sentence with known (shared) information is called the topic of the sentence. It is usually placed at the beginning of the sentence. In the example below, (1a) introduces a new topic (MAN GERMAN) which in (1b) is old (shared) information in the form of INDEX₃a, which refers back to MAN.
Sign Language of the Netherlands (NGT)

(1) a. **MAN** GERMAN INDEX₃ᵃ UNIVERSITY WORK.
   ‘A German man works at the university.’

   b. INDEX₃ᵇ WANT COLLEAGUE INDEX₃ᵇ LONDON INDEX₃ᵇ VISIT₃ᵇ.
   ‘He wants to visit a colleague in London.’

→ Focus, Information structure and Topicalization

Baker et al. (2016) and Kimmelman (2014)

Topicalization

When a clause that normally appears elsewhere is placed in initial sentence position, it becomes topicalized as it assumes the function of the sentence topic. In a conversation, topicalized constituents have a specific information status. They always contain information that is shared by the conversationalists (i.e. old information). Usually this information has been introduced earlier in the conversation but not always. When shared information is placed in sentence-initial position, this is then the topic of the conversation about which new information will be added in the rest of the sentence (the comment). Since topicalized elements are dependent on the discourse context, they are not pragmatically neutral. Thus, the displayed word order cannot be considered basic. In (1a) a topicalized constituent (CITY BIG) with accompanying non-manual marker is presented. The remainder of the sentence (the comment) is grammatically complete and via the topic a constituent of the sentence is doubled, namely New York as being a set of big cities.

German Sign Language (DGS)

(1) ______ INDEX₁ NEW-YORK LOVE.
   ‘As for big cities, I love New York.’

   ______ INDEX₁ MEET.
   ‘I am meeting my grandma tomorrow.’

In (1b) the direct object of the sentence, POSS₁ GRANDMA INDEX₃ᵇ is fronted and in the comment only one argument of the verb is realized (INDEX₁).

Some forms of topicalization are a form of left dislocation.

→ also Information structure and Left dislocation

Kimmelman (2014) and Pfau and Bos (2016)
Total communication (TC)

The term Total Communication (TC) was first used by Roy Holcomb in California and then later developed by David Denton at the Maryland School for the Deaf (USA) in 1967. The Maryland School subsequently adopted the term as the official name for its educational philosophy. A decade before, studies had found that deaf children of deaf parents achieved a much higher educational level than did deaf children of hearing parents. The TC approach then began with the assumption that deaf children have the same developmental potential as hearing children, and that they develop optimally when there is a good and natural interaction between the deaf child and its environment. In order to achieve optimal interaction with the deaf child, all means of communication are allowed, including signing, facial expression, writing, use of voice, fingerspelling, body language etc. The adoption of this TC philosophy also resulted into the (re)introduction of signs in deaf education in the US.

Pahz, Pahz & Lloyd (1978) and Evans (1982)

Transcription

Transcription is the written representation of the sounds of spoken language or the signs of signed languages. For example, a phonetic transcription of the word *tree* is [tri:] in IPA (International Phonetic Association). Glosses are traditionally used to transcribe one language into another.

*English/German:*

1. English sentence: shall I buy a car tomorrow?
2. German transcription: soll ich kaufen ein auto morgen?

Although phonetic transcriptions in signed languages can be done, for example with the HamNoSys notation system (→ Notation), for transcription of signed sentences and longer texts, glosses from the spoken language have been traditionally used. The sign for ‘tree’ (in any sign language) can then be represented in English as *tree* or in German as *baum*. There are, however, drawbacks to using words from one language to transcribe another language, as the terms might not have exactly the same connotations. (→ Gloss and Notation).

Transfer

This is another term for interference. Transfer is the phenomenon where during language acquisition elements or structures of one language appear in the other language. These can be elements from the native tongue that appear in the target language (L2 acquisition), or elements from one native language that occur in the other native
language (simultaneous language acquisition). Transfer can have a positive effect on the language acquisition process (positive transfer), but also a negative effect (negative transfer). Transfer can be seen between signed languages, between spoken languages and between a signed and a spoken language.

→ also First language acquisition, Negative transfer, Positive transfer, Second Language acquisition and Transfer Hypothesis

Transfer hypothesis
The transfer hypothesis is one the oldest theories in L2-acquisition. It is based on the theories of behavior in which human learning is viewed as one of many kinds of habit formation. In this theory, all habits of behaviours, including language, are acquired by imitation and enforcement. Desired imitation is rewarded and thus thereby enforced. Applied to the learning of a second language, new behaviours are seen to be learned for which old behaviours (from the native language) play an important part. The theory postulates that a positive transfer between the languages occurs when new and old habits overlap, resulting in these aspects of the second language to be acquired easier or quicker. Negative transfer occurs when a part of the native language occurs in the second language, but some aspects of it are different between the two languages, leading to mistakes in the target language. Transfer is also called interference and thus is also referred to as the Interference hypothesis.

Transition movement
A Transition movement is the movement made between the ending location of one sign and the starting location of the next sign. This kind of movement is not considered part of the citation form of the sign as it varies, depending on where the hand was before the sign is made.

Transitive predicate
A transitive predicate is a multi-place predicate. A finer distinction can be made between transitive (two-place predicate) and ditransitive (three-place predicate).

→ also Three-place predicate and Two-place predicate

Transparent sign
Iconic signs show different degrees of iconicity. Some signs have been labeled Transparent, as they are so highly iconic that their meaning can be guessed by someone who has never seen the sign and who does not know its meaning. Transparency is rare and, moreover, is culturally bound. Within Western cultures, probably the signs for
DRINK, SWIM and BABY would be examples of transparent signs. Other kinds of iconic signs have traditionally been called Translucent signs or Opaque signs.
→ also Iconic sign, Opaque sign and Translucent sign

**Turn regulator**

In a conversation, the way in which participants alternate speaking is signaled by turn regulators. In sign languages, there are also ways to signalize turn taking. For example, turn can be explicitly transferred from one signer to another with a question about the opinion of this other person. Turn transference can also be done non-verbally by using body language, looking directly at somebody or making a sign in the direction of that person. The signer can also indicate more subtly by body language, that he is willing to give the turn to somebody else.
→ also Turn taking

**Turn taking**

Language users know when during a conversation a turn has finished and someone else can take the turn. The way in which this transition, this turn change, happens can differ in different cultures and language communities. For example, pauses between turns can differ in different languages. In Scandinavia, the pauses between two turns are longer then in the Netherlands. In countries where Spanish is spoken, turns often overlap because people interrupt each other. Although for a certain period of time, several people speak simultaneously, this overlap is not considered to be irritating in Spain, or at least less so than it would be in the Netherlands. The degree to which overlap occurs is also related to register: In informal situations, overlap is allowed more readily than in formal situations.

In conversations between sign language users, overlap happens when people sign at the same time. Also sign languages conversations only run smoothly when the participants comply with the language's rules of turn taking and the Cooperation principle.
→ also Attention strategy, Cooperation principle and Turn regulator

Baker and Van den Bogaerde (2016)

**Two-handed sign**

Two-handed signs can be divided into three groups:

1. Signs in which both hands move;
2. Signs in which one hand is active and the other passive;
   a. and the handshapes are different;
   b. and the handshapes are the same.
The signs in the first group have to comply with the so-called Symmetry Condition (→ Symmetry Condition) and the second group to the so-called Dominance Condition (→ Dominance Condition).


**Two-place predicate**

This is a predicate that has two arguments: the subject $\text{index}_1$ and the direct object **bike**.

*Sign Language of the Netherlands (NGT)*

(1) $\text{index}_1$ bike buy  
‘I am buying a bike’

*Flemish Sign Language (VGT)*

(2) $\text{index}_1$ buy bike  
‘I am buying a bike’

A two-place predicate is also called a transitive predicate.

→ also Valency of the predicate

**Two word sentence**

A two word sentence is a child’s early utterance that consists of two signs or words that have a certain grammatical relation with each other.

→ also Early linguistic period

**Two word stage**

In the Two word stage of language acquisition, the child begins to make its first sentences, which consist of two signs or words that have a certain grammatical relation with each other (Two word sentence).

→ also Early linguistic period
Underextension
In the early phases of language acquisition, a child usually links too few concepts to the language form. This is called underextension. For example, a child learning NGT might use the sign dog only for his favorite stuffed animal but not for all dogs. A child learning English might use the word bear only for his own teddy bear and not for the bears in the zoo or on television. These adaptations are on a semantic level, having to do with the field of word meaning.

Underlying form
This is another term for the concept basic form, citation form or phonological form.
→ Basic form and Citation form

Universal Grammar
Universal grammar is a theory (also called mental grammar) that is concerned with the innate principles of language available to all humans and linguistic universals.
→ also Innate language acquisition capacity and Linguistic universals

Universal Grammar theory on second language acquisition
This theory of L2-acquisition assumes that a second language, just like a first language, is acquired with the support of Universal grammar together with sufficient language input of the target language. This theory from within the framework of generative linguistic theory is in line with the Creative construction hypothesis. Although some research has been done that indicates that Universal Grammar also plays a leading role in adult L2 learning, there is still debate among researchers as to its conclusions about the role of Grammar in the process of L2 learning.
→ also Creative construction hypothesis

Universal language acquisition hypothesis
This is another name for the Creative construction hypothesis.
→ Creative construction hypothesis
Unmarked
A form, structure or rule in a language is usually considered to be unmarked if it occurs in many languages. All forms that deviate from the unmarked form are considered marked. It is assumed that the unmarked form is easier to be mastered than marked forms by both children and adults learning the sign language. When a language has a marked form, structure or rule, then the corresponding unmarked form also exist, but not vice versa.
→ also Marked and Marked handshape

Unmarked handshape
An unmarked handshape is one that is easy to make and also occurs in most sign languages researched to date. Unmarked handshapes are also the first handshapes that young children learn to master. In NGT the unmarked handshapes are the Ṣ-hand, Ṣ-hand, Ṣ-hand, Ṣ-hand, Ṣ-hand and Ṣ-hand. The phonological rule of dominance also restricts the handshape on the weak hand to a set of unmarked handshapes.
→ also Basic element, Handshape, Phonological simplification and Two-handed signs

Upwards metaphor
The meanings of some signs are linked (metaphorically and iconically) to particular movements. For example, signs with a positive meaning often have an upwards movement in the signing space. This is called the upwards metaphor.
→ also Downwards metaphor and Figurative use of language
Valency of the predicate

Valency refers to the number of arguments that belong to a predicate. Most languages have one-place, two-place or three-place predicates and also zero-place predicates, although these are rare. These different kinds of predicates are discussed in the relevant entries (→, One-place predicate, Three-place predicate, Two-place predicate and Zero-place predicate).

Leeson (2001)

Verbal constituent

A verbal constituent is a sign or word group, the head of which is a verb. In the next NGT example run is the head of the verbal constituent (VC).

Sign Language of the Netherlands (NGT)

(1) MAN INDEX₃⁺ HOUSE_vcf(run)_vc
   ‘The man runs to his house’

The next example is from spoken English in which roared is the head of the Verbal constituent and loudly the modifier.

English

(2) The lion [roared loudly]

In English a modifier can be used with the head of a VC. In NGT usually the manner of running is expressed in the verb run. In order to express that someone is running fast, the signer accelerates the movement of running and adjusts his facial expression.

Verbal predicate

This is a predicate that has a verb that indicates some kind of action.

Sign Language of the Netherlands (NGT)

(1) INDEX₁ MOTHER [LAUGHING] INDEX₃⁺
   ‘My mother laughs’
English

(2) My mother [laughs]
(3) My mother [laughed]
→ also Nominal predicate and Predicate

Verb, Types of

Like spoken languages, sign languages have several kinds of verbs, which are described in separate entries. Some verb signs can show agreement (→ Agreeing verbs) and others do not (→ Non-agreeing verbs). Agreement verbs fall into two groups (→ Directional verbs and → Locative verbs). Directional verbs have a further subtype (→ Backwards verbs). A distinction is also made between main verbs versus auxiliary verbs (→ Auxiliary verb). Auxiliary verbs such as the NTG aux-op (→ aux-op) carry agreement for the main verbs, as do serial verbs (→ Serial verb) Many sign language researchers also make a distinction between plain verbs (→ Plain verbs) and spatial verbs (→ Spatial verb).

Village sign languages

Village sign languages are a special type of sign language that only occur in isolated locations in the world, in closed societies where there is usually a high incidence of genetic deafness. Due to the isolation of the village, there is less contact with other societies, which enables genetic deafness to continue to exist. Because of the high number of deaf persons in such a community, the village sign language is often also used by the hearing villagers. The term ‘shared sign languages’ is also currently used to describe this kind of sign language.

Village sign languages are especially interesting for linguistic research, as they have certain grammatical structures and features that are different from ‘regular’, less isolated sign languages. This is not to say that all village sign languages have the same features. For example, Kata Kolok, a village sign language used in Bali appears to have a relatively simple grammar. In some village sign languages, the normal signing space is larger than the large signing space described in the lemma Signing space. In these languages, signs can also be articulated on the leg or behind the back, locations which are not used in other sign languages.

Hearing villagers in a community where a village sign language is used often adopt certain aspects of deaf culture, as has been reported for the village of Bengkala (Bali).

Many existing village sign languages are currently under threat of becoming extinct. A language which has already disappeared is MVSL, a village sign language that was used on Martha’s Vineyard, an island off the coast of North America. The language disappeared after the last remaining deaf person started to use ASL. It is not known if
the following four village sign languages still exist: Country Sign (Jamaica), Providence Island SL (on one of the islands of San Andrés and Providencia in Colombia), Ban Khor SL (Thailand) and Urubu-Kaapor SL (Brazil). Three other village sign languages that certainly still exist are Kata Kolok, Adamorobe SL (Adamorob, Ghana) and Kajana SL (Surinam). A great deal of research is currently being done on these languages as well as on Abu Sayid SL, a village sign language of the Al Sayid Bedouins in Israel.


**Visual Aphasia**

This is another term for Alexia, which is the loss of the ability to read written or printed text.

**Visuo-spatial loop**

A visuo-spatial loop is the component in the working memory that regulates the storage of visual information. A comparison of the phonological loop and the visual-spatial loop shows interesting similarities between signed and spoken languages. It appears that people find it harder to remember words that strongly resemble each other (boat, road, goat) than words that are dissimilar (bear, wood, coal). Also deaf signers find it more difficult to remember signs that are phonologically similar than those which are phonologically different. An important difference between signed and spoken languages, however, is that visual working memory can retain fewer signs than can working memory for words, probably related to the fact that the production of a sign on average takes a little more time than does the pronunciation of a word.

→  also Phonological loop and Working memory
Weak drop
Some two-handed signs, especially symmetrical signs, can also be made with one hand, the strong hand (→ Strong hand). In this case, the weak hand disappears or is dropped, hence weak drop. Weak drop is also seen in situations where one of the signer’s hands is otherwise occupied, for example by carrying a cup of coffee, but the signing is continued with the other hand.

→ also Preferred hand and Two-handed sign

Weak hand
In two-handed signs with different handshapes the non-moving (non-active, passive) hand is called the weak hand. In two-handed signs with the same handshapes but where only one hand is active, the weak hand is, again, the non-moving, passive hand. In symmetric signs, the hand that can be omitted is called the weak (usually non-dominant) hand. This phenomenon is called weak drop.

→ also Active hand, Dominant hand, Preferred hand Strong hand, Two-handed sign Weak drop

Weak hand spreading
The spreading of the weak handshape is a form of regressive assimilation of the handshape of the weak hand of the following component. An example of this is the ASL sign BLACK^NAME, which means ‘bad reputation’. Normally, the sign BLACK is made with one hand with a  hand, and the sign NAME is two-handed using the  hand. In the compound BLACK^NAME, however, BLACK is also made with two hands and is made with the handshape of the weak hand of the sign NAME. The phenomenon of Spreading of the weak hand occurs not only in lexicalized compounds, but also in sequences of signs in sentences and as such can mark different prosodic domains.

Pfau (2016b)
Wernicke’s aphasia

Wernicke’s aphasia, also called sensory aphasia, is a language disorder that is the result of damage in Wernicke’s area of the brain. Persons with this form of aphasia can produce language (although it can be incomprehensible to others), but have significant problems in understanding language. In addition, they usually have trouble with word retrieval and using neologisms. ASL users with Wernicke’s aphasia do produce signs, but what they are signing is incomprehensible. Moreover, they have problems with understanding ASL.

This form of aphasia is named after the German neurologist, psychiatrist and neuropathologist Carl Wernicke (1848–1905). Wernicke assumed that motor tasks and the processing of sensory information were situated in different locations in the brain. He correspondingly separated aphasia into two types: motor (or expressive) aphasia of the Broca area of the brain and a sensory (or receptive) aphasia, which Wernicke was connected to the area in the left temporal lobe, and which later would be known as ‘Wernicke’s area’. A person who has Broca’s aphasia understands what is being said and can answer in his head, but he cannot express himself. Someone who has Wernicke’s aphasia can produce language, but lacks the capacity to understand language.

→ also Aphasia and Broca’s aphasia

Wernicke’s area

This is the area in the left temporal lobe that is named for Carl Wernicke, who is known for his discovery that a certain form of aphasia (a language disorder) is connected to an area in the left temporal lobe.

→ also Aphasia, Wernicke, Carl and Wernicke’s aphasia

Wh-cleft construction

A Wh-cleft construction is a type of question-construction that is accompanied by another marker than the one used with a wh-question.

Flemish Sign Language (VGT)

(1)

\[
\text{INDEX} \quad \text{TAKEN UMBRELLA WHY, RAIN}
\]

‘I am taking my umbrella, because it is raining.’

→ also Adverbial clause of reason
Wh-doubling
In some sign languages, the question word occurs both at the beginning and at the end of the question. This is called Wh-doubling and is found, for example, in VGT and ASL.

Flemish Sign Language (VGT)

(1) __________________ wh
   WHY BOY LAUGH WHY
   ‘Why is the boy laughing?’
→ also Wh-question

Whispering space
Whispering space is another term for the smaller than normal signing space used for whispering in a sign language. Not only is a smaller syntactic signing space used, but also the signs are produced more with the wrist and fingers joints rather than from the shoulders or elbows (→ Distalization). The body can also be turned away from potential onlookers during whispering and the signer can make it even more difficult to ‘eavesdrop’ by taking care that the hands do not go beyond the shielding side of the body. The term whispering space has been used in research about NGT but is not found often in the literature about other sign languages.
→ also Distalization, Pragmatic correctness and Signing Space

Whole entity classifier
A whole entity classifier is a handshape (often with a specific orientation) that is used with movement and location components in a classifier construction to show the movement or location of an entity. The classifier depicts some aspect of the form of the referent entity. For example, a -hand is used to sign that an object like a book is falling. If a person is falling, then the handshape used is the -handshape. To show the location of an apple, a -hand is used. The following examples show how NGT and VGT glosses have been annotated to indicate which classifier is involved (Researchers of other sign languages often have developed their own, different ways of writing classifiers):

Sign Language of the Netherlands (NGT) and Flemish Sign Language (VGT)

(1) THIS-MORNING MAN FALL-CL: ⚜
   ‘This morning the man fell.’

(2) THIS-MORNING BOOK FALL-CL: ⚜
   ‘This morning the book fell.’
Classifiers can thus be combined in complex classifier constructions, as in (3). When there are more than one apple lying somewhere, the classifier handshape for apple can be reduplicated to portray the spatial locations of the different apples.

→ also Bound morpheme and Classifier

**Wh-question**

This type of questions is called wh-questions because in English, the most common question words begin with ‘wh’ (what, where, when, who etc.). In many sign languages, these types of questions are marked with a lexical sign for the question as well with a non-manual grammatical marker.

→ Question word question

**Word class**

Word classes group words of the same grammatical category, such as nouns, adjectives, articles, prepositions etc. These classes are further divided into content words and functional words (→ Function word/sign, Context word/sign).

Sign languages also have content and function words, although they seem to have far fewer function words than do spoken languages.

**Word class restriction**

Within the morphology of spoken languages, there are various rules that have to do with the possible combinations of morphemes. There are many kinds of such restrictions pertaining to word formation. One of the categories that impose restrictions on word formation is word class restriction. For instance, the suffix un- can attach to adjectives (unafraid, unhappy, unMexican) and verbs (unhang, unjoin), producing other adjectives and verbs, but cannot be attached to nouns (*unfear, *unMexico).

**Word order**

The term word order is used as a collective term for the order of all linguistic elements in both spoken and in signed languages. For both kinds of languages, the linguistic elements have some kind of linear order. In sign languages, however, there are in addition many simultaneously produced elements.

→ also Order of linguistic elements and Sign order
**Word picture**
This is another term for mouth gesture.

→ Mouth gesture

**Working memory**
The working memory is a temporary storage in the brain for information that is relevant for a particular task, like remembering a new phone number. One of the best known theories about working memory is from Baddeley, who assumes a multiple-component model, which, among other things distinguishes between the phonological loop and the visuo-spatial loop in working memory (→ Phonological loop and Visuo-spatial loop).


**Writing systems**
For many spoken languages, different systems have been developed over a long period of time to represent the spoken word in letters or symbols. Different writing systems represent different kinds of elements: In ideographic script, every symbol represents a certain idea of a concept (as in Chinese characters); in syllabic script, each symbol corresponds to a syllable (Japanese script); in alphabetic script, each letter corresponds to a certain speech sound (English, Spanish).

Also for sign languages, efforts have been made to develop a symbolic writing system, for example SignWriting (→ Sign Writing) and HamNoSys (→ HamNoSys).
Yes/no question

The interrogative form is one of three types of sentences (→ Sentence type). There are two types of interrogatives: the Yes/no question and the Wh-question. To a yes/no question, the answers ‘yes’, or ‘no’, or ‘may be’ or ‘perhaps’ are possible. A possible signed yes/no question is in Example (1).

(1) _______________ y/n
    TOMMORROW MAN COME
    ‘Is the man coming tomorrow?’

The difference between a declarative sign sentence and the yes/no question in (1) is that the yes/no question is accompanied by a specific non-manual marker (‘eyebrows up’ indicated in (1) by a line with y/n).

→ also Sentence type and Wh-question
Zero-place predicate

A zero-place predicate has no arguments, for example verbs like rain and snow. No entity can be indicated as being the actor of the actions of these verbs.

Sign Language of the Netherlands (NGT)

(1) \text{today rain}

‘It is raining today’ or ‘Today it will rain’

As the English translation of Example (1) shows, the zero-place predicate also occurs in a spoken language. Here, the word \textit{it} is a so-called dummy word, to stand for what is usually indicated as the pseudo-argument. In the NGT sentence in (1) there is no dummy-\textit{sign} for the pseudo-argument.

→ also Pseudo-argument and Valency of the predicate
References


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**Sources of figures**

**Figure 1.** Allomorphy in Israeli Sign Language.
Annieck van den Broek. Picture taken by Christiaan Plug.

**Figure 2.** Change in orientation.
Annieck van den Broek. Picture taken by Christiaan Plug.

**Figure 3.** Manual alphabet on the hand.

**Figure 4.** Conventional gesture for *good*.
https://www.google.nl/search?q=smiley+good&newwindow=1&biw=1093&bih=514&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwjIxfCLi6zKAhWKXB4KHc1qBi0Q7AkiKw#imgcr=rAYSTKnsuFmu_M%3A. Retrieved January 2016.

**Figure 5.** NGT signs for *chicken* and *talk*.
Annieck van den Broek. Picture taken by Christiaan Plug.

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**Figure 11.** NGT sign for *talk*.
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**Figure 12.** Proximal to distal distance to the torso.

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**Figure 15.** Manual simultaneity.
Vermeerbergen, Nijen Twilhaar & Van Herreweghe (2013)

**Figure 16.** Two-handed signs in which both hands move.

**Figure 17.** Synonyms with the same connotation (NGT).
Annieck van den Broek. Picture taken by Christiaan Plug.

**Figure 18.** The front-back timelines in VGT.
Annieck van den Broek. Picture taken by Christiaan Plug.
This extensive, well-researched and clearly formatted lexicon of a wide variety of linguistic terms is a long overdue. It is an extremely welcome addition to the bookshelves of sign language teachers, interpreters, linguists, learners and other sign language users, and of course of the Deaf themselves.

Unique to this lexicon is not only the inclusion of many terms that are used especially for sign languages, but also the fact that for the terms, there are not only examples from spoken languages but there are also glossed and translated examples from several different sign languages.

There are many interesting features to this lexicon. There is an immediate temptation to find examples of terms in the sign language one is studying as well as determining how many of the most used concepts would be signed in the local language. As there are to date still almost no reference grammars of sign languages, the definitions of many of these concepts would be extremely helpful for those linguists planning to make a reference grammar of their sign language.