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10. Agreement auxiliaries

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Abstract

In this chapter, I summarize and discuss findings on agreement auxiliaries from various sign languages used across the world today. These functional devices have evolved in order to compensate for the ‘agreement gap’ left when a plain verb is the main verb of a sentence. Although tracing back the evolutionary path of sign language auxiliaries can be quite risky due to the scarcity of documentation of older forms of these languages,

internal reconstruction of the grammaticalization paths in sign languages, cross-checked with cross-linguistic tendencies of grammaticalization of auxiliaries in spoken languages provides us with some safe assumptions: grammaticalization follows more or less the same pathways irrespective of the visual-gestural modality of sign languages. At the same time, however, the development of sign language auxiliaries exhibits some unique characteristics, such as the possibility for a signed language agreement auxiliary to have a nominal, a pronominal, or even a gestural source of grammaticalization.

1. Introduction

Agreement between the verb and its arguments (i.e. subject and object or source and goal) in a sentence is one of the essential parts of the grammar in many languages. Most sign languages, like many spoken languages, possess inflectional mechanisms for the expression of verbal agreement (see chapter 7 for verb agreement). Auxiliaries, that is, free grammatical elements accompanying the main verb of the sentence, are not amongst the most usual means of expressing agreement in spoken languages (Steele 1978, 1981). Hence, the wide use of agreement auxiliaries in sign languages has become an issue of great interest (Steinbach/Pfau 2007).

As discussed in chapter 7, in sign languages, verbal agreement is realized by modification of path movement and/or hand orientation of the verb stem, thereby morphosyntactically marking subject and object (or source/agent and goal/patient) in a sentence. Agreement auxiliaries use the same means for expressing agreement as agreement verbs do. They are mainly used with plain verbs, which cannot inflect for agreement. Agreement auxiliaries are either semantically empty, or their lexical meaning is very weak (i.e. light verbs); they occupy similar syntactic positions as inflected verbs or (in the case of light-verb-like auxiliaries) seem to be part of a serial verb construction. Only in a few cases, they are able to inflect for aspect, but they commonly have reciprocal forms (Sapountzaki 2005; Quer 2006; Steinbach/Pfau 2007; de Quadros/Quer 2008). However, although sign languages have been considered unique as to their rich morphological agreement expressions, unbound agreement auxiliaries were until recently under-researched (Smith 1991; Fischer 1996).

The focus of this chapter is on the grammatical functions, as well as on the evolutionary processes which have shaped this set of free functional elements that are used as agreement auxiliaries in many genetically unrelated sign languages. It is not the main purpose of this study to give a detailed account of each and every auxiliary, although such information will be employed for outlining the theoretical issues related to sign language agreement auxiliaries. Specifically in the case of sign languages, the device of agreement auxiliaries is closely related to at least three other issues, which are discussed in depth in other chapters of this volume, namely morphological agreement inflection (see chapter 7), indexical pronouns (see chapter 11), and grammaticalization (see chapter 34 for further discussion). The present study builds on the information and assumptions provided in these three chapters and it attempts to highlight links between them so that the grammatical function and the historical development of agreement auxiliaries will become clearer.

This chapter is organized as follows: the form and function of agreement auxiliaries as well as general implications of their study for linguistic theories and the human

language faculty, form the main parts of this chapter. Section 2 gives a brief overview of the forms and functions of agreement auxiliaries, in order to familiarize the reader with these specific grammatical markers. Moreover, I discuss the restrictions on the use of agreement auxiliaries in sign languages. In section 3, I introduce various sign languages that make use of agreement auxiliaries. Section 4 examines one by one a set of grammatical properties of sign language auxiliaries and considers possible implications for our understanding of sign languages as a major group of languages. In section 5, I will compare auxiliaries in sign languages to their counterparts in spoken languages. The final section summarizes the main issues addressed in this chapter.

2. Form and function of agreement auxiliaries

In spoken languages, auxiliaries have many different functions, such as expressing tense, aspect, modality, and grammatical voice (*genus verbi*), amongst others. In addition, auxiliaries also express verbal agreement features in many spoken languages. However, the realization of agreement is usually not the main function of spoken language auxiliaries (but see the discussion of German *tun* ('do') in Steinbach and Pfau (2007)). The morphosyntactic expression of verb agreement was one of the first grammatical features of sign languages to be researched (Padden 1988). Some verbs in sign languages express agreement between subject and object (or between source and goal) on the morphosyntactic level by modifying path movement and/or hand orientation. These verbs sharing specific grammatical properties are called *agreement verbs*. By contrast, another set of verbs, the so-called *plain verbs*, does not share the property of morphosyntactic expression of agreement, and it is primarily with these verbs that agreement auxiliaries find use, as will be described below. Interestingly, the main function of agreement auxiliaries is the overt realization of verb agreement with plain verbs that cannot be modified to express agreement. Hence, agreement auxiliaries in sign languages differ from auxiliaries in spoken languages in that they are not used to express tense, aspect, modality, or *genus verbi*.

2.1. Functions of sign language agreement auxiliaries

Agreement auxiliaries in sign languages have a different function from their counterparts in spoken languages in that their most important function is to express agreement with the subject and the object of the sentence – see example (1a) below. All of the agreement auxiliaries that have been described in sign languages accompany main verbs, as is the norm in most spoken languages, too. As stated above, sign language agreement auxiliaries usually accompany plain verbs, that is, verbs that cannot inflect for agreement. In addition, agreement auxiliaries occasionally accompany uninflected agreement verbs. Moreover, agreement auxiliaries have been found to accompany inflected agreement verbs (see example (1b) from Indopakistani Sign Language (IPSL)) thereby giving rise to constructions involving split and/or double inflection (following Steinbach/Pfau 2007). This will be described in more detail in section 4 below. Besides

verbs, in many sign languages, agreement auxiliaries also accompany predicative adjectives such as PROUD in example (1c) from German Sign Language (DGS).

While a large proportion of the attested agreement auxiliaries are semantically empty, a subset of semi-grammaticalized auxiliaries such as GIVE-AUX in example (1d) from Greek Sign Language (GSL) still have traceable roots (in this case, the main verb *to give*) and still carry semantic load expressing causativity or transitivity. This results in agreement auxiliaries which select for the semantic properties of their arguments and put semantic restrictions on the possible environments they occur in. Moreover, since agreement verbs usually select animate arguments, most agreement auxiliaries also select [+animate] arguments. Example (1a) is from Massone and Curiel (2004), (1b) from Zeshan (2000), (1c) from Steinbach and Pfau (2007), and (1d) from Sapoun-tzaki (2005); auxiliaries are in bold face.

- (1) Agreement auxiliaries in different sign languages
- | | |
|---|--------|
| a. JOHN ₁ MARY ₂ LOVE 1AUX ₂ | [LSA] |
| ‘John loves Mary.’ | |
| b. leftAUX ₁ COMPLETE _{left} TEACH ₁ . | [IPSL] |
| ‘He taught me everything completely.’ | |
| c. IX ₁ POSS ₁ BROTHER IX _{3a} PROUD 1PAM _{3a} | [DGS] |
| ‘I am proud of my brother.’ | |
| d. IX ₂ 2GIVE-AUX ₃ BURDEN END! | [GSL] |
| ‘Stop being a trouble/nuisance to him/her!’ | |

As in spoken languages, the same forms of agreement auxiliaries may also have additional grammatical functions when used in different syntactic slots or in specific environments in sign languages. They may, for instance, also function as disambiguation markers, such as the Brazilian Sign Language (LSB) agreement auxiliary when used preverbally. The DGS auxiliary can also be used as a marker of emphasis, similar to the insertion of *do* in emphatic sentences in English, and the auxiliaries in Flemish Sign Language (VGT) and GSL are also markers of transitivity and causativity.

2.2. Forms and origins of agreement auxiliaries

Based on the origins of agreement auxiliaries, Steinbach and Pfau (2007) have proposed a three-way distinction in their study on the grammaticalization of agreement auxiliaries:

- (i) indexical auxiliaries, which derive from concatenated pronouns; see the IPSL example in Figure 10.1 (note that we cannot exclude the possibility that the indexical signs went through an intermediate evolutionary stage of path/motion or transfer markers of a verbal nature);
- (ii) non-indexical agreement auxiliaries and semi-auxiliaries which derive from main verbs such as GIVE, MEET, GO-TO; see the GSL example in Figure 10.2; and
- (iii) non-indexical agreement auxiliaries which derive from nouns like PERSON (see the DGS example in Figure 10.3 (the DGS auxiliary is glossed as PAM, which stands for *Person Agreement Marker* (Rathmann 2001)).



Fig. 10.1: Indexical auxiliary derived from pronoun: AUX_I (IPSL, Zeshan 2000). Copyright © 2000 by John Benjamins. Reprinted with permission.



Fig. 10.2: Non-indexical agreement auxiliary derived from verb; pictures show beginning and end point of movement: GIVE-AUX (GSL, Sapountzaki 2005)



Fig. 10.3: Non-indexical agreement auxiliary derived from noun; pictures show beginning and end point of movement: $_{3a}PAM_{3b}$ (DGS, Rathmann 2001). Copyright © 2001 by Christian Rathmann. Reprinted with permission.

Note that neither the first nor the third subgroup of auxiliaries is common in spoken languages since in spoken languages, auxiliaries are usually grammaticalized from verbs (i.e. subgroup (ii)). In contrast, grammaticalization of auxiliaries from nouns is rare, if it exists at all. The abundant occurrence of sign language auxiliaries that have developed from pronouns or from a paralinguistic means such as indexical gestures is also intriguing.

Actually, the latter development, from pointing sign via pronoun to subject/object-agreement auxiliary, is the most common one identified in the sign languages investi-

gated to date; it is attested in, for instance, GSL (Sapountzaki 2005), IPSL, Japanese Sign Language (NS) (Fischer 1992, 1996), and Taiwan Sign Language (TSL) (Smith 1989, 1990). Fischer (1993) mentions the existence of a similar agreement auxiliary in Nicaraguan Sign Language (ISN), glossed as *BABY-AUX1*, which evolved in communication amongst deaf children. Another similar marker resembling an indexical auxiliary has been reported in studies on the communication of deaf children who are not exposed to a natural sign language but either to artificial sign systems (Supalla 1991; in Fischer 1996) or no sign systems at all (Mylander/Goldin-Meadow 1991; in Fischer 1996). This set of grammaticalized indexical (pointing) auxiliaries belongs to the broader category of pronominal or determiner indexical signs, which, according to the above findings, have evolved – following universal tendencies of sign languages – from pointing gestures to a lexicalized pointing sign (Pfau/Steinbach 2006, 2011).

In contrast to indexical auxiliaries, the second set of agreement auxiliaries has verbal roots. The lexical meaning of these roots can still be traced. Such auxiliaries mostly function as semi-auxiliaries and have not spread their use to all environments. They are attested in TSL (Smith 1990), GSL (Sapountzaki 2005), VGT (Van Herreweghe/Vermeerbergen 2004), and Sign Language of the Netherlands (NGT) (Bos 1994). The third group consists at the moment of only two auxiliaries, attested in DGS and Catalan Sign Language (LSC). Both auxiliaries derive from the noun *PERSON* (see Figure 10.3). In the following section, I will analyze the individual characteristics of the auxiliaries of all three groups language by language.

3. Agreement auxiliaries in different sign languages – a cross-linguistic comparison

Agreement auxiliaries are part of the grammar of numerous sign languages, which will be described individually in alphabetical order in this section. Firstly, I describe the form and the syntactic properties of each auxiliary. Then I discuss the historical development of each auxiliary for all cases where there is evidence for a specific grammaticalization process. Finally, I turn to other issues that are essential for the function of each auxiliary (such as, for example, the use of non-manual features).

3.1. Comparative studies on agreement auxiliaries

Agreement auxiliaries are attested in a wide range of sign languages from around the world. These agreement auxiliaries can be found in historically unrelated sign languages, and appear at different stages in the evolutionary continuum. Agreement markers explicitly described as auxiliaries appear in descriptions of the following sign languages:

Argentine Sign Language (LSA)	Greek Sign Language (GSL)
Brazilian Sign Language (LSB)	Indopakistani Sign Language (IPSL)
Catalan Sign Language (LSC)	Japanese Sign Language (NS)
Danish Sign Language (DSL)	Sign Language of the Netherlands (NGT)

Flemish Sign Language (VGT)
German Sign Language (DGS)

Taiwan Sign Language (TSL)

Initially, work was done from a language-specific perspective, analyzing agreement markers or sets of markers within a specific sign language. Recently, comparative studies also appeared in the field of sign language linguistics, shedding light on the similarities and differences of agreement auxiliaries across sign languages. The first comparative studies of agreement markers in sign languages (Engberg-Pedersen 1993; Fischer 1996; Zeshan 2000; Rathmann 2001) used findings from TSL, IPSL, DGS, and NGT combined with evidence of agreement auxiliaries in NS (which is historically related to TSL and structurally similar). The first cross-linguistic generalizations concerning auxiliaries in sign languages were already drawn in these studies: these auxiliaries, initially referred to as ‘pointing signs’, were identified as functional elements and not as pronouns that realize a specific grammatical function and are directly linked to the main verb of the sentence. But already in these studies, it became apparent how different the uses, origins, and distribution of pronominal auxiliaries may be, even in structurally related languages such as TSL and NS. More recent comparative studies by Quer (2006) and de Quadros and Quer (2008) discuss the typological status of two indexical auxiliaries in LSC and LSB, both glossed as AUX-IX. Amongst other issues, these studies provide information on the syntax and inflection of agreement auxiliaries, as well as on the verbs they accompany and their distribution in various syntactic environments.

However, the broadest typological study on agreement auxiliaries in sign languages to date is the one by Steinbach and Pfau (2007), which is also one of the main sources for this chapter. These authors emphasize the grammaticalization processes underlying agreement auxiliaries. The grammaticalization of auxiliaries in spoken languages is compared to the grammaticalization of agreement auxiliaries in sign languages. The authors conclude that modality-independent as well as modality-specific cognitive processes and grammaticalization paths characterize overall the grammaticalization of agreement auxiliaries in sign languages; the peculiarity of indexical pronominal sources for agreement auxiliation in sign languages, for instance, is attributed to specific properties of the visual-gestural modality.

3.2. Argentine Sign Language

In their work on sign order in LSA, Massone (1994) and Massone and Curiel (2004) compare the articulatory nature of pronouns and of an indexical agreement auxiliary; they conclude that morphologically, pronoun copy differs from a transitive auxiliary AUX. The auxiliary almost always appears in sentence-final position (2a). However, when it is combined with an agreement verb, it may appear in a preverbal position (2b), and when it is used in interrogative clauses with an overt sentence-final interrogative pronoun, AUX precedes the *wh*-pronoun (2c). Its function is restricted to the expression of agreement, while its form indicates that it is grammaticalized from two concatenated pronouns. The auxiliary is produced with a “smooth hold followed by a curved movement between two different loci in the signing space, also ending with a smooth hold” (Massone 1993). By contrast, a pronoun copy still retains more specific

beginning and end points of each pronoun, thus being grammaticalized to a lesser extent.

- (2) Argentine Sign Language indexical auxiliary [LSA]
- a. BOB IX₁ SEND-LETTER ₃AUX₁
 ‘Bob sends me a letter.’
 - b. _{3a}AUX_{3b} SAY-YES
 ‘He says yes to her.’
 _____wh
 - c. IX₂ SAY₃ ₂AUX₃ WHAT
 ‘What did you tell him/her?’

3.3. Flemish Sign Language

In VGT, the agreement auxiliary glossed as GIVE (GEVEN in Dutch) is phonologically similar to the VGT main verb meaning ‘to give’ (Van Herreweghe/Vermeerbergen 2004). GIVE needs two animate arguments and it tends to appear in reversible sentences where subject/source and object/goal can occupy interchangeable syntactic slots (3a), as long as the movement path of the auxiliary is from subject/source to object/goal. It functions as a semi-auxiliary, marking subject/object-agreement as well as causativity, a semantic property which can be traced back to its lexical source *to give* (see (3) below). Its lexical source and the grammaticalization process are apparently still visible in its present form.

- (3) Flemish Sign Language semi-auxiliary GIVE [VGT]
- a. GIRL GIVE BOY HIT
 ‘The girl hits the boy.’
 - b. MAN GIVE DOG CARESS
 ‘The man is caressing the dog’.

3.4. German Sign Language

The person agreement marker in DGS has been analyzed in several studies. The first study on this marker is the one by Keller (1998), where it was glossed as AUF-IX because it used to be accompanied by a mouthing related to the German preposition *auf* (‘on’). Phonologically, the auxiliary is similar to the sign for PERSON. Rathmann (2001) glossed this auxiliary as PAM (Person Agreement Marker), a gloss that hints at its phonological form as well as its morphosyntactic function in DGS. In this study, PAM was described as a marker which mainly occupies a preverbal position (its postverbal position had not been discussed prior to this) and has the ability to inflect for singular, dual, and distributional plural. The postverbal use of PAM in (4a) is described in Steinbach and Pfau (2007), who argue that the syntactic distribution of PAM in DGS is subject to

dialectal variation. Rathmann (2001) was the first to describe this marker as an agreement auxiliary, which is used in association with verb arguments that refer to animate or human entities. PAM can inflect for number and person. Rathmann argues that the use of PAM with specific main verbs is subject to certain phonological constraints, that is, it is used primarily with plain verbs such as LIKE in (4a), but it also complies with semantic criteria, in that the use of PAM may force an episodic reading (4c). Besides plain verbs, PAM can also be used with adjectival predicates such as PROUD in (4b), which do not select source and goal arguments, that is, with predicates that do not involve the transition of an object from *a* to *b*. Rathmann claims that PAM, unlike most agreement verbs, does not express agreement with source and goal arguments but rather with subject and direct object. Interestingly, when used with uninflected backward verbs such as INVITE, PAM does not move from the position of the source to the position of the goal but from the position of the subject to the position of the object (cf. also Steinbach/Pfau 2007; Pfau et al. 2011; Steinbach 2011). Hence, PAM has developed into a transitivity marker which is not thematically (source/goal) but syntactically restricted (subject/object). Note finally that with plain verbs, PAM can also be used as a reciprocal marker (Pfau/Steinbach 2003). Examples (4a) and (4b) are from Steinbach and Pfau (2007, 322), (4c) is from Rathmann (2001).

- (4) German Sign Language auxiliary PAM [DGS]
- a. MOTHER IX_{3a} NEIGHBOR NEW IX_{3b} LIKE _{3a}PAM_{3b}
'My mother likes Mary.'
 - b. IX₁ POSS₁ BROTHER IX_{3a} PROUD ₁PAM_{3a}
'I am proud of my brother.'
 - c. SON₂ MOTHER₁ 5-YEARS ₁PAM₂ TEACH
'A mother has been teaching her son for 5 years.' (episodic reading)
??'A mother used to teach her son for 5 years.' (generic reading)

3.5. Greek Sign Language

GSL has two different agreement auxiliaries. Firstly, there is some evidence for an indexical agreement auxiliary IX-AUX, although it does not occur frequently in spontaneous data (Sapountzaki 2005). As in other sign languages where indexical auxiliaries are observed, the movement of the one-handed auxiliary starts with the finger pointing towards the subject locus and ends with the finger pointing towards the object locus, the movement being a smooth path from subject to object. In addition, IX-AUX appears in a reciprocal form meaning 'transmitting to each other': in fact, the GSL sign usually glossed as EACH-OTHER seems to be no more than the inflected, reciprocal form of IX-AUX. The reciprocal form can also appear with strong aspectual inflection (progressive or repetitive). It can be used with the verbs TELEPHONE, FAX, HELP, and COMMUNICATE-THROUGH-INTERPRETER. Interestingly, all of the verbs of transmission of information, which typically combine with the GSL IX-AUX, are by default agreement verbs in GSL, which does not support the argument that the evolution of an indexical agreement auxiliary covers an 'agreement gap' in grammar. A hypothesis is that this indexical

sign selects only verbs that semantically relate to ‘transmission of message’. However, there is not enough evidence to support this hypothesis further at this point.

Secondly, a non-indexical semi-auxiliary marking agreement is also used in GSL. It is glossed as GIVE-AUX. In terms of grammatical function, its role is to make an intransitive mental state verb, such as FEEL-SLEEPY, transitive and, in addition, to express the causation of this state. Occasionally, it may combine with atelic verbs of activity like SING, suggesting that the use of GIVE-AUX is expanding to atelic, body-anchored verbs, in addition to plain verbs of mental or emotional state, which typically are also body-anchored. It appears that the criteria for selecting the verbs that combine with GIVE-AUX are both semantic and structural in nature. Usually (but not always, for example see (5b) below) GIVE-AUX appears in structures including first person (non-first to first, or first to non-first). The auxiliary may inflect for aspect, but it is more common for the main verb to carry aspectual inflection, while the auxiliary only carries the agreement information (5d).

- (5) Greek Sign Language non-indexical auxiliary GIVE-AUX [GSL]
- a. DEAF IN-GROUP_{loc:c} SIGN-TOO-MUCH ₃GIVE-AUX₁ GET-OVERWHELMED
‘Deaf who are too talkative make me bored and overwhelmed.’
 - b. IX₂ ₂GIVE-AUX₃ BURDEN END!
‘Stop being a trouble / nuisance to him/her!’
 - c. IX₂ SIGN++ STATIVE ₂GIVE-AUX₁ GET-OVERWHELMED, END!
‘Stop signing the same things again and again, you are getting very tiresome to me!’
 - d. IX₁ SEA ALL-IN-FRONT-OF-ME SIT, WHAT? ₃GIVE-AUX₁ BE-CALM.
‘Sitting by the sea makes me calm.’

3.6. Indopakistani Sign Language

The IPSL agreement auxiliary, which is glossed as AUX (or IX in some earlier studies; e.g. Zeshan 2000) is similar to the indexical GSL auxiliary discussed in the previous section. The IPSL auxiliary has the phonological form of an indexical sign with a smooth movement between two or more locations, with the starting point at the locus linked to the source of the action and the end point(s) at the locus or loci linked to the goal(s) of the action. It is thus used to express spatial agreement with the source and goal arguments, as is illustrated in (6a) and (6b). Its sentence position varies, depending on whether the main verb it accompanies is a plain verb or an agreement verb. Generally, the auxiliary occupies the same syntactic slot as the indexical sign IX in its basic localizing function, that is, immediately before or after the (non-agreeing) verb. When used with plain verbs, the auxiliary immediately follows the predicate (6c). When accompanying an agreement verb, the auxiliary may precede and/or follow the main verb and thus may be used redundantly, yielding structures with double (6a) or even multiple markings of agreement (6b). It can also stand alone in an elliptical sentence (6d) where the main verb is known from the context. In this case, it is usually associated with communicative verbs (SAY, TELL, TALK, INFORM, amongst others). Finally, and similar to the GSL auxiliary IX-AUX, it can also express reciprocity. AUX is a verbal

functional element, which is semantically empty. In sum, it is a fully grammaticalized auxiliary verb that accompanies main verbs.

- (6) Indopakistani Sign Language indexical auxiliary [IPSL]
- a. $_{\text{left}}\text{AUX}_1$ ALL COMPLETE $_{\text{left}}\text{TEACH}_1$.
 ‘He taught me everything completely.’
- b. SIGN WORK $_1\text{AUX}_0$ $_0\text{AUX}_{3b}$ $_{3b}\text{AUX}_0$ $_0\text{AUX}_1$ $_1\text{AUX}_0$ $_0\text{BOTH}_{3b}$
 ‘I discuss the matter via an interpreter.’

 q
- c. UNDERSTAND $_2\text{AUX}_1$?
 ‘Do you understand me?’
- d. YASIN $_{\text{right}}\text{AUX}_1$ DEAF LITTLE END.
 ‘Yasin told me that there are few deaf people.’

3.7. Japanese Sign Language

Fischer (1996) provides evidence of an indexical auxiliary used in NS. Like AUX-1 in TSL, which will be discussed below, AUX-1 in NS seems to be a smoothed series of indexical pronouns (pronoun copy is a common phenomenon in NS, much more than in American Sign Language (ASL)). AUX-1 has phonologically assimilated the phonological borders of the individual pronouns, that is, their beginning and end points. Its sentence position is more fixed than that of pronouns. It does not co-occur with certain pronoun copy verbs and is not compatible with gender marking. All these verb-like properties show that AUX-1 in NS is a grammaticalized person agreement marker and that it functions as an agreement auxiliary, as illustrated in (7) (Fischer 1996, 107).

- (7) Japanese Sign Language indexical auxiliary [NS]
- CHILD $_{3a}$ TEACHER $_{3b}$ LIKE $_{3a}\text{AUX-1}_{3b}$
 ‘The child likes the teacher.’

3.8. Sign Language of the Netherlands

Inspired by studies on agreement auxiliaries in TSL, Bos (1994) and Slobin and Hoiting (2001) identified an agreement auxiliary in NGT, glossed as ACT-ON. The grammatical function of this auxiliary is to mark person agreement between first and second person or between first and third and vice versa; see example (8). ACT-ON accompanies verbs selecting arguments which are specified for the semantic feature [+human]. The position of ACT-ON in the sentence is not absolutely fixed, although in more than half of the examples analyzed, ACT-ON occupies a postverbal position. In elliptical sentences, it can also stand alone without the main verb. Historically, ACT-ON seems to be derived from the main verb GO-TO (Steinbach/Pfau 2007), but unlike GO-TO, ACT-ON is often accompanied by the mouthing /op/, which corresponds to the Dutch preposition *op*

(‘on’), although ACT-ON is not always used in contexts where the preposition *op* would be grammatically correct in spoken Dutch. In the Dutch equivalent of (8), for instance, the preposition *op* would not be used. As for the source, an alternative analysis would be that ACT-ON is an indexical auxiliary, that is, that it is derived from two concatenated pronouns, just like the auxiliaries previously discussed

- (8) Sign Language of the Netherlands auxiliary ACT-ON [NGT]
 IX₁ PARTNER IX_{3a} LOVE _{3a}ACT-ON₁
 ‘My boyfriend loves me.’

Bos (1994) found a few examples where both the main verb and ACT-ON agree, that is, instances of double agreement marking. Consequently, she argues that agreement verbs and agreement auxiliaries are not mutually exclusive. In other words, ACT-ON can combine with an already inflected agreement verb to form a grammatical sentence. Just like agreement verbs, ACT-ON marks subject and object agreement by a change in hand orientation and movement direction. However, unlike agreement verbs, it has no lexical meaning, and its function is purely grammatical, meaning ‘someone performs some action with respect to someone else’.

Remember that ACT-ON might have developed from either a spatial verb or pronouns. According to Bos, ACT-ON is distinct from NGT pronouns with respect to manner of movement (which is rapid and tense); also, unlike indexical auxiliaries derived from pronouns, ACT-ON does not begin with a pointing towards the subject. Although it cannot be decided with certainty whether ACT-ON is derived from two concatenated pronouns or from a verb, the latter option seems to be more plausible. This brings us back to the question of grammaticalization in the systems of sign languages. In both studies on ACT-ON, reference is made to the accompanying mouthing (a language contact phenomenon), suggesting that the sign retains some traces of its lexical origin. In other sign languages, such as DGS, the initial use of mouthing with the agreement auxiliary (PAM) has gradually decreased, so that the DGS auxiliary is currently used without mouthing (i.e. in a phonologically reduced form), thus being grammaticalized to a greater extent (Steinbach/Pfau 2007). Trude Schermer (p.c.) suggests that the NGT auxiliary is presently undergoing a similar change.

3.9. Taiwan Sign Language

Smith (1990, 1991) is the first detailed discussion of agreement auxiliaries in a sign language. He focuses on TSL and describes which properties the TSL auxiliaries share with other auxiliaries cross-modally (Steele 1978). The three TSL auxiliaries serving as subject/object-agreement markers are glossed as AUX-1, AUX-2, and AUX-11, based on their function (*auxiliary*) and their phonological form: (i) AUX-1 is indexical, using the handshape conventionally glossed as ‘1’ (✎); (ii) AUX-2 is identical to the TSL verb SEE, using the handshape glossed as ‘2’ (✎); and (iii) AUX-11 is phonologically identical to the two-handed TSL MEET, performed with two ‘1’ handshapes (glossed as ‘11’). The use of AUX-11 is illustrated in (9).

- (9) Taiwan Sign Language non-indexical auxiliary AUX-11 [TSL]
- top
- a. THAT VEGETABLE, INDEX₁ 1AUX-11₃ NOT-LIKE
'I don't like that dish.'
- b. _{3a}AUX-11_{3b}-[fem] TEACH_{3b}-[fem]
'He/she teaches her.'

TSL agreement auxiliaries differ from verbs in syntax: they most often appear in a fixed position before the main verb. They are closely attached to the main verb and mark person, number, and gender, but not tense, aspect, or modality. In (9b), gender is marked on the non-dominant hand by a -handshape (Smith 1990, 222). Usually, the auxiliaries co-occur with plain verbs or with unmarked forms of agreement verbs. In (9b), however, both the lexical verb and the auxiliary are marked for object agreement (and the auxiliary in addition for subject agreement). Historically, the auxiliaries have developed from different sources. As mentioned above, AUX-1 might result from a concatenation of pronouns, while AUX-2 and AUX-11 are phonetically identical to the TSL verbs SEE and MEET, respectively, and seem to derive from 'frozen' uninflected forms of these verbs. They all seem to have proceeded along a specific path of grammaticalization and have lost their initial lexical meanings, as is evident from the examples in (9).

3.10. Sign languages without agreement auxiliaries

So far, we have seen that a number of unrelated sign languages employ agreement auxiliaries to express verb agreement in various contexts. However, this does not necessarily mean that agreement auxiliaries are modality-specific obligatory functional elements that can be found in all sign languages. Actually, quite a few sign languages have no agreement auxiliaries at all. ASL, for example, does not have dedicated agreement auxiliaries (de Quadros/Lillo-Martin/Pichler 2004). Likewise, British Sign Language (BSL), like ASL, distinguishes between agreement verbs and plain verbs but has not developed a means to express agreement with plain verbs (Morgan/Woll/Barrière 2003). For ASL, it has been argued that non-manual markers such as eye-gaze are used to mark object agreement with plain verbs (cf. Neidle et al. 2000; Thompson/Emmorey/Kluender 2006). In the case of young sign languages, agreement as an inflectional category may not even exist, such as is the case in the Al-Sayyid Bedouin Sign Language (ABSL), used in the Bedouin community of Al-Sayyid in the Negev in Israel (Aronoff et al. 2004).

4. Properties of agreement auxiliaries in sign languages

4.1. Inflection carried by agreement auxiliaries

In sign languages, the grammatical expression of agreement between the verb and two of its arguments is restricted to a specific group of verbs, the so-called agreement verbs.

In some sign languages, agreement auxiliaries take up this role when accompanying plain verbs, which cannot inflect for subject/object-agreement. When PAM accompanies an agreement verb, the latter usually does not show overt agreement (Rathmann 2001). Equally clear-cut is the distribution of agreement auxiliaries in many sign languages. In LSB, the indexical agreement auxiliary does usually combine with plain verbs, but when the same (indexical) form accompanies an agreement verb, the auxiliary takes over the function of a subject/object-agreement marker and the agreement verb remains uninflected. Interestingly, in LSB, in these cases the sentential position of the marker is different (preverbal, instead of postverbal), possibly indicating a different grammatical function of the auxiliary. In some sign languages (e.g. DGS), double inflection of both the main verb and the agreement auxiliary is possible. Such cases are, however, considered redundant, that is, not essential for marking verb agreement. Possibly, double agreement serves an additional pragmatic function like emphasis in this case (Steinbach/Pfau 2007). However, there are exceptions to this tendency, as in some other sign languages, such as IPSL or LSC, agreement auxiliaries commonly accompany agreement verbs, either inflected or uninflected, without any additional pragmatic function (Quer 2006; de Quadros/Quer 2008). In contrast, in other sign languages, such as, for example, GSL and NS, examples of double agreement are reported to be ungrammatical (Fischer 1996).

A related issue is the semantics of the auxiliary itself, and the semantic properties of its arguments in the sentence. Most auxiliaries that evolved from indexical (pronominal) signs are highly grammaticalized, purely functional, and semantically empty elements. The movement from subject to object may go back to a gesture tracing the path of physical transfer of a concrete or abstract entity from one point in the sign space to another. The grammaticalized agreement auxiliary expresses the metaphorical transfer from the first syntactic argument to the second one. Although in sign languages transfer from a point *x* to a point *y* in topographic sign space is commonly realized by means of classifiers, which carry semantic information about the means of or the instrument involved in this transfer (see chapter 8 for discussion), the movement of a semantically empty indexical handshape can be seen as the result of a desemanticization process in the area of the grammatical use of the sign space. While in some sign languages, agreement auxiliaries are fully functional elements that may combine with a large set of verbs, in other sign languages, agreement auxiliaries cannot accompany main verbs of all semantic groups. Take, for example, the GSL IX-AUX that only accompanies verbs expressing transmission of a metaphorical entity, like SEND-FAX or TELEPHONE (Sapountzaki 2005). In NGT, TSL, and LSB, agreement auxiliaries may combine with main verbs of any semantic group but require their arguments to be specified as [+human] or at least [+animate].

The ability of agreement auxiliaries to inflect for aspect, as well as their ability to inflect for person, also varies amongst sign languages. In sign languages, various types of aspectual inflection are usually expressed on the main verb by means of reduplication and holds (see chapter 9 for discussion). In auxiliary constructions, aspectual inflection is still usually realized on the main verb – in contrast to what is commonly found in spoken languages. In LSB, for instance, AUX-IX cannot inflect for aspect. The same holds for PAM in DGS. However, in a few sign languages, agreement auxiliaries can express aspectual features (e.g. GSL GIVE-AUX). Similarly, in some sign languages, agreement auxiliaries do not have a full person paradigm. GSL GIVE-AUX has a strong

preference to occur in first person constructions while in sentences with non-first person subject and object, IX-AUX is usually used. Thus, in GSL, the distribution of IX-AUX and GIVE-AUX seems to be complementary.

Finally note that some of the agreement auxiliaries, such as PAM in DGS, IX-AUX and GIVE-AUX in GSL, and AUX in IPSL, can also be used in reciprocal constructions. The reciprocal form of the agreement auxiliaries may either be two-handed – both hands moving simultaneously in opposite directions – or one-handed – in this case, the reciprocal function is expressed by a sequential backward movement.

4.2. Syntactic position

In syntax, agreement auxiliaries show a considerable amount of variation. The position of the DGS auxiliary PAM appears to be subject to dialectal variation as it may occupy either a preverbal (post-subject; Rathmann 2001) or a postverbal position (Steinbach/Pfau 2007). By contrast, LSA AUX and LSB AUX-IX usually occupy the sentence-final position. In GSL and TSL, indexical agreement auxiliaries are attested in two different positions, preverbal or sentence-final in GSL and sentence-initial or preverbal in TSL. Unlike in DGS, in GSL this variation is not dialectal. In some sign languages, the function of the agreement auxiliary may vary with the syntactic position. The LSB auxiliary can, for example, appear in a preverbal position but with a different grammatical function. In this position, it is used as a disambiguation marker. While the GSL indexical agreement auxiliary IX-AUX occupies the sentence-final or at least post-verbal position, GIVE-AUX appears immediately preverbal. The reason for this distribution may be articulatory: in most uses of GIVE-AUX, the end point of the movement is the signer (i.e. position '1'). Since the auxiliary only accompanies body-anchored signs, the order body-anchored main verb after agreement auxiliary seems to be more optimal. Other parameters may also play a role in determining the syntactic position of agreement auxiliaries. The indexical agreement auxiliary in IPSL, for instance, occupies the sentence-final position when the main verb is plain, while it has a more flexible distribution when the main verb is an agreeing verb.

Concerning syntactic structure, sign languages can be divided in two types: (i) sign languages which are specified as [+AUX] like the sign languages with agreement auxiliaries described in this chapter and (ii) [–AUX] languages, like ASL or BSL, which do not have agreement auxiliaries. According to Rathmann (2001), only [+AUX] languages project agreement phrases where the agreement auxiliary checks agreement features (note that Rathmann uses PAM as a general label for agreement auxiliaries and thus distinguishes between [$\pm$ PAM]).

4.3. Non-manual features

Mouthing – an assimilated cross-modal loan of (a part of) a spoken word (see chapter 35 for discussion) – is a phenomenon that not all of the studies on agreement auxiliaries address. In at least one case, that is, the NGT agreement auxiliary ACT-ON, mouthing of the Dutch preposition *op* is still fairly common (at least for some signers)

and can be considered as an integral part of the lexical form of the auxiliary. However, according to recent studies at the Dutch Sign Centre (*Nederlands Gebarencentrum*), use of mouthing is gradually fading. A similar process has previously been described for the DGS auxiliary PAM, which has lost its accompanying mouthing /aʊf/. This process can be considered as an instance of phonological reduction. Moreover, in DGS, the mouthing associated with an adjacent verb or adjective may spread over PAM, thus suggesting the development of PAM into a clitic-like functional element.

In GSL, the non-indexical auxiliary GIVE-AUX, unlike the phonologically similar main verb GIVE, is not accompanied by a mouthing. Besides its specific syntactic position, which is different from that of the main verb, it is now recognized as an agreement auxiliary because it is used without mouthing, a fact that further supports the hypothesis of ongoing grammaticalization of agreement auxiliaries.

Another interesting issue for theories of grammaticalization is the source of the mouthings accompanying ACT-ON and PAM in NGT and DGS respectively. The mouthing of the corresponding Dutch and German prepositions *op* and *auf* can either be analyzed as a cross-modal loan expression or as a Creole neologism taken from a language of a different (oral) modality into a sign language. In both languages, the prepositions are used with one-place predicates such as *wait* or *be proud* to mark objects (i.e. *Ich warte auf dich*, 'I am waiting for you'). Hence, the use of the agreement auxiliaries in NGT and DGS corresponds to some extent to the use of the prepositions in Dutch and German (i.e. IX WAIT PAM, 'I am waiting for you'). However, the use of the auxiliaries and the accompanying mouthings in NGT and DGS does not exactly match the use of the prepositions *op* and *auf* in Dutch and German (i.e. IX LAUGH PAM – *Ich lache über/*auf dich*, 'I laugh at you'). Moreover, although apparently both prepositions do not function as auxiliaries in Dutch and German, the semantics of a preposition meaning *on* nevertheless fits the semantic criteria for agreement auxiliary recruitment, that is, the motion and/or location schemas proposed by Heine (1993).

4.4. Degree of grammaticalization

As mentioned above, agreement auxiliaries have developed from three different sources: (i) pronouns, (ii) verbs, and (iii) nouns. Indexical agreement auxiliaries are generally grammaticalized to a high degree. An example of a fully grammaticalized agreement marker is the TSL auxiliary AUX-1, its NS and IPSL counterparts, and the LSB auxiliary AUX-IX, all of which have initially evolved from indexical signs. In their present stage, they are semantically empty function words – they are reported to have no meaning of their own and they only fulfill a grammatical function in combination with a main verb. They can accompany many different verbs in these sign languages, and their position can be predicted with some accuracy; in most cases, they immediately precede or follow the main verb. Still, we also find some cases of indexical agreement auxiliaries which are not fully grammaticalized: they do not inflect freely for person and they select only arguments which are specified for the semantic feature [+human]. Moreover, the IPSL agreement auxiliary exhibits selectional restrictions on the verbs it accompanies, as it is usually associated with communicative verbs meaning 'say', 'tell', 'talk', or 'inform' (Zeshan, p.c.).

Non-indexical agreement auxiliaries generally show a lower degree of grammaticalization. The GSL auxiliary GIVE-AUX has developed from the main verb GIVE. Although it is not yet fully grammaticalized, there is clear evidence for this grammaticalization path. Like the main verb, it requires a human recipient of an action; also, it inherited the source/goal argument structure of the main verb. However, GIVE-AUX does not inflect freely for agreement, it only combines with certain classes of verbs and its use is less systematic and less frequent than the use of the other auxiliary in GSL. Hence, it is not yet a fully grammaticalized agreement marker.

Although there is no historical relation between GSL and VGT, a very similar auxiliary is also found in VGT (see examples in (3) above). The VGT auxiliary GIVE acts as an agreement marker between actor and patient, both specified as [+animate]. Moreover, GIVE appears not to be fully grammaticalized, as it has, for example, selective restrictions on its two arguments. In both form and function it thus resembles the GSL auxiliary GIVE-AUX. GSL GIVE-AUX and VGT GIVE comply with the criteria on low grammaticalization proposed by Bybee (1994), Heine (1993), and Heine and Kuteva (2002): (i) selectivity of a marker with respect to the groups of verbs it combines with, (ii) low ability for inflection, and (iii) synchronic use with an identical lexical form. In addition, these markers still carry a significant amount of semantic content and, due to semantic restrictions, are not used as frequently as indexical auxiliaries in a sign language. Finally, these markers express more than only agreement in that they also convey causativity and change-of-state. This shows that the grammaticalization of these non-indexical agreement auxiliaries has not reached the end of grammaticalization continuum.

However, it is not the case that all non-indexical auxiliaries show a lesser degree of grammaticalization. In some sign languages, non-indexical agreement auxiliaries can also be fully grammaticalized, as is, for example, the case in TSL and DGS, where the non-indexical markers appear to be highly grammaticalized. Consequently, the grammaticalization patterns of non-indexical agreement auxiliaries vary from language to language, but overall they show a somewhat lower degree of grammaticalization than the indexical ones. This is evidenced by a narrower grammatical distribution: non-indexical auxiliaries may not have a full inflectional paradigm (GSL), may not combine with all semantic groups of arguments (GSL, LSB, VGT, and DGS), may express more than one grammatical function (VGT and GSL), and may show an overall higher semantic load and light-verb characteristics.

In the next section, the discussion of shared linguistic properties of agreement auxiliaries in sign languages is expanded to include auxiliaries in spoken languages.

5. Grammaticalization of auxiliaries across modalities

5.1. Grammaticalization of gestures: the notion of transfer

Universally, the main function of grammaticalization as a cognitive mechanism is the “exploitation of old means for novel functions” (Werner/Kaplan 1963, 403; cited in Heine/Traugott 1991, 150). Following this reasoning, one may argue that sign languages needed some grammatical means to express grammatical categories such as verb agree-

ment. However, this view does not provide us with sufficient answers to the question why grammaticalization occurs in all languages, and why grammaticalized elements often co-occur with other devices that express the same meaning (Heine/Claudi/Hühnemeyer 1997, 150; Heine/Traugott 1991). Borrowing of linguistic tokens might be an alternative means of incorporating elements that fulfill novel functions but, apparently, the driving forces of borrowing are not always adequate in practice cross-linguistically (Sutton-Spence 1990; cited in Sapountzaki 2005).

A major issue in the evolution of sign language auxiliaries is the fact that some of them are not simply grammaticalized from lexical items, but have evolved from a non-linguistic source, that is, gestures. Indeed, strictly following the terminology of spoken language linguistics, gestures cannot be considered as a lexical source that is the basis of grammaticalization. According to Steinbach and Pfau (2007), agreement in sign languages has a clear gestural basis (see also Wilcox (2002), Pfau/Steinbach (2006, 2011), and Pfau (2011) on the grammaticalization of manual and non-manual gestures). In sign languages, gestures can enter the linguistic system, either as lexical elements or as grammatical markers (also see chapter 34 on grammaticalization). Some of these lexicalized gestures such as the index sign INDEX can further develop into auxiliaries.

As mentioned at the beginning of this chapter, the most common assumption for (Indo-European) spoken languages is that auxiliaries derive from verbs (e.g. English *will*, *may*, *shall*, *do*). Irrespective of this apparent difference, however, there are common cognitive forces, such as the concept of transition from one place to another, which is a common source for grammaticalization in both modalities. Many spoken languages, some belonging to the Indo-European family and some not, use verbs such as 'go', 'come', or 'stay' as auxiliaries (Heine 1993; Heine/Kuteva 2002). Similarly, tracing a metaphorical path from the subject/agent to the object/goal, for example, is quite common in many sign languages. This is just another realization of the same concept of transition, although this spatial concept is realized in a modality-specific way in the sign space. Thus, the spatial concept of transition from *a* to *b* is grammatically realized by gestural means in sign languages, with the use of agreement verbs or agreement auxiliaries. In the case of most agreement verbs, the physical movement between specific points in space either represents transfer of a concrete object (such as in the case GIVE) or transfer of an abstract entity such as information (as in the case of verbs of communication, e.g. EXPLAIN). Finally, in the case of agreement auxiliaries this basic concept of transition may be even more abstract since agreement auxiliaries may denote transfer of virtually any relation from subject to object, that is, they denote transfer in a grammatical sense (Steinbach/Pfau 2007; cf. also Steinbach 2011).

5.2. Semantic emptiness and syntactic expansion

Two essential criteria for complete grammaticalization are the semantic emptiness of a grammaticalized item and its syntactic expansion. Applying these criteria to sign languages, the pointing handshape of indexical auxiliaries can be analyzed as a reduced two-dimensional index, which carries as little visual information as possible, in order to denote motion between two or more points in space. In accordance with the second criterion, that is, syntactic expansion, agreement auxiliaries again express grammar in a physically visible form in sign languages. 'Syntax' is a Greek word with the original

meaning of ‘grouping entities in an order’, and agreement auxiliaries in sign languages, when syntactically expanded, do visibly exactly this, that is, on the very physical level of articulation, they perform motor-visual links between points in the sign space in front of the signer’s body, a peculiarity unique to sign languages. In sign languages, syntactic expansion of the use of an agreement auxiliary is then realized as maximization of path tracings in the sign space, with minimal movement constraints. Moreover, indexical agreement auxiliaries in sign languages originate from reference points in space and are linked to the concept of transfer in real space. Overall, however, the use of indexical auxiliaries is functional to a higher degree than that of auxiliaries that originate from verbs or nouns in sign languages.

On the other hand, lexical origins still remain transparent in the respective non-indexical auxiliaries. Auxiliaries derived from verbs (such as GIVE, SEE, MEET) comply with universals of grammaticalization. But even in the case of PAM, which derives from the noun PERSON, the handshake and movement of the underlying noun provide an essential phonological and semantic basis for the grammaticalization of the agreement auxiliary (Rathmann/Mathur 2002; Steinbach/Pfau 2007).

Cross-linguistically, it is typical for verbs denoting transfer (such as *give* or *send*) to grammaticalize into markers of transitivity. Interestingly, typologically different languages like Mandarin Chinese (an isolating language) and GSL and VGT use auxiliaries drawn from a lexical verb meaning ‘give’ (Ziegeler 2000; Van Herreweghe/Vermeerbergen 2004; Sapountzaki 2004, 2005). Moreover, the use of a main verb meaning ‘go to’ as the source for the NGT auxiliary ACT-ON and the use of a verb meaning ‘meet’ as the source of TSL AUX-11 can be explained if we apply the Motion Schema proposed as a general (modality-independent) schema for the grammaticalization of auxiliaries (Heine 1993). By contrast, there is no direct equivalent in spoken languages that corresponds to the use of SEE as the source of the TSL auxiliary AUX-2. Steinbach and Pfau (2007) point out that the verb SEE could be included in the category of “a proposition involving mental process or utterance verbs such as ‘think’, ‘say’, etc.” (Heine 1993, 35). The following example from Tonga, a Bantu language of Zambia, illustrates the grammaticalization of an auxiliary from a mental state verb in spoken languages. In (10), the verb *yeeya* (‘to think’) has developed into an auxiliary marking future tense (Collins 1962; cited in Heine 1993, 35).

- (10) *Joni u-yeeya ku-fwa* [Tonga]
 John 3.SG-think INF-die
 ‘John is about to die.’ (or: ‘John will die.’)

It would not come as a surprise that in sign languages, whose users perceive language visually, verbs like *see* are linked to mental events in a more direct way than in spoken languages. Thus, SEE may be used in sign languages within the mental process event schema as an optimal source for the grammaticalization of auxiliaries. Moreover, the TSL verb SEE belongs to the group of agreement verbs and can therefore more readily grammaticalize into an agreement auxiliary. Note finally that in most sign languages, mental state verbs are usually body-anchored plain verbs, articulated on or close to the (fore)head. Consequently, typical mental process verbs such as THINK are not as available for carrying agreement as auxiliaries.

5.3. Frequency of occurrence as a criterion of grammaticalization

The issues of syntactic expansion and of use in different syntactic environments are linked to the issue of frequency of use of auxiliaries. One can hypothesize that agreement marking by free functional morphemes in sign languages may not be as developed as in the domains of aspect and modality. According to cross-linguistic evidence on auxiliaries, aspectual auxiliaries are the most frequent and thus the most developed auxiliaries, whereas agreement auxiliaries are the least frequent and thus the least developed ones – and also the ones with the lowest degree of grammaticalization in a wide sample of spoken languages examined by Steele (1981). The examples discussed in this chapter show, however, that agreement auxiliaries are used abundantly in sign languages and that in many different sign languages, agreement auxiliaries are already highly grammaticalized functional elements. The following table sums up the properties and distribution of agreement auxiliaries in the sign languages discussed in this chapter (this is an extended version of a table provided in Steinbach/Pfau 2007).

Tab. 10.1: Properties of agreement auxiliaries across sign languages

	N	source	aspectual marking	double agr?	reciprocal marking?	sentence position
LSA	1	pronouns	on verb	yes	??	sf ^a > prv
LSB	1	pronouns	on verb	no	??	sf > prv
LSC	2	pronouns	on verb	??	??	??
		noun PERSON	on verb	??	??	??
DGS	1	noun PERSON	on verb	yes	yes (1H)	sf ^a (prv)
VGT	1	verb GIVE	??	??	??	prv
GSL	2	pronouns	on verb	no	??	sf, prv
		verb GIVE	on aux	no	??	prv
IPSL	1	pronouns	on verb	yes	yes (2H)	sf ^a > si
NS	1	pronouns	on verb	no	??	sf > prv, si
NGT	1	verb GO-TO	on verb	yes	yes (1H)	sf ^a
TSL	3	pronouns	on verb	yes	yes (2H)	prv, si
		verb SEE	on verb	yes	yes (2H)	prv, si
		verb MEET	on verb	yes	yes (2H)	prv, si

Abbreviations used in Tab. 10.1: si = sentence-initial, sf = sentence-final, prv = pre-verbal, > means “more frequent than”, 1H = one-handed, 2H = two-handed, “??” indicates that no information is available.

^a Some signs, such as wh-signs, manual negation, or aspectual markers may follow the auxiliary.

6. Conclusion

Many different sign languages across the world make use of agreement auxiliaries. These auxiliaries share many properties in terms of their phonological form, syntactic

distribution, lexical sources, and indirect gestural origins. However, some degree of variation between agreement auxiliaries in different sign languages is also attested, as would be expected in any sample of unrelated, natural languages. Based on these findings, future research with a wider cross-linguistic scope might deepen our understanding of common properties of auxiliaries in sign languages in particular (thereby including wider samples of still unresearched sign languages), as well as of similarities and differences between sign and spoken languages in general, thus shedding more light on the cognitive forces of grammaticalization and auxiliation in sign and spoken languages.

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11. Pronouns

1. Pronouns in spoken languages and sign languages
2. Personal pronouns
3. Proforms
4. Conclusion
5. Literature

Abstract

The term ‘pronoun’ has been used with spoken languages to refer not only to personal pronouns – i.e. those grammatical items that ‘stand for’ nouns or noun phrases – but also to ‘proforms’, including words such as demonstratives, indefinites, interrogative pronouns, relative pronouns, etc. In sign languages, pronominal systems have been identified at least as far back as the mid-1970s (e.g., Friedman 1975 for American Sign Language). Since then, the term ‘pronoun’ has been widely used to refer to signs in various sign languages which have the function of personal pronouns – that is, deictic/pointing signs which refer to signer, addressee, and non-addressed participants. As with spoken languages, the term has also been extended to refer to proforms such as indefinites, interrogatives, and relative pronouns. This chapter describes personal pronouns and proforms in sign languages, their relationships (or possible relationships) to each other, and how these relationships compare to pronouns/proforms in spoken languages.

1. Pronouns in spoken languages and sign languages

The traditional definition of a pronoun is that it ‘stands for’ or ‘takes the place of’ a noun (or more specifically, noun phrase) (Bhat 2004). However, the term ‘pronoun’