SignGram Blueprint

A Guide to Sign Language Grammar Writing

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DE GRUYTER
MOUTON

Socio-historical background

Phonology

Lexicon

Morphology

Syntax

Pragmatics

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Chapter 3 Parts of speech

3.0 Definitions and challenges

3.0.1 What are parts of speech?

Parts of speech can be detected in any language and refer to different categories of lexical items based on syntactic or morphological behavior. Typical parts of speech are nouns or verbs. In the lexicon, there is a distinction between functional words or closed-class elements (usually without a concrete meaning, generally quite short, and rather frequent) and lexical/content words or open class elements (with specific meaning, usually longer, but lower frequency). Nouns, verbs, adjectives, and usually adverbials are lexical words while pronouns, adpositions, conjunctions, numerals, quantifiers, and interjections are functional words and members of a closed class. The notion 'closed class' implies that it is generally possible to enumerate all such words in a given language in an exhaustive list. As in other languages, new words resulting from sign language word formation processes are first and foremost lexical words such as nouns, adjectives, and verbs/predicates. Although some basic categories (such as noun and verb) exist across all languages, there is some variation in the parts of speech present in each language.

In sign languages, different parts of speech can be found in the core lexicon [Lexicon – Chapter 1] and across the native/non-native distinction. A typical word/ sign that would be classified as a noun would be a part of the core lexicon (e.g. HOUSE) but in some sign languages, a noun may be a non-native lexeme (e.g. a fingerspelled name such as M-A-R-Y or a fingerspelled sign [Lexicon – Section 2.2.2.2] such as BANK in ASL and Æ-X-L-I ('tumor') in ÍTM).

Differentiating between different parts of speech is notoriously difficult for sign languages, and identifying the part of speech that a given sign belongs to is not always straightforward. A noun, for instance, is semantically easy to identify if it is related to a specific object/entity in the world. Most verbs, however, usually have a nominal counterpart with the same phonological form, and it is not always easy to make a distinction between a verb and a noun with the same semantic basis in sign languages (e.g. RING-DOORBELL and DOORBELL in LSE). Obviously, this is related to the question of what may serve as a predicate [Syntax – Section 2.1.1].

A further important aspect of parts of speech in sign languages is the fact that – apart from manual elements – we find non-manual realizations for certain categories of parts of speech. Some adjectives exhibit a manual form (e.g. BIG), but may also be realized non-manually when modifying a noun. Specific non-manuals such as *puffed cheeks* can be simultaneously layered on the sign HOUSE to mean 'a big house'. The same is the case for manual and non-manual adverbials.

Many elements listed as a category of parts of speech in sign languages may have no manual realization at all. This happens with adpositions [Lexicon – Section 3.8] in sign languages, in particular spatial adpositions, which in some cases can be expressed by a manual sign. More frequently, however, the relational information usually conveyed by an independent spatial adposition is expressed by means of relative locations in the signing space. Thus, there may be sign languages that have either manual signs as adpositions, or only spatial modification, or a combination of both.

3.0.2 Methodological challenges

When investigating parts of speech in a specific sign language, the distinction between the different categories is not always clear-cut. Thus, methodologically, it is important to bear in mind that the phonological form of a sign does not necessarily tell you something about the status of the sign. Semantics may tell you about classical common nouns such as HOUSE, but a sign glossed as CYCLE may theoretically be a noun ('bicycle') or verb ('to cycle') in certain cases.

Furthermore, as always when working with a sign language, great care must be taken to avoid undue influence from glosses and translations into the spoken language. A given sign may appear to be a different part of speech depending on the translation given to it (e.g. 'My leg **hurts**', 'I've got a **pain** in my leg', 'The treatment is really **painful**'). The part of speech must be identified based on the language-internal properties of the sign, namely its syntactic (where the sign can appear in the sentence and what other signs it can or cannot combine with) and morphological properties (what inflections or modifications the sign can undergo). As we shall see in the section on common nouns [Lexicon – Section 3.1.1], various indications may help to distinguish between nouns and verbs, for instance, sentence structure, accompanying non-manual features, and inflectional marking (such as aspectual and adverbial for verbs, and plurality for nouns).

Nevertheless, there are many grey areas: the grammar writer should bear in mind, for example, that aspectual marking may appear on verbs but also on predicative adjectives; plural marking may appear on nouns but also on nominalized adjectives; and quantifiers may appear with nouns but also with verbs as adverbials. Thus, providing a list for each category of parts of speech should be treated with care.

3.1 Nouns

Semantically, a noun is a part of speech that usually denotes a person, place, entity, animal, idea/concept, etc. Formally, nouns often combine with articles and adjectives, forming a noun phrase. Nouns in sign languages – at least some of them – may inflect for number, but rarely for case and gender. In the following, we distinguish two types of nouns, common nouns and proper nouns, and we address name signs in the context of the latter group.

3.1.1 Common nouns

Common nouns are nouns that describe classes of entities, which can be concrete or abstract. The following examples are representative of common nouns, DGS HOUSE and ÍTM STUDENT being concrete, DGS IDEA being abstract.
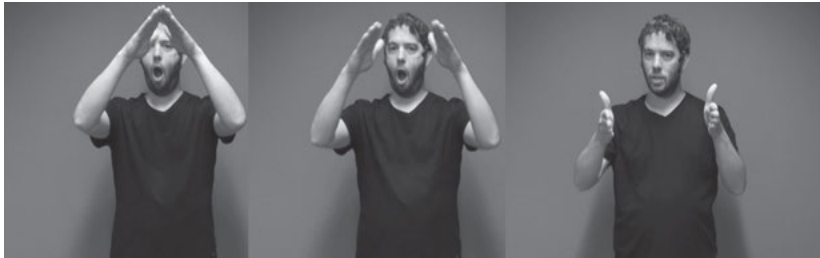
HOUSE   (DGS)

IDEA   (DGS)

STUDENT (ÍTM)

Remember from the discussion in the introduction that distinguishing between different parts of speech is often difficult in sign languages. Of the three examples given above, the first two can be clearly classified as nouns, as they are never used as verbs. As for the third example, the two sign languages differ: while the sign for STUDENT may also mean 'to study' in DGS, in ÍTM, this sign is specifically nominal and different from the verb 'to study'.

As an additional categorization, within the group of common nouns, we can distinguish countable nouns from non-countable nouns – also known as count nouns and mass nouns. In contrast to count nouns (like the three nouns above), mass nouns cannot combine with numerals (and certain quantifiers) or be pluralized [Morphology – Section 4.1]. Consider, for instance, English mass nouns like *money* and *rice*, which have no plural form and which combine with the quantifier *much*, while count nouns generally take the quantifier *many*. The following examples from DGS are representative of mass nouns.
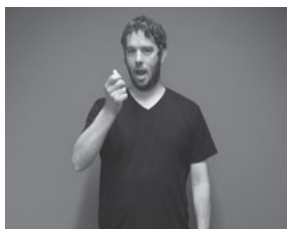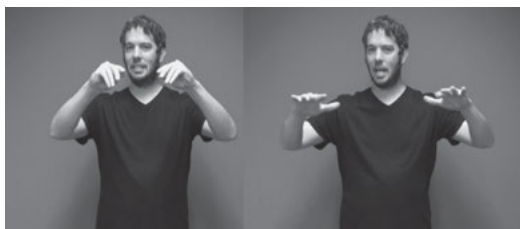
MONEY **SAND** (DGS)

Nouns in sign languages can also be used in a predicative function. Most sign languages studied to date do not exhibit copula verbs, so it is not always easy to detect clausal constructions, as shown in the following DGS example, where TEACHER functions as a nominal predicate.

POSS$_1$ NEIGHBOR IX$_3$ TEACHER
'My neighbor is a teacher.' (DGS)

While nouns are semantically easy to identify if they are related to a specific object/ entity in the world, most verbs usually have a nominal counterpart with the same (or a very similar) phonological form, and it is therefore not always easy to make a distinction between a verb and a noun with the same semantic basis in sign languages. The following two examples illustrate this challenge.

AIRPLANE/FLY ('airplane/fly')
CHAIR/SIT ('chair/sit')   (DGS)

The noun *airplane* and the verb *fly* in DGS (and many other sign languages) are usually produced by an identical phonological form; in DGS, this is the 🖐-handshape which moves in an arc-movement across the signing space. The nominal or verbal function of the sign can only be detected in distributional terms, that is, its place of occurrence within the sentence. Thus, either the syntactic and semantic context, or in some cases also the mouthing, clarifies the difference. In contrast, in ÍTM, the same pair AIRPLANE/FLY is distinguished by a different path movement and a different mouth pattern. Thus, sign languages may vary in their way of differentiating between verbs and nouns (see section on noun-verb pairs [Morphology – Section 2.1.2.1] for further discussion).

The most important way to identify parts of speech is by looking at sentence structure. The basic sentence structure in verb-final languages, for instance, gives a strong indication of which element has a predicative status (usually verbs, but possibly also nouns or adjectives) and conversely which elements are subjects or objects (usually nouns). Furthermore, (reduced) mouthings [Phonology – Section 1.5.2] more often appear on nouns (and adjectives) than on verbs. Verbs are often accompanied by specific mouth gestures [Phonology – Section 1.5.1] or show no mouth movements at all. In addition, aspectual marking [Morphology – Section 3.3] (e.g. reduplication) and adverbial marking [Lexicon – Section 3.5] (e.g. mouth gestures, facial non-manuals) may help to make a decision in favor of a verb. Plural marking and quantification by means of numerals is indicative of (countable) nouns. In some sign languages, movement is added to the verbal sign as opposed to a reduced movement on the noun (e.g. SMOOTHING-IRON vs. IRONING in ASL).

Given the idea of ID glosses (a unique label given to each sign, a fundamental part of corpus annotation) and the fact that a single sign may very often have different functions (i.e. homonymy is more frequent than in spoken languages), it is disputable whether we should distinguish between different parts of speech at all. The general question of whether we find one or two (or more) lexical entries for such signs, as in the examples above, further adds to this debate. Thus, categorizing a given element as a noun (rather than as a verb) should be treated with care. In any case, to the extent possible, the grammar writer should provide a few representative examples of the different types of common nouns and also attempt to provide evidence for the classification.

3.1.2 Proper nouns and name signs

As opposed to common nouns, proper nouns describe specific entities rather than classes of entities. These can be country names, names of unique objects such as planets or famous monuments, people's names, brand names, etc. For toponyms (place names, such as countries and cities), a sign language may have its own indigenous sign, which may be a native core lexicon [Lexicon – Section 1.1] sign, as in the first two examples below, or may have a degree of non-nativeness [Lexicon – Chapter 2] involving fingerspelling based on the written form of the place name, as in the third example.

▶ 3_3.1.2_1_DTS_ROME   ▶ 3_3.1.2_2_LSF_LA-TOUR-EIFFEL

ROME (DTS)   LA-TOUR-EIFFEL (LSF)

M-C ('Manchester')   (BSL, Fenlon et al. 2014)

As noted in the section on borrowings from other sign languages [Lexicon – Section 2.1], there has been a recent tendency for sign languages to adopt the place sign from the sign language local to that place: for example, the BSL sign for SPAIN used to be a visually motivated imitation of a flamenco dancer with castanets but has since become the less iconic sign used in LSE. There has also been a further tendency to modify toponymic signs that may be seen as politically incorrect. For example, many European sign languages have a sign for INDIA which involves pointing at the centre of the forehead; in BSL, a newer sign has appeared which traces the shape of the Indian subcontinent. Sign language users' attitudes towards an acceptance of such borrowings and changes may vary, and some signers may have strong opinions in either direction.

Name signs are a type of proper nouns. On the one hand, there are name signs for famous people (e.g. Barack Obama), and just like toponyms, these are

commonly borrowed from the sign language of the country where the famous person lives. On the other hand, there is also the cultural tradition of creating name signs for sign language users and people they interact with (Mindess 1990; Paales 2010) – simply because using a sign is quicker and less cumbersome than fingerspelling a name. Within sign language communities, there are various strategies for creating personal sign names, and the grammar writer is encouraged to discuss strategies common to the sign language in this section. One is a form of metonymy, which uses the physical properties of a person's appearance (e.g. curly hair, big nose), properties of their character (e.g. blushes easily), or typical actions or behaviors (e.g. loves hiking) to denote the person. The name sign usually follows general word formation rules of the respective sign language and is more or less unique within a specific group of people. Here, name signs are glossed with the respective name in small caps to distinguish them from fingerspelled names (e.g. C-H-R-I-S-T-I-A-N). It is important to note that a name sign usually does not refer to all individuals carrying the name (e.g. to all Julias), but rather to one specific individual. If the sign language to be described behaves differently in this respect, this would certainly be worth mentioning.

▶ 3_3.1.2_4_ÍTM_JÚLÍA

JÚLÍA (sign name) (ÍTM)
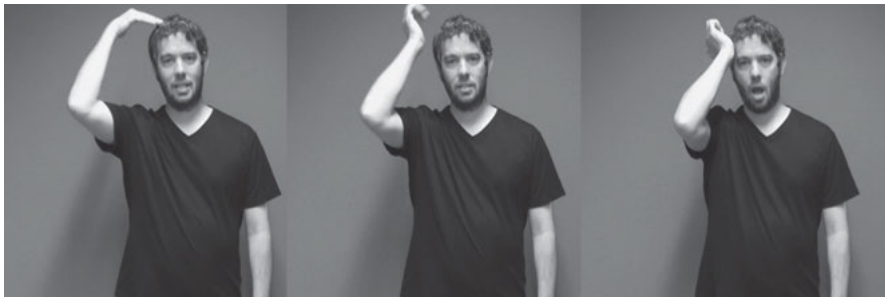
CHRISTIAN (sign name) (DGS)

Another common strategy for creating name signs is to use the handshape of the initial letter of the written name, often adding a specific movement or location, a form of initialization [Lexicon – Section 2.2.2.1]. For instance, the sign for a specific Júlía in Iceland consists of the handshape 'J' moving in an arc in neutral space (like the letter J). Some name signs may incorporate two letters, such as the person's initials. Alternatively, names may be entirely fingerspelled, often resulting in a reduced form of the type mentioned in multiple-letter signs [Lexicon – Section 2.2.2.2].

3.2 Verbs

Ever since the seminal work by Padden (1988 [1983]) on the verbal system of ASL, sign language verbs are commonly divided into three macro-categories:

1. Plain verbs [Lexicon – Section 3.2.1], i.e. verbs that cannot be spatially modified to show manual agreement (but they can usually inflect for aspect [Morphology – Section 3.3]);
2. Agreement verbs [Lexicon – Section 3.2.2] (also called "directional" or "indicating" verbs), i.e. verbs the movement and/or orientation of which can be modified to target loci associated with the subject and/or (indirect) object, thereby expressing agreement with these arguments;
3. Spatial verbs [Lexicon – Section 3.2.3], i.e. verbs that can be spatially modified to target the loci associated with locative arguments.

As for the internal structure of this section, we adopt this three-way distinction. It should be noted, however, that there have been suggestions in the literature to give up the distinction between the two types of verbs that can be spatially modified, that is, agreement and spatial verbs. It is up to the grammar writer to decide how to structure this section, and also which terminology to use (e.g. "agreement verb" vs. "indicating verb"). Obviously, decisions taken here will have repercussions on the section on agreement in the Morphology Part [Morphology – Section 3.1]. It is important that terminology is used consistently throughout the Blueprint.

The goal of this section is not to provide exhaustive lists for the different verb types. Rather, the grammar writer should examine the existence of the different types, provide representative examples, and – if possible – identify patterns. It may be the case, for instance, that verbs belonging to one group show recurring phonological or semantic features. It is also worth noting that when identifying verb types, scholars often focus on transitive (and ditransitive) verbs, but intransitive verbs may also be of the agreeing or plain type. Investigating the different verb types is interesting in light of the fact that some sign languages – in particular, some shared sign languages – appear to not make this three-way distinction. In Kata Kolok, a shared sign language of Bali, for instance, verbs cannot be spatially modified (with the possible exception of the verb GIVE). If this is the case in the sign language under investigation, it should certainly be reported here.

Note that auxiliaries should not be discussed in the present section but in a separate section on lexical expressions of inflectional categories [Lexicon – Section 3.3].

3.2.1 Plain verbs

The class of plain verbs is negatively defined as the class of verbs that cannot be spatially modified to agree with one or two of their arguments. In many cases, this constraint results from the phonological specification of the sign: body-anchored

signs cannot be detached from the body location to move between loci associated with arguments. This is true in many sign languages for transitive verbs like LOVE (contact with chest) and UNDERSTAND (signed on or close to the forehead). Note that lack of path movement is not sufficient for classifying a verb as a plain verb; some verbs can express agreement with an object by means of the orientation of the hand. Plain verbs may also be intransitive, as is true in many sign languages for verbs like CRY and LAUGH (which, again, are commonly body-anchored). The grammar writer should investigate the existence of transitive and intransitive plain verbs and should attempt to identify in how far phonological features determine class membership. If, for instance, plain verbs can be identified that are not body-anchored and involve path movement, this should certainly be pointed out.

3.2.2 Agreement verbs

In contrast to plain verbs, agreement verbs can be spatially modified to mark their arguments. The prototypical case are verbs that express (concrete or abstract) transfer and involve path movement. It is commonly assumed that such verbs are not lexically specified for the beginning and the end point of the movement. The path movement can then be modified such that the beginning point coincides with the locus associated with the subject argument and the end point with the locus associated with the object argument (Lillo-Martin & Meier 2011; for more details, see the section on agreement in the Morphology Part [Morphology – Section 3.1]). The following are examples of transitive agreement verbs from two sign languages. The LSE verb EXPLAIN in (a) starts at the locus in neutral signing space associated with Rita and moves towards the signer's body, thereby expressing agreement with a third person subject and a first person object. In contrast, the BSL verb HELP in (b) agrees with third person subject and object by moving between two loci in the signing space.

a. RITA$_x$ $_x$EXPLAIN$_1$
    'Rita explained [it] to me.'   (LSE)
b. OLIVER$_x$ $_x$HELP$_y$ CHRIS$_y$
    'Oliver helped Chris.'   (BSL)

In addition, a verb without path movement may agree with an object by means of the orientation of the fingers or the palm. As mentioned before, scholars often focus on (di)transitive verbs when describing sign language agreement, but it may well be the case that some intransitive verbs can also be spatially modified. In the following NGT example, the boy is localized, and the verb GROW is then articulated at this locus in signing space.

BOY INDEX$_3$ $_3$GROW
'The boy grew up (= got taller).'   (NGT)

Finally, for a number of sign languages, verbs have been identified that map the grammatical categories subject/object differently on the beginning and end slot of the movement; these are the so-called "backward verbs". In NGT, for instance, the verb INVITE moves from the locus associated with the object towards the locus associated with the subject.

If only a rather limited set of agreement verbs exists in the language, then the grammar writer could attempt to provide an exhaustive list. However, as before, the main goal of this section is not to provide a list but rather to scrutinize the availability of different types of agreement verbs (transitive, intransitive, backward) and to offer illustrative examples. Crucially, the realization (i.e. phonological instantiation) of agreement will not be discussed in this section but in the section on agreement [Morphology – Section 3.1] in the Morphology Part.

3.2.3 Spatial verbs

Spatial verbs, like agreement verbs, may be spatially modified to mark their arguments. In contrast to agreement verbs, however, the referents marked by spatial verbs do not prototypically participate in the argument structure of the verb since they are locative. Some authors assume that spatial verbs in sign languages take locative arguments, and as such, they can be argued to show agreement with their arguments (in the same way that agreement verbs do). The following are examples of spatial verbs. In example (a), the verb expresses movement of an object from one location to another, but the beginning and end point of the movement do not coincide with loci associated with a subject or an object. In (b), the beginning of the movement coincides with the locus established for the shelf, which again is neither a subject nor an object (note, however, that in both examples, the handshape may reflect shape properties of the manipulated or moving object [Morphology – Section 5.1]).

a. INDEX$_1$ BOOK $_x$MOVE$_y$
    'I moved the book from here to there.'   (LSE)
b. SHELF$_x$, BOOK $_x$FALL-DOWN
    'The book fell down from the shelf.'   (LSC)

3.3 Lexical expressions of inflectional categories

The elements we discuss in this section are signs that co-occur with lexical verbs and that, in a sense, support the lexical verb by carrying or expressing certain morphosyntactic features, most importantly tense, aspect, modality, or agreement. These are elements that would usually be referred to as "auxiliaries" or "auxiliary verbs", but here we refrain from using these labels, as at least for some of the elements to be discussed, it is not certain whether they are indeed verbal in nature. However, if the

verbal status of the relevant elements can be determined with some certainty for a specific sign language, then the grammar writer may prefer to adapt the header of this section accordingly. In this case, s/he might even prefer to include this section as a whole within the previous section on verbs (but maintaining the internal structure of the present section).

As for the suggested subsections, it has to be pointed out that while aspectual markers [Lexicon – Section 3.3.2] and modality markers [Lexicon – Section 3.3.3] appear to be common across sign languages, agreement markers [Lexicon – Section 3.3.4] and especially tense markers [Lexicon – Section 3.3.1] are less common (for overviews, see also Pfau et al. (2012) for tense, aspect, and modality markers, and Sapountzaki (2012) for agreement markers). The first three categories to be discussed – tense, aspect, and modality – are known to closely interact; they are therefore commonly subsumed under the acronym "TAM-markers". It is up to the grammar writer to decide whether s/he wants to add an additional structural layer by distinguishing TAM-markers as a group (Section 3.3.1, with internal structure) from agreement markers (Section 3.3.2).

3.3.1 Tense markers

In sign languages, tense is generally not marked on verbs, that is, there is no tense inflection (for exceptions, see the section on tense in the Morphology Part [Morphology – Section 3.2]). Rather, information about tense is generally provided by temporal adverbials [Lexicon – Section 3.5.2]. Tense markers are a third option for specifying tense information; however, to date such markers have only been described for ASL (Aarons et al. 1995; Neidle et al. 2000).

Neidle et al. point out that tense markers (which they call "lexical tense markers") may be very similar in form to temporal adverbials but that they differ from adverbials with respect to their distribution and their articulation. First, while temporal adverbials can occur in various positions within the clause in ASL (e.g. sentence-initially and sentence-finally), tense markers have a highly restricted syntactic distribution. In fact, they can only appear in the position between the subject and the verb, as shown in example (a) below for the lexical tense marker FUTURE$_{tns}$. The grammatical status of tense markers is corroborated by the observation that they take the same position as modal verbs, and that they cannot co-occur with modals – in contrast to temporal adverbials. Neidle et al. further show that tense markers cannot occur in infinitival clauses, as shown in example (b) – again in contrast to temporal adverbials which can be used in such environments.

a.   JOHN FUTURE$_{tns}$ BUY HOUSE
     'John will buy a house.'
b.   * JOHN PREFER FUTURE$_{tns}$ GO MOVIE
     'John prefers to go to a movie.'   (ASL, Neidle et al. 2000: 79f)

Furthermore, Neidle et al. argue that tense markers cannot vary in their articulation; in particular, they have a fixed pathlength. In contrast, the path movement of adverbials to which the lexical tense markers are related (e.g. FUTURE$_{adv}$) can be modified to provide information about distance in time. Taken together, the observations made by Neidle et al. – restricted sentential position, ban on use in infinitival contexts, and non-modifiability – could serve as tests to determine whether comparable markers exist in the sign language under investigation.

3.3.2 Aspect markers

Free aspect markers appear to be rather common across sign languages (for aspectual inflection, see the section on aspect in the Morphology Part [Morphology – Section 3.3]. Just like the tense markers discussed in the previous section may be related to temporal adverbials, aspect markers may be related to lexical verbs (e.g. FINISH) or adverbials (e.g. ALREADY). Two aspectual meanings for which free markers have been described for various sign languages are the completive and the perfective – two meanings that are not always easily distinguished.

Fischer & Gough (1999 [1972]) have described the use of the aspect marker FINISH in ASL. The first example below illustrates use of FINISH as a lexical verb. Example (b) is quite similar, but now FINISH occupies the position preceding the main verb. In this position, it takes on a grammatical meaning, namely that of completive aspect. Finally, in example (c), FINISH serves as a marker of perfective aspect. In this use, it may appear in initial, second, or final position.

a. YOU FINISH EAT, WE GO SHOPPING
   'When you('ve) finish(ed) eating, we'll go shopping.'
b. YOU EAT FINISH, WE GO SHOPPING
   'After you eat, we'll go shopping.'   (ASL, Fischer & Gough 1999: 68f)
c. FINISH EAT YOU?
   'Have you eaten?'   (ASL, Isenhath 1990: 203)

The fact that subtle aspectual distinctions have to be carefully investigated is revealed by the observation that Israeli SL employs two different markers for the two aspectual meanings (Meir 1999). For marking perfective aspect, Israeli SL signers use the sign ALREADY, the source of which is an adverb. Perfective constructions strongly imply that an action is terminated, and in most cases, this may also imply completion of the action; this, however, is by no means a prerequisite. The sentence in (a) below, for instance, could very well be uttered in a context where I got tired of writing the letter and therefore did not finish it (note that the ASL sign FINISH could not appear in a similar context). For marking completion, Israeli SL makes use of a sign which is also glossed as FINISH. Meir points out that, given its frequent occurrence in past tense contexts, it might be tempting to analyze ALREADY as a temporal adverbial or tense

marker. She shows, however, that ALREADY can be used in present tense and future tense contexts, the latter being shown in (b).

a. INDEX₁ ALREADY WRITE LETTER SISTER MY
   'I have written a letter to my sister (but have not finished it).'
b. WEEK FOLLOWING THEY ALREADY MARRIED
   'Next week they will already be married.'   (Israeli SL, Meir 1999: 51, 47)

With respect to completive/perfective markers, it may be worth investigating whether they have negative counterparts (e.g. a dedicated negative completive marker NOT-YET). In Israeli SL, for instance, the negative counterpart of ALREADY is a sign glossed as ZERO (e.g. INDEX₁ EAT ZERO 'I haven't eaten yet'). These signs can be included in this section, but they will probably make another appearance in the sections dealing with irregular negation in the Morphology Part [Morphology – Section 3.5.2] and the Syntax Part [Syntax – Section 1.5.1.1.2].

Even though the markers described so far may be the most common ones, the grammar writer should be aware that additional, less common markers may exist in the sign language under investigation. Some of these, like the NGT free durative marker THROUGH are true aspectual elements (e.g. INDEX₁ WORK THROUGH 'I worked for a long time'), while others are adverbials [Lexicon – Section 3.5] that carry aspectual meaning, for example, DGS USUALLY for habitual aspect, NGT REPEAT for iterative aspect, and DGS NEARLY and FINALLY for certain conative interpretations. Even though these elements are not true aspectual markers, the grammar writer may wish to mention them in this section and provide examples that illustrate their use. If the sign language distinguishes free markers for various aspectual categories, then the grammar writer may wish to add internal structure to this section.

3.3.3 Modality markers

Modality as a grammatical category is defined as a semantic category that conveys the attitude of a speaker or signer towards the validity of the content of a proposition (remember that in the context of sign languages, the term "modality" also refers to the channel of signal transmission). In addition, the manner of an event or state that is described by a sentence is specified. Note that what we refer to as "modality markers" is commonly referred to as "modal verbs" in the literature, but as before, in sign languages, the verbal status of some of these elements may yet have to be determined. As for the internal structure of this section, we adopt the common distinction between deontic and epistemic modality (see also the discussions of modality in the Morphology Part [Morphology – Section 3.4] and in the Semantics Part [Semantics – Chapter 4]).

3.3.3.1 Deontic modality

Deontic modality covers modal meanings such as obligation/necessity (*must*), recommendation (*should*), ability (*can*), permission (*can*, *may*), and intention/volition (*want*), thus referring to the speaker's attitude towards the necessity or possibility of an act or event. Sign languages commonly express deontic modality by means of modal verbs/auxiliaries, adverbs, nouns, and adjectives. Lexical items that have been described for many sign languages include the following.

CAN ('can')	(ASL)
MUST ('must')	(DGS)
MAY ('may')	(DGS)

For obligation and possibility in ASL, Wilcox & Shaffer (2006) distinguish between participant-external and participant-internal uses of modality markers (e.g. obligation: *We had to line up* vs. *I have to have strawberries*; possibility: *We were allowed to sign* vs. *I can lift 100 pounds*). The grammar writer may wish to also address this distinction, as it may turn out that different markers are used for these meanings. Furthermore, Wilcox & Shaffer (2006: 230) address differences between weak and strong modals and note that "weak forms exhibit a soft, reduplicated movement, while the strong forms are produced with a single forceful stroke". Moreover, in ASL, strong forms also tend to be accompanied by non-manual markers such as brow furrow and head nod (e.g. MUST vs. SHOULD, CAN vs. POSSIBLE).

Similar to what we described above for aspectual markers, irregular negative forms have often been described for modality markers (e.g. Shaffer (2002) for ASL; Pfau & Quer (2007) for DGS and LSC). The negative forms may be irregular in that they involve cliticization of a negative particle [Lexicon – Section 3.11.1] or a suppletive form. In DGS, for instance, the negative forms of the modals CAN, MUST, MAY, and NEED involve an alpha-shaped movement pattern that is added to the base form of the modal. Again, such specific negative forms should be mentioned in this section, but will be discussed further in the sections dealing with irregular negation in the Morphology [Morphology – Section 3.5.2] and the Syntax Part [Syntax – Section 1.5.1.1.2].

In addition, it has been argued for some sign languages that deontic modality may also be expressed by nouns (e.g. OBLIGATION) and adjectives (e.g. POSSIBLE). The use of such elements should also be described here.

Syntactically, modality markers may appear in different positions vis-à-vis the verb, but word order patterns should not be described in the present section (see the section on word order in the Syntax Part [Syntax – Section 2.3.1.3]. Taken together, in the present section, the grammar writer should provide a list of available modality markers and attempt to describe the, sometime subtle, meaning nuances (including the role of non-manual markers). In addition, it may be worthwhile to also address (or speculate about) possible grammaticalization processes, as modality markers often grammaticalize from lexical signs (or even co-speech gesture; Wilcox & Wilcox 1995). For ASL, for instance, it has been argued that the deontic modal CAN can be traced

back to the Old French Sign Language (Old LSF) sign STRONG, while the modal MUST is diachronically derived from the sign OWE (and both lexical signs are in turn based on French co-speech gestures). While the main aim of the grammar is, of course, to present the synchronic grammar of the sign language, including such diachronic information – if available – may certainly be of interest for the readership.

3.3.3.2 Epistemic modality

Epistemic modality is concerned with the speaker's attitude towards the actual proposition, judging the truth of the sentence and evaluating the probability of the event expressed in the utterance. Thus, epistemic modality addresses what is known and believed and indicates how much certainty or evidence a speaker has for his utterance. It is an estimation of the likelihood that a certain state of affairs or an event is true/false, has been true/false, or will be true/false in a certain possible situation.

What may complicate the investigation of epistemic modality, and the identification of dedicated markers, is the fact that modal markers may have both deontic and epistemic readings. This is true, for instance, for the English modal verb *must*, as illustrated by the following examples.

a. John didn't show up for work. He **must** be sick
    → epistemic modality: assumption
    (*Given that he's not present, and knowing him, I assume he is sick.*)
b. John didn't show up for work. He **must** be fired.
    → deontic modality: necessity
    (*Given that he's not present, it is a necessary consequence for him to be fired.*)

Wilcox & Shaffer (2006) observe that in ASL, certain deontic modals, like SHOULD and POSSIBLE, can also be used to express epistemic meaning. The following example illustrates this for SHOULD. Note that the modal is accompanied by non-manual markers: brow furrow and head nod. The authors also note that the articulation of SHOULD is weaker and reduplicated. As a result, the sign indicates the speaker's positive commitment to the truth of the proposition (they further observe that the sentential position is different, as these modals typically appear in clause-final position, but remember that word order is not addressed in this section).

	top	bf+hn
LIBRARY HAVE DEAF LIFE		SHOULD

'The library should have Deaf Life / I'm sure the library has Deaf Life.'

(ASL, Wilcox & Shaffer 2006: 226)

Other signs that can express epistemic modality in ASL are FEEL, SEEM, and OBVIOUS (Wilcox & Wilcox 1995). Again, when used epistemically, these signs are commonly accompanied by brow furrow and/or head nod. Also, the sign FUTURE that we

discussed in the section on tense markers [Lexicon – Section 3.3.1] can take on an epistemic meaning when accompanied by these non-manual markers, as shown in the following example.

<div align="center">

<u>bf+hn</u>
</div>

[...] RECEIVE MONEY FUTURE

'[...] I'm sure I'll rake in the money.'   (ASL, Wilcox & Shaffer 2006: 228)

Across sign languages, epistemic modality may also be expressed by sentence adverbials such as MAYBE or PROBABLY. The grammar writer is encouraged to investigate this possibility and, if it is attested, to include cross-reference to the section on sentence adverbials [Lexicon – Section 3.5.2]. In any case, the available data suggest that a thorough analysis of non-manual markers is particularly important in the context of epistemic modality. Remember that this concerns non-manual markers that accompany manual modality markers; non-manuals that can function as modality markers by themselves, and that attach to lexical verbs or spread over (parts of) the clause, will be addressed in the section on modality inflection [Morphology – Section 3.4].

Finally, grammaticalization scenarios may also be relevant for epistemic modality markers, as adjectives and nouns may take on this grammatical function; e.g. in ASL: noun MIRROR > modal SEEM and adjective BRIGHT > modal OBVIOUS (Wilcox & Wilcox 1995).

3.3.4 Agreement markers

In the section on verbs [Lexicon – Section 3.2], we pointed out that many sign languages have been found to distinguish plain (non-agreeing) and agreement verbs. Interestingly, some sign languages have developed a strategy to express agreement in the context of plain verbs, namely dedicated agreement markers. These markers are semantically empty or weak signs, which, similar to agreement verbs, can express the agreement relation by means of movement and orientation features (see the section on agreement inflection [Morphology – Section 3.1] for details). In this sense, they support the lexical verb, and they have therefore also been labeled "agreement auxiliaries". Sign languages differ from each other with respect to whether or not they have such markers at their disposal, and if yes, how many of them. For instance, while ASL and BSL do not employ agreement markers, NGT has been found to have one and TSL three. If more than one marker exists in the sign language under investigation, then the grammar writer may wish to introduce subsections within this section.

In the literature, different types of agreement markers have been distinguished, based on inflectional patterns, properties of their arguments, semantic contribution, and their source (grammaticalization chain) (Steinbach & Pfau 2007; Sapountzaki 2012). For illustration, consider the DGS auxiliary PAM (person agreement marker;

Rathmann 2000). In example (a), PAM combines with the plain verb LIKE, but it may also be used with adjectival predicates like PROUD. PAM does not carry any meaning by itself; it is only introduced to express agreement with the subject and object. It does not usually combine with inanimate arguments (e.g. *I like the book*). As for inflectional patterns, it can in principle express all person combinations (e.g. *I like you*, *You like me*, *She likes you*, etc.), but there may be articulatory constraints on its use. For instance, if the subject is localized at the contralateral side of the signing space, and the object at the ipsilateral side, performing the movement (with fingertips oriented towards the object) is rather cumbersome. In this case, subject agreement may be dropped or the signer may choose to apply dominance reversal. Note further that in DGS, aspectual inflection [Morphology – Section 3.3] / aspectual inflection cannot be realized on PAM; thus, in this respect, PAM behaves differently from prototypical auxiliaries. Finally, it has been found that PAM occasionally combines with (uninflected or inflected) agreement verbs.

a. MOTHER IX$_{3a}$ NEIGHBOR NEW IX$_{3b}$ LIKE $_{3a}$PAM$_{3b}$
    '(My) mother likes the new neighbor.'

<div align="right">(DGS, Steinbach & Pfau 2007: 322)</div>

$\overline{\quad\text{/da/}\quad}$

b. EXAM $_{3}$AUX-DA$_{1}$ NERVOUS
    'The exam makes me nervous.'   (LSC, Quer & Frigola 2006)

Now consider the LSC example in (b) which contains the agreement marker glossed as AUX-DA (based on the accompanying mouthing related to the Catalan verb *dar* 'give'). This marker differs from DGS PAM in important respects: (i) AUX-DA does not only serve as a carrier of agreement but expresses the additional meaning of causative result; (ii) it only combines with psychological predicates; (iii) it has a strong tendency to occur with a first person argument, and it excludes agreement between third person subject and object; and (iv) it can take inanimate subject arguments, such as EXAM in (b).

Both the DGS and LSC agreement markers have been argued to have grammaticalized from lexical signs: PAM from the noun PERSON and AUX-DA (as the mouthing suggests) from the verb GIVE. However, the most common source for such markers are actually concatenated pronouns; such markers consist of a ⍭-hand that connects two points in space, pointing first towards the subject locus and then performing a smooth movement towards the object locus. Other sources that have been reported in the sign language literature are the verbs GO-TO (NGT), SEE (TSL), and MEET (TSL).

Taken together, once it has been established that the sign language has one or more agreement markers, the grammar writer should investigate the following questions per marker:

–   Is the agreement marker void of semantics, or does it express an additional meaning besides agreement (e.g. causation)?
–   Is use of the marker restricted to certain verbs? Can it also occur with adjectival predicates?

- Does the marker combine with plain verbs only, or can it also co-occur with agreement verbs? In the latter case, does the agreement verb then appear in an uninflected form, or can the auxiliary also combine with an inflected agreement verb?
- Can the marker express all person combinations?
- Can the marker inflect for aspect (e.g. by means of reduplication)?
- Can the marker combine with animate and inanimate arguments?
- If the source can be identified with some certainty, is the marker grammaticalized from a lexical sign (verb/noun) or from concatenated pronouns?

3.4 Adjectives

Adjectives describe parts of speech that usually qualify and specify a nominal element. They can combine with a noun within a noun phrase; in this case, they are called "attributive" (e.g. *a huge house*). In addition, adjectives can be used predicatively (e.g. *The house is huge*). The English examples illustrate that English makes use of a copula and that the form of the adjective is the same in attributive and predicative function. However, it may still be the case that a certain adjective can only be used in one of the functions (e.g. *former*, as in *the former president*, cannot be used predicatively). Usually, but not in all languages, adjectives constitute an open-class word category (see also the related section in the Syntax part [Syntax – Section 4.5.0.1].

3.4.1 Attributive adjectives

The following examples are representatives of attributive adjectives.
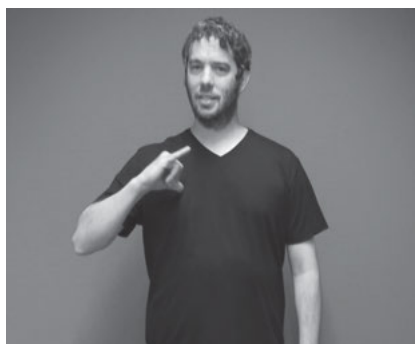
INTERESTING (DGS)
(e.g. 'interesting book')

NICE (NGT)
(e.g. 'nice movie')

ANGRY (İTM)
(e.g. 'angry person')

Formally, in all three sign languages, the same sign may be used as an adjective or an adverbial [Lexicon – Section 3.5]. Most adjectives in sign languages exhibit a manual form, but some adjectival meanings may also be realized by non-manual markers that combine simultaneously with the noun they modify. Specific non-manuals such as *puffed cheeks* – glossed as '( )' in the below example – for instance, can be simultaneously layered on nominal signs like HOUSE to yield the meaning 'a big house' (note that in the accompanying image, the sign is also manually modified).
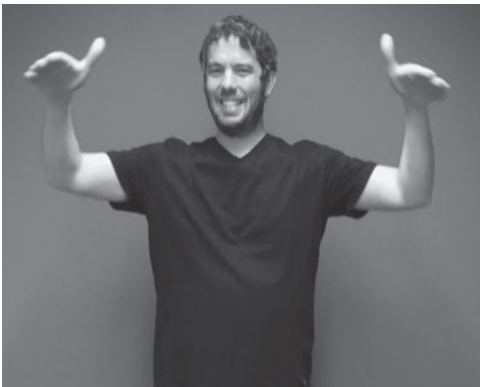
$$\overline{\quad\quad}^{()}$$
HOUSE ('big house')   (DGS)

As for manual attributive adjectives, it will suffice to provide some clear examples – for instance, some that are body-anchored and some that are articulated in neutral signing space. In addition, the grammar writer may wish to include in the discussion the so-called "Size-and-Shape-Specifiers" (SASS) that are often subsumed under the

morphological category classifier. Size-and-Shape-Specifiers [Morphology – Section 5.2] are signs that specify the shape of a referent by outlining (part of) its shape; e.g. TABLE SASS~round~ 'a round table'. The translation suggests that in this example, the SASS fulfils an adjectival function.

The range of non-manual adjectives is probably rather limited, and is likely to include meanings like 'big', 'small', 'fat', and 'thin'. Therefore, for these, the grammar writer may attempt to provide an exhaustive list. Note that the relevant non-manual markers may actually be part of the phonological specification of the corresponding manual adjectives (e.g. the sign BIG articulated with puffed cheeks) – if this is the case, it should be mentioned. In addition, it may be worth investigating whether non-manual adjectives combine freely with nouns. It may, for instance, turn out that they combine more freely with nouns that are signed in the signing space than with body-anchored nouns (e.g. 'big house' versus 'big nose' in DGS).

3.4.2 Predicative adjectives

It seems that, across sign languages, predicative adjectives are very similar, or even identical, in form to attributive adjectives. Consequently, given that the sign languages investigated to date do not offer clear evidence for the availability of a copula, a string like BOOK INTERESTING might either mean 'interesting book' or 'the book is interesting' (see also the discussion on methodological challenges [Syntax – Section 4.5.0.2] in the Syntax Part. If this is indeed the case, then the grammar writer may decide to do without the internal structure of this section.

However, in some sign languages, there may be syntactic or morphosyntactic cues to distinguish the two types of adjectives. For instance, if attributive adjectives generally precede the noun they modify, then word order may distinguish between attributive (e.g. INTERESTING BOOK) and predicative (e.g. BOOK INTERESTING) uses. But even in a language with post-nominal attributive adjectives, the syntax may provide clues, as is illustrated in the DGS pair below (noun phrases between brackets). Similarly, a localizing INDEX intervening between the noun and the adjective (e.g. GIRL INDEX~3~ NICE) may suggest that the adjective is used predicatively ('The girl is nice').

a. [BOOK INTERESTING] INDEX~1~ READ
    'I read an interesting book.'
b. [BOOK INDEX~1~ READ] INTERESTING
    'The book I read is interesting.'   (DGS)

Moreover, it has been shown for a number of sign languages that some predicative adjectives behave similar to verbs in that they allow aspectual inflection (e.g. 'repeatedly or characteristically x'). However, this will likely not apply to all adjectives, as modification of adjectives which refer to permanent characteristics is ruled out for semantic reasons: e.g. 'I'm frequently ill' versus *'I'm frequently tall' (Klima & Bellugi

1979). While the grammar writer may mention such clues here, s/he should keep in mind that the present section is about adjectives as parts of speech, not about word order or aspect [Morphology – Section 3.3]. Syntactic characteristics of non-verbal predication [Syntax – Section 2.1.4] and the order of the adjective with respect to the noun within the NP [Syntax – Section 4.5] are addressed in the Syntax Part.

3.5 Adverbials

Just like adjectives, adverbials (or adverbs) are modifying elements. While (attributive) adjectives modify nouns, adverbials modify sentences, verbs, adjectives, or other adverbials, as illustrated in the following examples (adverbials in boldface). Occasionally, one and the same adverbial may modify different types of constituents (e.g. *very quick – very quickly*).

a. **Coincidentally**, he met his teacher on the plane.   (sentence)
b. I **strongly** recommend that you read this book.   (verb/VP)
c. This is a **rather** surprising development.   (adjective)
d. He edited the chapter **very** meticulously.   (adverbial)

In the literature, different, rather fine-grained, classifications have been suggested for adverbials (see e.g. Parsons 1990). One possible classification considers the semantic contribution of adverbials and thus distinguishes between, for instance, manner (e.g. *quickly*), time (e.g. *recently*, *tomorrow*), frequency (e.g. *frequently*), and degree (e.g. *probably*, *maybe*) adverbials (for details, see the section on classes of adverbs [Syntax – Section 6.4] in the Syntax Part). In the following, however, we adopt a simplified two-fold classification which is based on the constituent that the adverbial modifies: the verb (or verb phrase) on the one hand and the sentence on the other hand. That is, we leave aside the types illustrated in (c) and (d) above. Obviously, the grammar writer is free to include these types in separate subsections and/or to structure this section differently, for instance, according to semantic contribution. Also, the discussion below will reveal that in sign languages, certain adverbial meanings can be realized manually and non-manually. Actually, the types we are leaving aside – i.e. adverbials modifying adjectives or other adverbials – appear to be commonly expressed by non-manual markers. Hence, this section might also be internally structured along these lines.

In some languages, adverbials are overtly marked as such by derivational affixes. In English, for instance, the suffix *-ly* systematically distinguishes between adjectives (*a happy girl*) and adverbials (*she sang happily*), while the same job is done in French by the suffix *-ment* (*une fille hereuse – elle chantait heuresement*). But even in English, there are exceptions; consider e.g. *a fast car* versus *he drove fast* (**fastly*). It appears that in the sign languages investigated to date, no (systematic) morphological distinction is made between adjectives and adverbs, but obviously, this is something the grammar writer should scrutinize.

3.5.1 Verb-oriented adverbials

"Classical" verb-oriented adverbials (or VP-adverbials) modify the event expressed by the verb or verb phrase (see also the section on VP-adverbs [Syntax – Section 6.4.2] in the Syntax Part); they often occur within or adjacent to the verb phrase (e.g. *He painted the house quickly*; see the section on the positions of adverbials in the section on clause structure [Syntax – Section 2.3.1.6] in the Syntax Part). Besides adverbials that express a quality or manner, this group also contains adverbials that express a degree (e.g. *enough*, *rather*), frequency (e.g. *often*), or aspectual information (e.g. *frequently*, *usually*), as well as negative adverbials like *never*. Note that some of these are clearly adverbial, as they cannot combine with nouns (e.g. **a rather decision*). The examples below illustrate that elements with a similar function exist in NGT. Note, however, that in example (a), the element that functions as adverbial is not glossed as QUICKLY, as its phonological form does not distinguish it from the corresponding adjective.

a. INDEX₃ BOOK QUICK READ
   'He read the book quickly.'
b. CHILD INDEX₃ ENOUGH SLEEP
   'The child has slept enough.'   (NGT)

Note that aspectual adverbial meanings are commonly realized by manual modulations of the verb sign, most importantly movement modification and reduplication (see the section on aspectual inflection [Morphology – Section 3.3] in the Morphology Part). Similar to what we described above for adjectives, some adverbial meanings can be realized by means of non-manual markers that are articulated simultaneously with the verb. It appears that, for the most part, these markers are expressed on the mouth, their labels commonly related to the characteristic mouth configuration. For ASL, for instance, Liddell (1980) reports the non-manual adverbials glossed as 'mm' and 'th'. In the former, the lips are kept together and pushed out a little bit; it expresses that a particular action has been done in a relaxed manner, as is true for the fishing in example (a). The latter is characterized by a slight head tilt and protrusion of the tongue through the lips; it contributes the meaning of lack of control and inattention, as illustrated in example (b).

           ‾‾‾‾‾‾mm
a. MAN FISH[continuous]
   'The man was fishing with relaxation and enjoyment.'
           ‾‾‾‾‾‾th
b. INDEX₁ GO-ACROSS. WRONG, ACCIDENT
   'I crossed (the street) carelessly. Whoops! There was an accident.'
                                              (ASL, Liddell 1980: 42, 50)

As with non-manual adjectives, the set of non-manual adverbials is expected to be limited. The grammar writer should therefore strive to provide an exhaustive list

complemented by a description of the formational properties of the markers (see also the section on non-manual adverbs [Syntax – Section 6.3] in the Syntax Part.

3.5.2 Sentence adverbials

Sentence adverbials (or sentential adverbials), as the name suggests, affect the whole sentence and modify the proposition with respect to mood or the speaker's attitude. In English, these adverbials have a tendency to appear sentence-initially (e.g. *fortunately*, *perhaps*, *finally*). The following two examples from DGS are representative of manual sentential adverbials in a sign language.
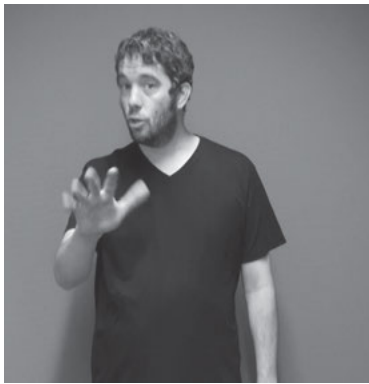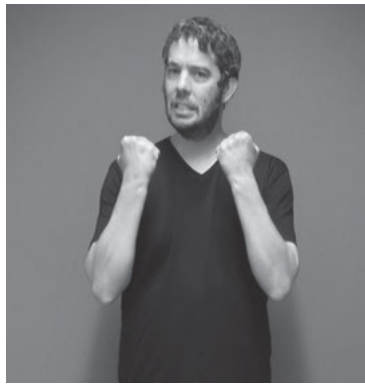
PROBABLY   SURELY   (DGS)

Some of the sentence adverbials are subsumed under the label "modal adverbials", as they contribute deontic or epistemic modal meaning, for instance, by conveying the attitude of the speaker/signer towards the content of the sentence (e.g. *probably*, which expresses epistemic modality).

 Just like verb-oriented adverbials, certain sentence-adverbial meanings can be expressed non-manually. As for their scope, the corresponding non-manual features usually spread across the entire clause (in contrast, to the non-manual verb-oriented adverbials which are usually confined to the verb). Also, it is common for specific adverbial meanings to be realized by both manual and non-manual elements, as in the following DGS example (the non-manual marker that we simply gloss as 'probably' consists of a specific lip configuration, possibly in combination with a slight to-and-fro movement of the head).

<u>   probably   </u>
PROBABLY POSS$_1$ GRANDPA IX$_3$ LATE ARRIVE
'My grandpa will probably arrive late.'   (DGS)

Here, we also subsume temporal adverbials under sentence adverbials (see the section on temporal adverbs [Syntax – Section 6.4.2.1] in the Syntax Part. This category includes adverbials like *yesterday*, *soon*, and *later*. It should be pointed out, however, that according to some authors, temporal adverbials cut across the two categories (Parsons 1990). If the grammar writer adopts the internal structure suggested here, it is up to her/him to decide where to treat these adverbials. If the section on adverbials is structured according to the semantic contribution of the adverbials (see the introduction to this section), then there will be a separate subsection on temporal adverbials. See also the section on sentential adverbs [Syntax – Section 6.4.1] in the Syntax Part.

3.6 Determiners

By "determiner", we refer to a class of elements whose function is to provide information on referentiality (i.e. the relation between the noun and what the noun refers to). In grammar handbooks, determiners are often labeled "articles" (English *the/a*), and demonstratives (e.g. English *this/that*) are commonly subsumed under determiners. Traditionally, determiners are categorized into two groups: definite [Lexicon – Section 3.6.1] and indefinite [Lexicon – Section 3.6.2] determiners (see also the section on determiners [Syntax – Section 4.1] in the Syntax Part).

On the one hand, definite determiners (in English, prototypically *the*, but also demonstratives like *this*) are used when the speaker presupposes that the interlocutor can identify the referent(s) of the nominal expression. Definite determiners can be used for three different purposes (Lyons 1999): (i) to refer back to something or someone that has been previously mentioned in the discourse (e.g. 'The cat was feeling hungry', with the cat already introduced in the discourse); (ii) to refer to something or someone that is easily identifiable in the extra-linguistic context (e.g. 'Could you pass me the pen?', with the pen visible to the interlocutors); (iii) to refer to a referent that is unique in its genre (e.g. 'the Earth', or 'the driver' when talking about a bus trip).

On the other hand, indefinite determiners (prototypically *a/an*) are used when the speaker presupposes that the interlocutor cannot identify the referent(s) of the nominal expression. Indefinite determiners are used to introduce new information, specifically new referents, into the discourse (e.g. 'Yesterday I saw a cat', where the cat is a first-mention entity). See the section on definiteness [Semantics – Section 2.1.2] in the Semantics Part for more on this distinction.

In sign language linguistics, definite determiners are frequently identified as pointing [Lexicon – Section 1.2.2] signs, also referred to as "indexes" (e.g. Zimmer & Patschke (1990) for ASL). What the grammar writer should pay particular attention to is the linguistic function associated to indexes. As a matter of fact, in many sign languages, pointing signs are polyfunctional elements that can be used for various grammatical functions, not only as determiners, but also as demonstratives, personal

pronouns, and locatives. Therefore, there may be some confounders making it hard to pinpoint real determiners. Still, it might be the case that indexes functioning as determiners can be distinguished from the others by characteristics such as movement (single, repeated, tense), hand orientation (palm oriented down or sidewards), or even eye gaze (Pfau 2011). The following list of properties may help the grammar writer in pinpointing indexes functioning as determiners (see Neidle & Nash 2012).

(i) Isolation

Within the noun phrase [Syntax – Chapter 4], determiners cannot be used in isolation. In other words, if the determiner does not co-occur with a noun, the output is ungrammatical, as shown for English and Italian in (a). Also, a determiner cannot appear in isolation as an answer to a question, as is illustrated in (b) (note that the Italian examples are translations of the English ones). The examples reveal that this test only works for "basic" determiners (like English *the*, Italian *il*), but not for demonstratives, as demonstratives can also function as demonstrative pronouns [Lexicon – Section 3.7.1].

a.   I saw *the / this / him   (English)
     Ho visto *il / questo / lui   (Italian)
b.   Q: What did you see?   A: *the / this / him   (English)
     Q: Che cosa hai visto?   A: *il / questo / lui   (Italian)

In some sign languages, there might be a slight phonological difference (e.g. hand orientation) between a pointing sign functioning as determiner and a pointing sign functioning as a demonstrative [Lexicon – Section 3.7.1] or personal pronoun [Lexicon – Section 3.7.2]. This test could be used to distinguish them: in isolation contexts, determiners are not acceptable, whereas demonstratives and pronouns are acceptable.

(ii) Plural forms

Determiners, demonstratives, and personal pronouns can include number information. In sign languages, to indicate plurality, they may be articulated as pointing signs accompanied by a circular or an arc-like movement in the neutral space. Conversely, locatives [Lexicon – Section 3.7.1] do not show this pattern. The test on plural forms may be used to distinguish determiners from locatives.

   Noun phrases in ASL can include two co-occurring pointing signs, one in prenominal position and the other in postnominal position. The following examples show that the prenominal index can be articulated with an arc-like movement (a), but the postnominal one cannot (b).

a. $IX_{PL\text{-}ARC}$ MAN IX KNOW PRESIDENT
     'Those men over there know the president'   (ASL, MacLaughlin 1997: 117)
b.   * IX MAN $IX_{PL\text{-}ARC}$ KNOW PRESIDENT

These examples provide evidence for claiming that the prenominal pointing sign is a determiner while the postnominal pointing sign is a locative (MacLaughlin 1997).

(iii) Articulatory restrictions

Determiners are articulated by moving the pointing sign in neutral space along a fixed path [Phonology – Section 1.3.1] length. This particular type of movement cannot undergo path variation (a). Conversely, pointing signs functioning as locatives can be directed to a point closer to the signer or towards a point farther away in space in order to iconically show proximity and distance (b).

a. * IX$_{[+DISTAL]}$ MAN IX$_i$ KNOW PRESIDENT
b. IX$_i$ MAN IX$_{[+DISTAL]}$ KNOW PRESIDENT
    'The/that man over there knows the president'

<div align="right">(ASL, Neidle & Nash 2012: 270)</div>

3.6.1 Definite determiners

Definite determiners are typically realized by means of a pointing sign directed to the spatial location associated with the referent(s). A sequence like HOUSE INDEX$_3$ could thus be interpreted as 'the house'. While the ⍟-handshape is most commonly used for pointing, other handshapes are also possible, such as an open hand and a handshape with thumb extended (Neidle & Nash 2012). Fenlon, Schembri, Rentelis & Cormier (2013) show that in BSL, the category of determiners is particularly subject to handshape variation. The grammar writer should consider the immediate phonological environment in order to detect possible assimilation [Phonology – Section 3.1.1] patterns.

We already pointed out that demonstratives are a type of definite determiner, and that they may be phonologically very similar, if not identical, to other definite determiners. In fact, depending on the sign language, the sequence HOUSE INDEX$_3$ could also mean 'that house' (or even 'house there'; see the section on locative and demonstrative pronouns [Lexicon – Section 3.7.1]). We encourage the grammar writer to look for phonological features – be they manual or non-manual – that distinguish different uses of pointing signs within the noun phrase.

The non-manual markers that may accompany definite determiners are: eye gaze, head tilt, raised eyebrows, and slightly raised chin. Eye gaze and head tilt are usually directed toward the location to which the index points. See also the corresponding section [Syntax – 4.1.1.3] and the section on articles expressed by non-manual marking only [Syntax – Section 4.1.1.4] in the Syntax Part.

3.6.2 Indefinite determiners

Indefinite determiners usually differ from their definite counterparts [Lexicon – Section 3.6.1] in that the pointing sign is directed upward and moves toward a broader

area, rather than a specific point in space. In ASL and in LIS, indefinite determiners require a tremoring motion (MacLaughlin 1997; Bertone 2009). Things are different in HKSL, where the indefinite determiner and the cardinal ONE are articulated similarly. Some older signers avoid homophony by producing the cardinal ONE with a slight rotation of the forearm.

The non-manual markers that may accompany indefinite determiners are: furrowed eyebrows, wrinkled nose, lowered mouth corners, and raised shoulders. In sign languages, these non-manuals are generally used to denote uncertainty. See also the corresponding section [Syntax – 4.1.1.3] and the section on articles expressed by non-manual marking only [Syntax – Section 4.1.1.4] in the Syntax Part.

Indefinite nominal expressions can fall into two categories, namely specific or non-specific (see specificity [Pragmatics – Section 1.4] for more information). The former is associated with a particular referent that is known by the sender, but not by the addressee. The latter is associated with an unspecified referent that is unknown to both the sender and the addressee. The distinction between specific indefinites and non-specific indefinites may be conveyed in different ways. In ASL, specific indefinites are marked by eye gaze directed toward the spatial location of the referent (a), whereas non-specific indefinites involve roving eyes toward an upward location (b).

$$\frac{\qquad\qquad\qquad eg_i\qquad}{}$$
a. SOMETHING/ONE WOMAN$_i$ ARRIVE
    'Some/a (specific) woman arrives.'   (ASL, Bahan 1996: 274)

$$\frac{\qquad\qquad wandering\ eyes\qquad}{}$$
b. SOMETHING/ONE WOMAN$_i$ ARRIVE
    'Some/a woman arrives.'   (ASL, Bahan 1996: 273)

In LSC, the distinction between specific and non-specific is conveyed by spatial location. Specificity is marked in the lower part of the frontal plane (a), whereas non-specificity is marked in the upper part (b).

$$\frac{\qquad eg{:}contralateral\qquad}{}$$
a. IX$_1$ CAT   WANT BUY
    'I want to buy a cat (specific).'   (LSC, Barberà 2012: 259)

$$\frac{eg{:}ipsi\text{-}up\qquad}{}$$
b. CAT   IX$_{3PL:ipsi\text{-}up}$ IX$_1$ WANT BUY
    'I want to buy a cat (non-specific).'   (LSC, Barberà 2012: 261)

Taken together, the grammar writer should investigate whether indefinite determiners (if attested at all) as a group differ formationally from definite determiners, and moreover, whether in the former group, specificity may be marked by non-manual features.

3.7 Pronouns

Sign languages use sign space to refer to present and non-present referents by pointing towards the actual referent or towards abstract locations that have been established earlier in the discourse. Pointing may be done manually (with the index finger, the thumb, the entire hand, or possibly some other hand configuration), non-manually (with eye gaze, head nod, or body orientation), or some combination of these. Further discussion on pointing [Lexicon – Section 1.2.2] is given in the section on the non-core lexicon. The grammar writer should be aware of the fact that, in addition to pronominal reference, pointing may serve a variety of functions in a given sign language. Furthermore, other elements have been identified as possible candidates for pronouns. One group is classifiers [Morphology – Chapter 5], which stand in for and allow anaphoric reference to a discourse entity, as a proform does (Zwitserlood & van Gijn 2006). Another strategy is related to role shift and the use of the body (orientation) to refer to and distinguish between different referents (Kegl 2003). Finally, some researchers have claimed that sign languages make frequent use of null pronouns (Lillo-Martin 1986).

Pronominal signs can be represented in various ways in the glosses (INDEX, IND, IX, POINT, PT, …). For simplification, it is possible to use pronouns from the spoken language, such as YOU, I, SHE, WE, ME, HIS, etc. Another strategy would be to give pronouns with different grammatical functions different labels in the gloss (e.g. INDEX(dem) for demonstrative pronoun, INDEX(pers.sg) for personal pronoun singular, INDEX(pers.pl), etc.), and a further strategy would be to describe the handshape of the sign in the gloss. The strategy followed here, and throughout the Blueprint, is to gloss a pointing sign as INDEX (or IX) and provide information on movement, grammatical categories, etc. in subscripts, such as $INDEX_1$ ('I'), $IND\text{-}EX_{3pl}$ ('they'), and so on. If the sign has a different handshape from the pointing sign, a different gloss is chosen, such as POSS for possessive pronouns. This is just a suggestion, but the grammar writer should adopt a consistent glossing practice that best suits the goals of the grammar being written. Whatever conventions the grammar writer adopts, it is essential to make these explicit and to explain exactly what the glossing reflects (and to point out any assumptions or limitations that the glossing system may impose).

3.7.1 Locative and demonstrative pronouns

Across sign languages, locative pronouns are expressed by pointing [Lexicon – Section 1.2.2] signs, and in some notational conventions, small letters are used as subscripts, such as $INDEX_a$ and $INDEX_b$. Locative pronouns generally point to a locus – be it a previously established spatial point or an actual (absolute) location. They refer

to the place that is associated with that locus and mean 'there' in that case. Locative pronouns meaning 'here' usually point to a spatial point close to the signer's body.

a. GIRL LIVE INDEX$_a$
    'The girl lives there.'
b. COME INDEX/HERE
    'Come here (to me).'   (ÍTM)

Temporal and locative indexicals expressed by pointing often have lexical glosses, such as TODAY and HERE. Sometimes, the gloss THERE is used, as well.

Demonstratives have already been addressed in the section on determiners [Lexicon – Section 3.6.1]. However, demonstratives can also be used as substitutes for noun phrases (e.g. 'I want this (one), and not that (one)'), and in this case, they are referred to as "demonstrative pronouns". In sign languages, demonstrative pronouns are very often phonologically identical to personal pronouns [Lexicon – Section 3.7.2]. However, this need not always be the case; yet, the phonological differences may be rather subtle. In at least some sign languages, the demonstrative pronoun is reduplicated and signed faster and in a tenser way (Pfau 2011). Also, ASL has been reported to have a distinct demonstrative pronoun THAT (Cormier 2012: 238).

3.7.2 Personal pronouns

A personal pronoun stands for a noun or a noun phrase (see also the discussion of pronouns [Syntax – Section 2.1.2.2] in the Syntax Part). It can be deictic, referring to a person or thing that is present in the situation, or anaphoric referring to something already established in the discourse. In most sign languages, personal pronouns take the form of pointing [Lexicon – Section 1.2.2] signs, but they can also be expressed non-manually, by head tilt and/or eye gaze. The pointing signs are directed towards present referents, like the signer or the addressee, or to locations (loci) that have previously been established in the discourse for absent referents. The following are examples of personal pronouns in ÍTM:

INDEX$_1$ ('I/me')   INDEX$_{2/3}$ ('you/him/her/it')   (ÍTM)

▶️ 3_3.7.2_3_ÍTM_INDEX-1PL

INDEX$_{1PL}$ ('we') (ÍTM)

First person pronouns are directed inwards, in most sign languages towards the signer's chest (with which they may make contact). There are exceptions to this, such as in NS, where a first person pronoun can be directed towards the signer's nose (McBurney 2002: 342).

Second and third person pronouns are directed outwards from the signer, at chest-level, toward the location of referents that are present (deictically) or, when referents are absent, toward a point (or locus) already established for that referent in the signing space (anaphorically). As with the first person pronouns, there are exceptions to this: for example, in Kata Kolok, a shared sign language used in a village on Bali, there is a preference for the use of pointing to the fingers of the non-dominant hand (similar to what happens in some buoy [Lexicon – Section 1.2.3] structures), rather than spatial locations (Marsaja 2008).

Personal pronouns can express different grammatical categories such as person [Lexicon – Section 3.7.2.1], number [Lexicon – Section 3.7.2.2], clusivity [Lexicon – Section 3.7.2.3], case [Lexicon – Section 3.7.2.4], gender [Lexicon – Section 3.7.2.5], honorific status [Lexicon – Section 3.7.2.6], and logophoricity [Lexicon – Section 3.7.2.7].

3.7.2.1 Person

The issue of whether or not sign languages encode the person feature has been heavily debated in the literature. The various claims vary from a three-person distinction similar to what is found (almost) universally in spoken languages, to a reduced two-person system, and even that sign languages do not encode person at all and show no person distinctions. Moreover, some accounts suggests that pronominal pointing involves gestural use of space.

The prevalent view in the field is that there is a two-way distinction between first and non-first person. Various researchers have defended this restricted first versus non-first person distinction (Meier (1990) for ASL; Engberg-Pedersen (1993) for DTS). The main arguments for the difference between first/non-first relate to the special status and form of the first person pronouns: (i) the form of first person pronouns is constant and stable, as well as being different compared to all other pronouns; (ii) the first person form behaves differently to other pronouns under role shift; and (iii) first person plural pronouns are not compositional in form whereas other pronouns are.

Alternatively, a three-way person distinction is upheld by some researchers who claim that the difference between second and third person is marked by accompanying non-manual features, especially eye gaze (Alibašić Ciciliani & Wilbur (2006) for HZJ; Berenz (2002) for Libras). On this view, the second person pronoun points to the addressee and eye gaze is also directed toward the addressee; in contrast, the

third person pronoun points to a locus but the eye gaze is typically directed at the addressee, that is, in a direction that does not align with that of the pointing of the hand. This non-manual marking may extend to other articulators: the head and the body orientation of the signer may also have the same direction as the eye gaze.

Finally, other authors have suggested that some sign languages may not encode person distinctions at all, and that this distinction does not form part of the grammar (related to the fact that the referent marking system is so highly indexical) (Lillo-Martin & Klima (1990) for ASL; Costello (2015) for LSE). Costello (2015) shows that the arguments for distinguishing between first and non-first person pronouns (in ASL and DTS) do not hold for LSE. Thus, although the debate is often couched in terms of the person system of sign languages in general, it is fundamental to look at the properties of each specific language.

The distinction between different person values is based on differences in phonological form (and also referential behavior) of the pronouns for different referents. The grammar writer is encouraged to look carefully at the pronominal forms in the sign language under study to find distinctive properties that could justify a two- or three-way categorization.

Note finally that some scholars assume that the loci that are pointed at by pronouns do not encode grammatical (morpho-syntactic) features at all, but rather are motivated by gestural use of space – similar to what we find in co-speech gesture (Liddell 2003; Cormier, Schembri & Woll 2013). Under this view, pronominal pointing fuses linguistic and gestural properties. It is up to the grammar writer to decide which theoretical view s/he wants to adhere to. Obviously, the choice may have an impact on the header of this section, which will probably not be "Person" if the gestural perspective is followed. The same is true if the grammar writer adopts an account according to which the person feature does not play a role in the grammar of sign languages, but rather another, modality-specific feature. The choice of theoretical perspective notwithstanding, the other headers within this section can probably be maintained, as they refer to features (realized by movement and/or handshape changes) that are independent of the linguistic vs. gestural treatment of pronominal pointing signs.

3.7.2.2 Number

Sign languages generally distinguish singular, dual, and plural forms for pronouns. In the singular form of a pronoun, the index finger usually points directly at the locus associated with the referent. The dual form functions very much in the same way as the singular form, by pointing to the referents' loci in space, but with a different handshape. The number of the extended fingers may correspond to the number of the referents. A common handshape for the dual form is a V-handshape (🖐) or a K-handshape (🖐), in both of which the index finger and the middle finger are extended. Another known handshape is an L-handshape, 🖐, where the index finger and the

thumb are extended. The pronoun oscillates back and forth between the loci of its referents, as shown in the two examples from DGS and ÍTM below.

▶️ 3_3.7.2.2_2_ÍTM_TWO-OF-US

TWO-OF-US ('two of us', DGS)   TWO-OF-US ('two of us', ÍTM)

In some sign languages, the extension of the fingers can be used to indicate up to nine referents (Steinbach 2012: 121; see also the discussion on numeral incorporation of cardinal numbers [Lexicon – Section 3.10.1.1] and numeral incorporation [Syntax – Section 4.3.4] in the nominal domain). McBurney (2002), however, points out that, at least in ASL, the dual is different from the other (incorporated) forms in that (i) the handshape ( ) is different from that of the cardinal numeral TWO, and (ii) use of the dual form is obligatory while the other forms are optional. These differences are something that the grammar writer may wish to address, as they imply different grammatical status of the dual (fully grammaticalized) vs. the other forms (incorporated).

Plural forms of pronouns involve a modification of the pointing signs. There are normally two different plural forms: a collective form, where the pronoun is realized with an arc-shaped or sweeping movement across the locations associated with the referents; and a distributive form where the pointing is successively directed towards multiple locations lying along an arc (compare the discussion of number markers on verbs [Morphology – Section 3.1.2] in the Morphology Part).

▶️ 3_3.7.2.2_3_ÍTM_INDEX-ARC-SWEEPING   ▶️ 3_3.7.2.2_4_ÍTM_INDEX-SHORT-POINTING-IN-AN-ARC

INDEX$_{\text{ARC-SWEEPING}}$ INDEX$_{\text{SHORT-POINTING-IN-AN-ARC}}$ (ÍTM)
('you/they', collective form)   ('you/they', distributive form)

3.7.2.3 Clusivity

In many sign languages, pronouns can be either inclusive or exclusive. When a first person plural pronoun, meaning 'we', is inclusive, the addressee is included in the

group of referents; when it is exclusive, the addressee is not one of the referents. In BSL and ASL (Cormier 2012: 233), the inclusive forms are produced at the center of the signer's chest by making a circular or a sweeping movement at that location. By changing the location of the signs, the forms can be made exclusive. The exclusive forms are produced slightly to one side (making the same type of movement as before), as illustrated below for ITM. The exclusive pronouns may exclude any referent salient for the discourse, not just the addressee.
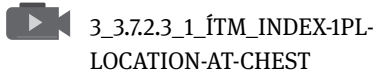
▶ 3_3.7.2.3_1_ÍTM_INDEX-1PL-LOCATION-AT-CHEST

▶ 3_3.7.2.3_2_ÍTM_INDEX-1PL-LOCATION-AT-LEFT-SIDE

INDEX$_{\text{1PL-LOCATION-AT-CHEST}}$
('we all', inclusive)

INDEX$_{\text{1PL-LOCATION-AT-LEFT-SIDE}}$
('we all', exclusive)

(ÍTM)

TWO-OF-US$_{\text{LOCATION-AT-CHEST}}$
('we two', inclusive)

TWO-OF-US$_{\text{LOCATION-AT-LEFT-SIDE}}$
('we two', exclusive)

(ÍTM)

3.7.2.4 Case

It is uncommon for sign language pronouns to mark case (with the exception of the possessive [Lexicon – Section 3.7.3]). Alibašić Ciciliani & Wilbur (2006), for instance, investigated the possibility that handshapes or mouthings [Phonology – Section 1.5.2] / mouthings distinguish different cases in HZJ, but found no clear evidence for such marking. An exception seems to be Israeli SL, which has been claimed to have a case-marked pronoun grammaticalized from the noun PERSON (Meir 2003). Otherwise, there is little evidence of explicit case marking in sign languages, and grammatical relations between arguments tend to be marked either on the verb or by word order.

3.7.2.5 Gender

It is uncommon for sign language pronouns to be marked for gender. However, gender marking has been described for NS and TSL (Fischer 1996; Smith 1990), both for pronouns and classifier predicates. In these sign languages, gender can be marked by a change in handshape (✍ for male, ✍ for female) and is limited to human referents. However, the marking is not obligatory, and therefore may not be a case of grammatical gender marking but rather an optional morphological process that marks

semantic gender (McBurney 2002). If the grammar writer finds evidence of different pronominal forms for different genders, it is important to ascertain to what extent this marking is semantically driven (by biological gender of animate referents, for example) and, more importantly, how obligatory such marking is.

It is worth noting that some accounts that treat classifiers [Morphology – Section 5] as pronominal forms consider the different handshape classes as a type of gender marking, along the lines of classes in the rich multiple gender systems displayed by Bantu languages (Zwitserlood 2003).

3.7.2.6 Honorific pronouns

In many sign languages, pronouns have an honorific form. This form is marked by directing the pronoun to a spatially higher location (higher than in an unmarked form of the pronoun), indicating some kind of honorific status of the referent (based on the metaphor POWER IS UP). Other alternations for respect forms include a change in handshape (using the ⚲-hand rather than the normal extended index finger) or introducing the non-dominant hand to "shield" the dominant hand (e.g. Berenz (2002) for Libras). The use of one form or the other may depend upon the physical presence of the referent in the communicative setting. As with other grammatical categories that may be marked by personal pronouns, the grammar writer should determine how obligatory this marking is.

3.7.2.7 Logophoric pronouns

Some languages make use of a specific set of pronouns in the context of indirect discourse to mark co-referentiality with the individual whose point of view is being described. Thus, in the case of reported speech, a language like Ewe (spoken in West Africa) has a specific logophoric pronoun, *yè*, to refer to the main clause subject (a), and a normal third-person pronoun, *e*, to refer to any other individual (b). (In the examples, the change in subscript denotes that the referents are distinct.)

a. Kofi be yè-dzo
    'Kofi$_i$ said that he$_i$ left.'
b. Kofi be e-dzo
    'Kofi$_i$ said that he$_j$ left.'   (Ewe, Clements 1975: 142)

Sign languages do not appear to have a specific set of logophoric pronouns, but parallels have been drawn between the use of role shift [Syntax – Section 3.3.3], which has many properties of indirect discourse, and logophoric pronouns. Lillo-Martin (1995) suggests that the first person pronoun (that is, the signer pointing at herself) is a logophoric pronoun in the context of role shift. Ultimately, the classification of such pronouns will depend on the treatment that the grammar writer gives to role shift (see Lillo-Martin (2012) for further discussion).

3.7.3 Possessive pronouns

Possessive pronouns may be differentiated into two main types. The first type is a proform for the possessor (e.g. English *my*, *her*, *your*) which still requires a noun for the thing possessed ('my ruler', 'her pen'). These forms are not, strictly speaking, pronouns since they do not replace a noun, and act as adjectives or determiners (depending on the language). Consequently, they are often referred to as adjectival possessive pronouns. In contrast, a substantival possessive pronoun is a proform for both the possessor and the thing possessed (e.g. English *mine*, *hers*, *yours*). Such pronouns may act as an argument ('Mine is bent', 'I prefer yours') or as a predicate ('This pen is hers'). The two types are sometimes referred to as dependent/independent or weak/strong possessive pronouns. For more on adjectival possessive pronouns see attributive possessive pronouns [Syntax – Section 4.2.1.1] in the Syntax Part.

Some sign languages do not have a specific form for possessive pronouns and make use of personal pronouns [Lexicon – Section 3.7.2] (that is, a ✋-hand) to express possession. However, specific forms for possessive pronouns have been described for various sign languages. Most commonly, these are directional elements that differ from personal pronouns in handshape (and orientation): thus in many sign languages (e.g. ASL, DGS, ÍTM), the handshape in possessive pronouns is B, ✋, and the palm of the hand is directed toward the (possessor) referent. (Other handshapes have been attested for other sign languages.)

POSS₁ ('mine')   POSS₂/₃ ('yours/his/hers')   (ÍTM)

 3_3.7.3_3_ÍTM_POSS-1PL   (ÍTM)

POSS₁PL ('ours')

Furthermore, some sign languages may distinguish between adjectival and substantival possessive pronouns: in BSL, for example, the substantival form is marked with the ☝-handshape. If different handshapes appear for possessive pronouns, it is important for the grammar writer to look at the context and distribution of the forms in order to establish the function of each. It is possible that the sign language in question does not uphold the adjectival/substantival distinction and may differentiate, for example, between predicative and other uses. Equally, other factors may condition

the form of the possessive pronoun: in BSL, for instance, the index handshape can only be used for inalienable possession (Cormier 2012: 233).

3.7.4 Reflexive and reciprocal pronouns

A reflexive pronoun is used when the object in a sentence (direct or indirect) refers to the same person or thing as the subject of the sentence (e.g. *I scratch myself*). A reflexive pronoun exists in various sign languages (e.g. ASL, BSL, NGT, RSL), often glossed as SELF. The form of the sign differs from language to language; in some cases, the pronoun can be modified spatially, in the same way that personal pronouns [Lexicon – Section 3.7.2] can (i.e. directed toward a locus associated with a referent), while in other cases, the sign is fixed in form. Frequently, the reflexive pronoun is optional, and in the case of RSL, a personal pronoun may be used for reflexive meaning, as illustrated by the following two examples.

BOY INDEX$_3$ PAINT SELF
BOY INDEX$_3$ PAINT INDEX$_3$
'The boy paints himself.'   (RSL, Kimmelman 2009: 22)

These pronouns often function as emphatic pronouns in the same way that reflexive pronouns in English can, as shown in the translation of the following ASL example.

SISTER SELF TELEPHONE OFFICE
'My sister will call the office herself.'   (ASL)

A reciprocal relation expresses a meaning similar to a reflexive relation since co-referentiality is involved. However, reciprocity requires a plural referent so that each individual is at the same time agent and undergoer of the action (e.g. *They visit each other*). Generally, in sign languages, reciprocal relations are expressed by reciprocal markers [Morphology – Section 3.1.3] on the verb. As such, it is common for sign languages not to have a specific reciprocal pronoun. Nevertheless, such reciprocal pronouns have been described for some sign languages, such as ASL and BSL, and the forms tend to share formational features with the reflexive pronoun.

JOHN MARY EACH-OTHER WISH MERRY CHRISTMAS
'John and Mary wished each other merry Christmas.'   (BSL)

3.7.5 Interrogative pronouns

Interrogative pronouns are proforms that are used in wh-questions [Syntax – Section 1.2.3]. They can be found in all sign languages studied to date, but their numbers vary

between sign languages (Zeshan 2004). BSL has at least six interrogative pronouns, ÍTM seems to have 13, but IPSL only has a single interrogative sign. Thus, there is a continuum from simple wh-word paradigms to highly complex paradigms. Examples of interrogative ÍTM pronouns are the following:

WHO WHAT (ÍTM)

Actually, IPSL is an interesting case, as it has been argued that the interrogative sign (glossed as G-WH for 'general wh-sign') is not an interrogative pronoun but rather a question particle [Lexicon – Section 3.11.2]; this sign may combine with certain nouns to yield more specific meanings (e.g. FACE^G-WH 'who', PLACE^G-WH 'where'; cf. Aboh, Pfau & Zeshan 2005). If the sign language under investigation patterns with IPSL in this respect, then the grammar writer would have to decide where to discuss the interrogative sign – here or in the section on question particles. If the status of the sign is uncertain, then it should be mentioned in both sections.

Sign languages with larger interrogative pronoun inventories may also feature examples of compound interrogative pronouns, such as those from ÍTM and DGS illustrated below.

  ▶️ 3_3.7.5_3_ÍTM_HOW-CHARACTERISTIC   ▶️ 3_3.7.5_4_DGS_WHO-PAM

HOW^CHARACTERISTIC   WHO^PAM
('what kind', ÍTM)   ('whom', DGS)

In many sign languages, the same signs are used for interrogatives as for indefinites. Examples of this are the BSL signs for SOMEONE and WHO, which are identical in form.

3.7.6 Relative pronouns

Sign languages use a variety of strategies to mark relative clauses [Syntax – Section 3.4], including word order, manual, and non-manual markers. One option is to use a

relative pronoun, and pronouns with such a function have been described for various sign languages. ASL, for example, uses a sign glossed as THAT as a relative pronoun (or "relative conjunction"; Liddell 1980). DGS has two relative pronouns, one for human referents (e.g. *the man who* ...) and another for non-human referents (e.g. *the book which* ...); both can be localized in space (Pfau & Steinbach 2005). As occurs with spoken languages, the same form may be used as a relative pronoun and a demonstrative pronoun [Lexicon – Section 3.7.1]. In contrast, other sign languages do not appear to have a sign that functions as a relative pronoun, and instead use other strategies to indicate the relative clause.

3.7.7 Indefinite pronouns

Across spoken languages, indefinite pronouns often have forms similar to the nouns meaning 'person' or 'thing', or to the numeral 'one', and this is also the case for sign languages. There may be different indefinite pronouns for human and non-human referents, like the English *someone* and *something*. Indeed, in many sign languages, the human indefinite pronoun may be similar in form to the numeral ONE, often with an additional movement or a marked location in the signing space.

In some sign languages, the indefinite pronoun SOMEONE bears a relation to the interrogative pronoun [Lexicon – Section 3.7.5] WHO. In BSL, the indefinite and interrogative pronouns are identical in form; in LSC, WHO forms part of the indefinite pronoun.

WHO^SOME
WHO^INDEX$_{3pl}$
'someone' (LSC)

Compound signs are also attested for other sign languages: in DGS and NGT, the indefinite pronoun consists of ONE^PERSON.

3.8 Adpositions

3.8.1 Manual adpositions

Adpositions generally mark relational information between two elements, and such relations are usually expressed in sign languages by the use of sign space, especially if they are spatial in nature (e.g. *on*, *in*, *next to*). In some sign languages, there are, however, at least some manual signs for certain adpositions that can be glossed as such, as the following examples from LSE and DGS show.

UNIL ('until')   WIHOUT ('without')   (LSE)

OVER ('over')   (DGS)

Note that the use of a sign language adposition may be very different and possibly more restricted than that of the nearest equivalent in the spoken language. For the given sign language, the grammar writer should check whether these elements are prepositions or postpositions.

3.8.2 Adpositions and spatial relations

In sign languages, relational information that is usually expressed by adpositions in spoken languages can be conveyed via various means involving the sign space – in particular when it comes to spatial relations. In general, spatial adpositions may be incorporated in spatial verbs and classifier constructions, that is, the movement of the verb is modified to indicate the spatial locations of and relations between objects. This strategy is illustrated by the two DGS examples below.
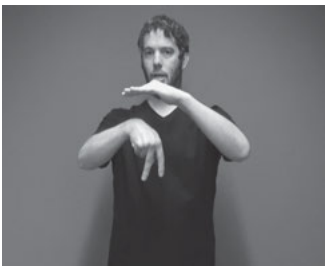
▶🎥 3_3.8.2_2_DGS_JUMP-OVER

STAND_under ('stand under')   JUMP_over ('jump over')   (DGS)

3.9 Conjunctions

Conjunctions are parts of speech connecting two or more elements of speech such as words, phrases, and clauses. Languages use a variety of mechanisms to connect constituents, and here we look at three types of conjunctions: coordinating [Lexicon – Section 3.9.1], subordinating [Lexicon – Section 3.9.2], and correlative [Lexicon – Section 3.9.3]. For more information on how clauses are conjoined, see coordination and subordination [Syntax – Section 3] in the Syntax Part (for overview, see also Tang & Lau (2012) and Pfau & Steinbach (2016); for BSL connectives, see Waters & Sutton-Spence (2005)).

3.9.1 Coordinating conjunctions

Coordinating conjunctions such as *and*, *or*, *but*, and *so* paratactically join lexical elements or clauses. In sign languages, there may be manual signs for some conjunctions, but this does not necessarily need to be the case. Established sign languages very often realize coordination via prosodic marking such as rhythmic pauses, a change in body posture, and/or other non-manual expressions. Many sign languages do not show overt manual elements for 'and', for instance, as can be seen in the following examples (see Davidson (2013) for ASL). In contrast, use of a conjunction BUT appears to be more common across sign languages.

EMMA APPLE BANANA GRAPE LOVE
'Emma loves apples, bananas, and grapes.' (DGS)
EMMA FRIEDA LOVE ÖRN SVERRIR LOVE
'Emma loves Frieda and Örn loves Sverrir.' (ÍTM)

It is important to describe not only single words, but also test complex sentences to gain insight in the realization of coordinate structures in naturally signed discourse. There may be manual items from manually coded speech systems that are usually not used in native signing, for instance (e.g. the sign PLUS used for 'and'). For more information on coordination at the clausal level, see coordination of clauses [Syntax – Section 3.1].

3.9.2 Subordinating conjunctions

Subordinating conjunctions usually introduce embedded clauses or conjoin main and embedded clauses. Typical examples in English are *because*, *since*, *though*, *where*, *that*, *if*, etc. Similarly to coordinating conjunctions [Lexicon – Section 3.9.1], sign languages may have certain manual elements that are used as subordinators,

but frequently realize embedding by means of non-manual markers and prosodic structure. Based on the sign languages investigated to date – and these are only a few – the pattern that emerges is that (i) sign languages do not employ conjunctions that introduce complement clauses (complementizers like English *that*); (ii) sign languages generally have some conjunctions that introduce different types of adverbial clauses (comparable to English *if*, *because*, *so that*); and (iii) some types of adverbial subordinate clauses, such as e.g. temporal clauses and conditional clauses, can be marked by a non-manual only (even though a manual conjunction may optionally be used in addition). The two images below are examples of manual subordinate conjunctions in LSC and DGS, respectively, while the video illustrates non-manual marking of a conditional clause in DGS.

IF ('if', LSC)	WHEN ('when/if', DGS)

▶️📹 3_3.9.2_3_DGS_TODAY SUN RISE, IX-1PL SWIM

raised eyebrows	head nod
TODAY SUN SHINE	IX$_{1PL}$ SWIM

'If the sun shines today, we go swimming.'   (DGS)

Like in spoken languages, subordination conjunctions are commonly grammaticalized elements. Compare the grammaticalization of 'be+cause' in English with the sign BECAUSE in DGS, which grammaticalized from the noun REASON illustrated in the video below. When used as a conjunction, the movement of the sign is commonly reduced.

▶️📹 3_3.9.2_4_DGS_BECAUSE2

REASON   (DGS)

For more information on clausal subordination, see subordination [Syntax – Section 3.2].

3.9.3 Correlative conjunctions

Correlative conjunctions consist of at least two items that assign a correlative rela-
tion to two equal grammatical units. Thus, these pairs establish parallel construc-
tions that conjoin similar words or phrases. Examples in English are *(n)either ...
(n)or*, *not only ... but*, *whether ... or*, *the more ... the more*, etc. In sign languages, there
are certain manual equivalents to those pairs, which, however, do not necessarily
include all spoken language items (see example (a) below, where BUT is not overtly
realized).

a.   NOT ONLY BEER, ALSO SALAD
      'not only beer, but also salad'
b.   IX$_1$ CINEMA GO THEATER GO PALM-UP$_{RH}$ PALM-UP$_{LH}$
      'I either go to the cinema or to the theater.'   (DGS)

In some sign languages, the sign PALM-UP (which is related to a common co-
speech gesture; see the discussion in the section on borrowing of gestures
[Lexicon – Section 2.3]) may be used in correlative constructions such as *either ...
or*, using one hand on the ipsilateral side of the sign space and the other hand on
the contrasting side of the sign space, as illustrated in example (b). Syntactically,
the correlative construction follows the two elements that are connected. More
important, however, is the fact that non-manual markers such as body leans very
often indicate the specific relation between the elements. In case of *either... or*, for
instance, a contrasting sideward body lean on each unit is sufficient to express
the correlative conjunction.

3.10 Numerals and quantifiers

Numerals and quantifiers identify the number or amount of the set denoted by the
noun that they modify. Strictly speaking, a numeral is a type of quantifier in that it
specifies the exact number, but we adopt the widespread practice of distinguishing
between numerals on the one hand, and (non-numeric) quantifiers that give a relative
or indefinite indication of quantity on the other.

3.10.1 Numerals

Generally speaking, the term "numeral" used in the nominal domain indicates an
item specifying the number of entities referred to. Numerals are either words such
as *one*, *ten*, *twenty-two* that are used to count and denominate numbers (cardinal
numbers) or number words that relate to a specific ordering (ordinal numbers), such
as *first*, *second*, etc.

At a closer inspection, numerals can be classified according to three main categories: cardinal, ordinal, and distributive numerals. Cardinals are used to count entities and answer the question 'How many?' (e.g. 'three suitcases'). In contrast, ordinals are used to rank entities according to a certain order and provide an answer to the question 'Which in order?' (e.g. 'the third suitcase'). Finally, distributive numerals specify how a certain quantity is distributed over some entities and can be used to answer the question 'How many each?'. The distributive use is illustrated by the following Georgian example.

sam-sami   čanta
three-DIST.ABS   suitcase.ABS
'three suitcases each'   (Georgian, Gil 1988: 1044)

Usually, ordinals and distributives are derived from cardinals since they combine a numerical quantity with another type of information (i.e. order and distribution). Not all languages have a distinct word class for ordinals and distributives (Dryer & Haspelmath 2013).

3.10.1.1 Cardinal numerals

For cardinal numerals in sign languages, the two manual articulators offer a direct option of counting from 1 to 10 by the use of fingers, making 10 the common base for most sign languages (decimal system). Thus, sign languages obviously draw on gestural means in their counting systems. However, sign languages are known to have quite different number systems even for counting from 1 to 10, and these systems may at times be quite different from how hearing subjects count using their hands. In DGS, signers count by separately extending one finger after the other on the dominant hand, starting with the thumb, and maintaining five extended fingers on the non-dominant hand when counting from 6-10 with the dominant hand again (two-handed number system). In ASL, however, the numbers from 1 to 10 are all expressed by one hand alone (one-handed number system). The number system of a sign language may involve handshapes that are rare, or even unattested in other lexical signs (note that the handshapes of numerals 1 to 5 or 1 to 10, depending on the type of counting system, will also be listed in the section on number signs [Phonology – Section 1.1.3] in the Phonology Part).

Strategies for forming higher numbers should also be explained. For numerals from 11 to 19, as well as for decimals 20, 30, etc., sign languages commonly combine number handshapes with specific movement patterns (e.g. circular movement, side-to-side movement); in this case, the movement simultaneously represents the numeric base 10. Just as in some spoken languages, the numbers 11 and 12 may show exceptional patterns. Higher numbers may be compositionally formed, as in DGS, or produced by juxtaposition of digits (digital strategy), as in ASL, as shown in the following examples.

FIVE-TWENTY ('twenty-five')   (DGS)
ONE-ZERO-FIVE ('one hundred and five')   (ASL)

As can be seen from the DGS example above, inversion may also be attested in certain sign languages (possibly due to influence from the spoken language, as is true for DGS and NGT). Some sign languages have been found to employ typologically unusual patterns in their numeral system, like a base-20 system (vigesimal system), subtractive numerals, and the like (Zeshan et al. 2013). Hence, the grammar writer should describe the numeral system, the simultaneous and sequential combinatorial possibilities, and point out typologically common and unusual patterns. Signs for higher numbers like 100, 1000, and one million, if attested, should also be included. It should also be noted that the articulation of numerals is known to be subject to dialectal variation (e.g. McKee, McKee & Major (2011) for NZSL). The position of numerals [Syntax – Section 4.3.1] vis-à-vis the noun will be described in the Syntax Part.

In the domain of numerals, sign languages have the unique opportunity to incorporate specific numerals into pronouns and temporal expressions. Examples of the former are 2-OF-US ('the two of us'), 3-OF-YOU ('the three of you'), etc. Numerals may also be incorporated into temporal expressions such as YEAR in DGS, which is usually signed with a ⅄-handshape, but in the case of 'one-year', 'two-years', etc., the number sign is combined with the specific movement of the sign YEAR (see left video below). The same process is available for signs like WEEK (see right video) or HOUR, for instance.

▶️ 3_3.10.1.1_2_DGS_1-YEAR, 2-YEAR, 3-YEAR   ▶️ 3_3.10.1.1_1_DGS_1-WEEK, 2 WEEK

1-YEAR, 2-YEAR, 3-YEAR…   1-WEEK, 2-WEEK, 3-WEEK
('one year', 'two years', 'three years', etc.)   ('one week', 'two weeks', 'three week', etc.)

Due to the physical properties of the hands, the upper limit for numeral incorporation is usually 10. Even though these cases are attested (more frequently for temporal expressions than for pronouns), sign languages more commonly apply numeral incorporation up to 5 and not beyond (also see the section on numeral incorporation [Syntax – Section 4.3.4] in the Syntax Part).

3.10.1.2 Ordinal numerals

Ordinal numerals are often derived from cardinals [Lexicon – Section 3.10.1.1]. The handshape of the cardinal numeral is usually maintained, while changes in orientation and movement may occur. In many sign languages, ordinal (ordering) numbers have a specific extra movement, indicating the difference between, for example, ONE and FIRST.

Ordinals differ from cardinals in that they do not constitute an open set of elements. Generally, they do not extend beyond TENTH. For example, in FinSL, ordinals from 10 onwards make use of a strategy based on written language that consists of combining the cardinal with the sign DOT.

TWENTY^DOT

'20th'   (FinSL, Takkinen, Jantunen & Seilola 2016: 152)

Very often list buoys [Lexicon – Section 1.2.3] are used to keep track of ordinal numbering in signed discourse.

3.10.1.3 Distributive numerals

In sign languages, the distributive reading is usually expressed through reduplication of a cardinal numeral [Lexicon – Section 3.10.1.1] in the signing space. Each reduplication is produced at a distinct location, similar to the distributive plural for number marking on pronouns [Lexicon – Section 3.7.2.2]. That is, the sign languages investigated to date do not employ dedicated lexical signs for distributive numerals but rather make use of morpho-syntactic spatial strategies to express the distributive meaning. For illustration, we provide two examples from RSL.

_____ topic

MAN INDEX BUY BEER ONE_{DISTR}

'Each man bought a beer.'

INDEX_{DISTR} EACH ONE_{DISTR} SUITCASE TWO_{DISTR}

'Each of them had two suitcases.'   (RSL, Kimmelman 2015: 13,22)

3.10.2 Quantifiers

A quantifier is an expression that identifies the number or amount of the set denoted by the noun it modifies. The following are some of the quantifiers attested in English: *no*, *some*, *both*, *few*, *a few*, *several*, *enough*, *many*, *most*, *each*, *every*, *all*. Sign languages also have quantifiers, as illustrated by the following LSC example.

_____ br

STUDENT MAJORITY EXAM PASS

'Most students passed the exam.'   (LSC, Quer 2012: 188)

Quantifiers are typically classified together with determiners [Lexicon – Section 3.6] / determiners or nominal modifiers, but quantification may also be achieved with other elements such as adverbials [Lexicon – Section 3.5] or auxiliaries. In the present section, the grammar writer should provide a list of attested quantifiers (including negative quantifiers like *no*), possibly supplemented by examples illustrating their use. See quantifiers [Syntax – Section 4.4] in the Syntax Part for more on quantifiers and quantification [Semantics – Chapter 10] for information about the different ways in which quantification may be expressed.

3.11 Particles

Particles are functional words that do not inflect and typically encode grammatical categories or discourse functions. This section looks at negative particles [Lexicon – Section 3.11.1], question particles [Lexicon – Section 3.11.2], and discourse particles [Lexicon – Section 3.11.3]. However, the grammar writer may decide to add further particle types, such as focus particles (such as English *even*, *also*, and *only*) or modal particles, if these are attested in the sign language under investigation (see Herrmann (2013) for discussion of these types of particles).

3.11.1 Negative particles

Many languages use a particle meaning 'not' to negate an affirmative sentence, such as *no* in Spanish or *niet* in Dutch.

Cayetana toca la trompeta. / Cayetana **no** toca la trompeta.   (Spanish)
'Cayetana plays the trumpet.' / 'Cayetana doesn't play the trumpet.'
Ik zie Hans. / Ik zie Hans **niet**.   (Dutch)
'I see Hans.' / 'I don't see Hans.'

All sign languages described to date have at their disposal one or more negative particles for expressing clause negation. Across sign languages, use of a basic 'not' particle appears to be the most common strategy, next to non-manual negation (which, in some sign languages, may negate a clause by itself). For illustration, see the LSE example below, which involves a clause-final particle (accompanied by a headshake).

<u>   hs   </u>
JUANITA MEAT EAT   NOT
'Juanita doesn't eat meat.'   (LSE)

The interaction between the manual particle and the non-manual marking (normally a headshake, but this may vary cross-culturally; see non-manual markers of negation [Morphology – Section 3.5.1.2]) is different from language to language. In this section, the grammar writer should only list and describe the attested manual particles. The relative importance given to the manual and the non-manual component, the position of the particle, and the possible spreading of the non-manual marking with respect to the manual signs will be addressed in the section on negatives [Syntax – Section 1.5] in the Syntax Part.

    Some sign languages have negative particles which carry additional semantics, e.g. emphatic negatives ('absolutely not'), contrastive negatives, or negative imperatives ('don't!') (Zeshan 2006). Such specialized particles should be included here. Other negative elements which combine negation with another inflectional category

(e.g. aspect, modality) will be treated elsewhere in the grammar, namely in the respective subsections within lexical expressions of inflectional categories [Lexicon – Section 3.3]. Also, they may make another appearance in the section on negative inflection [Morphology – Section 3.5]. Still, the grammar writer may decide to mention such negative elements here and refer the reader to the relevant parts of the grammar.

3.11.2 Question particles

Question particles normally mark polar interrogatives [Syntax – Section 1.2.1] but may also occur with content interrogatives [Syntax – Section 1.2.3]. They usually appear in a sentence-initial or -final position and may be grammaticalized from a more complex syntactic structure or a pragmatic interrogative marker such as 'I ask you'. The *est-ce que* form in French (literally 'is it that …') may be regarded as a question particle:

Est-ce que tu veux le voir?
'Do you want to see it?' (French)

Since polar interrogatives are most frequently marked by non-manual markers, question particles in sign languages tend to be optional (in contrast to spoken languages, where question particles, if they are used, tend to be obligatory). An example of a question particle is found in Japanese Sign Language:

<u>   y/n   </u>
IX$_3$ TRUE Q-PART
'Is that true?' / 'Really?' (NS, adapted from Morgan 2006: 99)

Genuine interrogative particles tend to occur in the same prosodic unit as the rest of the interrogative. If there is an intervening prosodic break, the interrogative marker may actually function as a question tag or a request for confirmation, such as *innit?* in a sentence like 'You're from Harrogate, innit?' (attested in some non-standard dialects of British English). An example of a question tag is found in the following LSE polar interrogative:

<u>   y/n   </u>
IX$_3$ LIVE BILBAO YES-NO
'Do you live in Bilbao?' / 'You live in Bilbao, don't you?' (LSE)

Question particles also need to be distinguished from pragmatic means of asking a question by means of a verb like 'ask' or a strategy based on written language such as tracing the shape of a question mark. However, both of these strategies may grammaticalize into a question particle, and the same is true for the 'palm-up' gesture (which has already been mentioned in the context of borrowing of gestures [Lexicon – Section 2.3.2] and correlative conjunctions [Lexicon – Section 3.9.3] and will make another appearance in the next section on discourse particles

[Lexicon – Section 3.11.3]). The grammar writer should look for evidence of semantic bleaching, inflectional rigidity, and syntactic distribution (especially word order) to justify treating an element as a grammaticalized question particle. See interrogative particles [Syntax – Section 1.2.1.3] in the polar interrogatives section and interrogative particles [Syntax – Section 1.2.3.9] in the content interrogatives section of the Syntax Part for more information.

3.11.3 Discourse particles

Certain particles do not add to the meaning of a sentence but affect its communicative intent. These particles serve a pragmatic function and help to organize and connect the different elements of the discourse, or to express the signer's attitude. For example, in English, the adverbial *well* can be used as a discourse particle to heighten the speaker's attitude, and *like* can be used to diminish the effect of exaggerated language, as the following examples show:

Well, what a cheek!
She was, like, totally wasted.

A common element across sign languages that is often translated as 'well' or 'so' is the palm-up gesture (holding one or both hands open with the palms facing upwards), and this seems to operate as a discourse marker in many sign languages. (As mentioned previously, the palm-up gesture appears to serve various functions (McKee & Wallingford 2011; Van Loon, Pfau & Steinbach 2014); therefore, the grammar writer should be careful about classifying all instances of palm-up as a single element.) Such particles that express the speaker's attitude are often treated as interjections [Lexicon – Section 3.12] and other examples are given in that section.

The structuring and organization of discourse [Pragmatics – Chapter 5] in sign languages is often achieved by the use of space [Pragmatics – Chapter 10], but there are also manual elements that qualify as discourse particles. Some particles serve to structure the discourse produced by the signer, whereas others control the discourse between interlocutors. Of the first kind, various sign languages, such as NGT or LSE, mark a change in discourse topic [Pragmatics – Section 4.2] by means of a sign that involves moving both hands (⯅-handshape) from the contralateral to ipsilateral side as if pushing something out of the signing space. The second type includes the use of finger-wiggles to maintain a turn in a conversation [Pragmatics – Section 10.2], similar to the use of vocalic sounds in spoken languages such as *ah* or *er* to indicate that the turn-holder is thinking of what to say and does not want to be interrupted.

The grammar writer should bear in mind that these discourse particles may be derived from items that normally have a lexical meaning but – possibly due to metaphorical extension – may be used for purely pragmatic purposes. Identifying such

discourse particles and distinguishing them from lexical counterparts can give a clearer picture of what forms an integral part of a clause and what does not.

3.12 Interjections

Interjections are exclamative words or phrases that express the speaker's emotions, sentiments or judgments, such as English *well*, *oh my god*, or *yeah*. Furthermore, English *uh* and *ahem* or German *äh* and *ach* are pause fillers and are usually also called interjections. The linguistic definition of interjections from spoken languages often includes the notion that interjections express exclamative sounds, which poses some challenges to define the respective expressions in sign languages. In general, an open mouth may be seen as an equivalent to a sound-related interjection indicating surprise such as *oh* or *ah*. In addition, there are sign language-specific interjections such as WOW in DGS, where, in addition to a specific mouth pattern, the fist-hand-shape quickly moves from side to side in sign space.

WOW ('wow')   (DGS/ÍTM)
AH-sign (multiple translations depending on the facial expressions)   (Irish SL)

The so-called "finger-wiggling" to hold on to a turn in a conversation is a relatively frequent gesture, attested in many sign languages, that can be considered an interjection. However, such elements may also be treated as discourse particles [Lexicon – Section 3.11.3]. Interjections can also be similar in form to gestures used with an interjective function by non-signers.

   Since interjections express emotions or sentiments, and because such information is frequently transmitted through non-manual (especially facial) markers, interjections in sign language often involve a rich mixture of manual and non-manual material. These signs have been referred to as "multi-channel signs" and are characterized by the fact that they are difficult to translate simply into spoken language, with glosses such as THAT'S-A-BIT-EMBARRASSING or I'M-ALL-FOR-IT. However, this relative untranslatability is typical of interjections, and does not give these signs any particularly unique status with respect to their spoken language counterparts.

Elicitation materials

Rather than attempt to elicit different parts of speech individually, in a word by word fashion, it is recommended that the grammar writer tries to analyze these different grammatical categories in the context of sentences or discourse. For this reason, the grammar writer is directed to the relevant sections of the Syntax [Syntax Part] Part for recommendations of elicitation materials and techniques.

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Chapter 9   Figurative meaning (Vadim Kimmelman)
Chapter 10 Communicative interaction (Andrea Lackner, Jette Kristoffersen)
Chapter 11 Register and politeness (Jette Kristoffersen, Andrea Lackner)