

## Chapter 11

# Pointing out possession and existence in Adamorobe Sign Language

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### ADAMOROBE SIGN LANGUAGE

Adamorobe Sign Language (AdaSL) is used in a small village in Ghana of about 1400 inhabitants where a high incidence of hereditary deafness has persisted over many generations. Both deaf and hearing villagers use AdaSL, which is entirely unrelated to Ghanaian Sign Language (GSL), the ASL-based national sign language of Ghana. Compared to the sign languages studied to date, AdaSL has a number of distinctive features that set it apart structurally. These include the absence of entity classifier handshapes in verbs of motion, an unusual system for the expression of size and shape, and idiosyncratic iconicity phenomena, in particular the types of spatial projections allowed (Nyst 2007). The relatively large number of hearing AdaSL signers seems to have caused some of these atypical, language-specific features.

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## 1. Introduction

This chapter explores the expression of existence and possession in Adamorobe Sign Language (AdaSL). After presenting the village of Adamorobe in section 2, and the methodology in section 3, structures expressing existence are presented in section 4. In section 5, the extended structures expressing possession are presented. In section 6, the results are discussed. A remarkable feature of the expression of possession is the lack of a possession marker and the dependence on juxtaposition. However, this juxtaposition in itself is polysemous and the interpretation of the possessive structures appears to be context-dependent to a considerable extent.

## 2. Adamorobe

### 2.1 The village

Adamorobe, a small village in Ghana, has an unusually high incidence of deafness. Of a total population of about 1400, more than 30 persons are deaf<sup>1</sup>. This represents 2% of the village population. This figure is very high, compared to the estimated 0.4% incidence of deafness for Africa in general (WHO/CBM 1998). Locally, several explanations are found for the high prevalence of deafness in the village: first, the cause of deafness is seen as related to drinking water from the stream between Adamorobe and the town of Aburi. Other historical explanations concern war times. For example, during the war at Katamanso in 1826, Adamorobe warriors used a special concoction that made them fierce in battle, but which, when they returned, appeared to have left them deaf. Another explanation talks about how Adamorobe was short of warriors during wartime: the deaf god Adamorobe Kiti called animals from the bush and turned them into anthropomorphic soldiers who looked like humans but could not speak. Finally, the deafness is sometimes ascribed to a tall and hard-working deaf man, who, according to the former chief Nana Kwaakwa Asiampong II, lived among the settlers of the village around the end of the 18<sup>th</sup> century (Frishberg 1987). This last explanation comes closest to scientific explanation, which attributes the deafness in Adamorobe to the mutation of the connexin 26 gene. This mutation must have arisen at least sixty generations ago (Brobbly et al. 1998). Both local and scientific sources thus indicate the considerable longitudinal presence of deafness in the village, possibly present for as long as 1,000 years. The rate of deafness has declined significantly in recent times, with a decrease from 10% in 1971 to around 2% today (David et al. 1971; Amedofu et al. 1997). However, in past decades, the actual number of deaf people has remained more or less stable at about 35.

<sup>1</sup>In this chapter, I follow the convention of using a capital D to refer to deafness as a cultural identity label. As the presence of a Deaf cultural identity can be debated in Adamorobe, I will refer to the deaf people in Adamorobe as *deaf* (Nyst 2007).

## 2.2 Languages in Adamorobe

A local signed language has evolved in Adamorobe, which Frishberg (1987) named ‘Adamorobe Sign Language’ or AdaSL. Locally, the language is called *mumu kasa*, literally ‘deaf language’. It is the primary means of communication for adult deaf inhabitants. Though most hearing villagers communicate relatively easily with deaf people, proficiency in the signed language depends on the degree of contact and ties with the deaf inhabitants. Since deafness appears to have a long history in Adamorobe, it is not unreasonable to assume that AdaSL has a history of about two centuries. Thus, AdaSL is certainly not a young language. The language is used by all deaf villagers (except one deaf immigrant who continues to use Ghanaian Sign Language) and by some of the hearing villagers in their communication with the deaf villagers. AdaSL is historically unrelated to Ghanaian Sign Language (GSL), which is used in Ghana’s schools for the Deaf. GSL is in fact related to ASL. It is the ‘offspring’ of ASL-based Signed English introduced with deaf education in Ghana in 1957 by the legendary Deaf missionary, Andrew Foster, who is considered to be Africa’s Gallaudet (Oteng 1988, GNAD n.d.). Most deaf people in Adamorobe know some GSL and AdaSL contains a number of GSL loan signs. Adamorobe’s deaf children attend the boarding school for the deaf in Mampong-Akuapim where Ghanaian Sign Language is used, and as a consequence, GSL seems to be their primary language. The increasing use of GSL constitutes a serious threat to the future of AdaSL. Deaf pupils are taught to read and write in English, this being the official language in Ghana. Virtually all deaf adults are illiterate in Adamorobe.

Akuapim Twi, a dialect of Akan (belonging to the Kwa group of languages, itself a branch of the Niger-Congo languages), is the primary spoken language of the community, although most hearing adults also know the neighbouring language Gã (Gã-Adangme, Kwa, Niger-Congo).

A community with a similar high incidence of deafness was found on the island of Martha’s Vineyard (Groce 1985), although its signed language had disappeared before it could be described. Nowadays, the signed languages of similar communities, scattered around the globe, are starting to be studied: Kata Kolok in Bali (Marsaja 2003; Perniss and Zeshan, this volume), Providence Island Sign Language (Washabaugh 1986) and Al-Sayyid Bedouin Sign Language in Israel (Kisch 2000, Sandler et al. 2005).

## 3. Methodology

This study is based on data collected in a larger project aiming at a descriptive analysis of AdaSL (Nyst 2007). The data for this project were collected during three periods of fieldwork totalling ten months between January 2000 and May 2004. A total of roughly 40 hours of signing material was collected on digital video tapes, featuring most of the adult deaf signers as well as some deaf children of Adamorobe. The data consist of spontaneous, mostly monologue signing of personal narratives,

mythical stories, and bible stories as well as a number of church services in GSL simultaneously interpreted into AdaSL, in addition to cartoon retellings. The data used for this study consist of spontaneous texts in the forms of bible stories, personal narratives, and direct observations.

The following transcription conventions are used. Glosses of signs are printed in capital letters, e.g. ADAMOROBÉ. Akan words are rendered in italics. English translations are given between single quotes. Where information from the linguistic or situational context is needed for an accurate interpretation, this information is added to the translation between brackets, e.g. '(The child) refuses'. Mouthings and mouth gestures are represented between square brackets and superimposed on the gloss they coexist with, wherein the underlining indicates the spread of the mouth activity. Descriptions of gestured or mimed forms in a signed utterance are rendered in normal font.

Relatively few expressions of existence and possession were found in the data. In part, this is due to the way the data were collected, as no stimulus material was used that specifically aims at generating existential or possessive expressions. This observation is supported by the fact that one signer rendered several relevant expressions in a single fragment on the composition of his family. However, to some extent the scarceness of such constructions seems to be related to the high degree of underspecification and context dependency attested in the few expressions found in the data.

#### 4. Expressions of existence

Three structures expressing existence were identified in the data. Signs for an entity whose existence is asserted may be followed by a pointing sign with the optional mouthing [wɔ] (§4.1), a quantifier (§4.2), or the sign NOT-THERE with an optional mouth gesture in the case of negated existence (§4.3). Finally, a plain lexical sign may also express existence (§4.4).

##### 4.1 Juxtaposition of a noun and an index

A sign for an entity, followed by a pointing (index) sign directed towards the location of the entity, expresses the location of that entity. This pointing sign is sometimes accompanied by the mouthing [wɔ], which is based on the spoken Akan in (1) (Boadi 1971).<sup>2</sup>

- (1)     ɔ-wɔ hɔ  
           3SG LOC:be there  
           ‘S/he is there.’

<sup>2</sup> The verb wɔ in Akan in this phrase can have a locative interpretation or an existential interpretation. The same wɔ can be used in possessive constructions as well, when preceded by a possessor and followed by a possessum.

In the data, several of such locative constructions are found with an interpretation that tends towards existence rather location. The example in (2) was produced during a session where lexical items were collected. The signer comments that the sign NORTHERNER (referring to a person from the Northern part of Ghana or from other parts of the Sahel) has already been recording, signing that the sign is already in the camera.

- \_\_\_\_\_ [wɔ]
- (2) NORTHERNER IX:camera  
 ‘(The sign) NORTHERNER has already been recorded’, lit.  
 ‘NORTHERNER is in there’

In (3), the signer is in my house at the outskirts of the village. He tells me about the composition of his family and explains that a number of relatives have died. He states that only he and his two brothers are now alive. In this example, it is hard to distinguish between the meanings of ‘being at a location’, ‘living at a location’, ‘being alive’ and ‘existing’.

- \_\_\_\_\_ [wɔ]
- (3) IX<sub>1</sub> DEAF ONE HEARING TWO IX<sub>1</sub> HEARING TWO IX:village  
 ‘I am the only deaf person and they are two hearing people. They are there/they live in the village.’

The same broad range of meanings is expressed in (4). In examples (4) and (5) below, the mouthing is [wɔ] is absent. No patterns with respect to the distribution of this mouthing have been discerned so far.

- (4) WOMAN THREE IX:accra<sup>3</sup>  
 ‘(These) three women are there/live in Accra.’
- (5) WATER IX:mountain  
 ‘There is water on the mountain there.’

The pointing sign may also be directed towards the ground in front of the signer, as in (6). This example refers to the same situation as described in (3) of the signer and his two brothers being the only three children alive at that time. Whereas the pointing signs in the preceding signs are absolute pointing, pointing towards a location at which referents are (perceived as being) actually located. In (6), the pointing sign not only refers to the two brothers in the village, but also the signer himself, who is in a different place at the moment of signing. An explanation for the non-absolute pointing displayed in (6) may thus be due to the impossibility of referencing three persons in different positions with a simplex (non-composed) absolute pointing sign. Thus, the example in (6) may illustrate a simplex pointing sign to a default location as an alternative to a sign pointing at more than one absolute location. Alternatively, the downward, non-absolute pointing may have a semantic motivation, rather than a

<sup>3</sup> This sign is an absolute pointing sign directed towards Accra, the capital of Ghana.

formal one. The pointing at the ground in front of the signer may emphasise a ‘being alive’ interpretation of the pointing sign, rather than a locative interpretation.

- (6) THREE  $\overline{\text{IX}}_{\text{down}}$  [wɔ̃]  
 ‘Three are alive now.’ / ‘We are three now.’

The latter explanation is supported by example (7), where the downward point clearly means ‘being alive’. In this example, PERSON refers to the grandmother of the signer and MAN to his grandfather, as can be understood from the preceding discourse.

- (7) PERSON SEE  $\text{IX}_{\text{down}}$  MAN DEAD SEE  $\text{IX}_{\text{down}}$  SEE ALL SEE  
 ‘I have seen my grandmother alive and my grandfather who is dead;  
 I saw him alive (as well); I have seen all of them.’

#### 4.2 Juxtaposition of a noun and a quantifier

If the sign for the existing entity is modified by a quantifier, then there is no need for the overt marking of existence by means of a pointing sign. This is illustrated in examples (8), (9) and (10) below. An entity sign modified by a quantifier seems to generate an existential interpretation. However, the presence of a quantifier does not exclude the possibility of having a pointing sign, as shown in (3) and (4) above.

- (8) CHICKEN WOMAN CHICKEN MAN ONE WOMAN ONE  
 SHEEP MAN ONE WOMAN TWO ALL TOWARD  
 ‘As for the chickens, there was one hen and one cock. As for the sheep, there was one ram and one ewe; of all (the animal species) there were two that went.’
- (9)  $\text{IX}_1$  DEAF ONE  
 ‘I am the only deaf person.’
- (10) ALL THREE  
 ‘All together we are three.’

### 4.3 Negative existence: NOT-THERE

Negative existence is expressed by the non-directional sign NOT-THERE, consisting of a lax 5-hand of which the palm is moved upwards with a twisting motion of the wrist.<sup>4</sup> The sign may be accompanied by a mouth gesture consisting of a tense lip trill, as in (11).

- (11) IX<sub>1</sub> MOTHER NO lip trill NOT-THERE  
 ‘My mother is not (alive). She is no longer here.’

### 4.4 Noun with non-manual marking

In example (12) below, existence of an entity is expressed only by the sign for the entity. The single manual sign is followed by a head nod, which is a more general boundary marker. Adding a head nod to a single sign indicates that this sign is the only sign in the phrase. The context for example (12) is the Bible story about Noah’s ark. The signer explains how all the animals were there, both male and female ones. In this context, the single signs in the phrase are interpreted as conveying existence.

- (12) nod CHICKEN.... nod SHEEP... nod FEMALE...  
 ‘There were chicken and sheep, female ones...’

To summarise, the following structures have existential interpretations: the sign for an entity followed by a point to the location of the existing entity, sometimes with the mouthing [wɔ]; the sign for an entity followed by a point down with the mouthing [wɔ]; the sign for an entity followed by NOT-THERE in the case of negative existence; and the sign for an entity by itself with appropriate non-manual prosody. In most cases, expressions of existence build on locative expressions. The meaning of ‘existence’ is one of several possible interpretations of a macro-functional locative constructions and it is often hard to distinguish between the interpretations of ‘being somewhere’, ‘living somewhere’, ‘being alive’ and ‘existing’.

## 5. Expressions of possession

AdaSL signs or constructions that exclusively express possession are rare; no manual or non-manual sign with a primarily possessive meaning was found in the data. Expressions with a possessive interpretation are found in AdaSL in the context of family relationships or the possession of goods. Such expressions, however, are

<sup>4</sup> Accompanied by a “question face”, the sign is a general WH-sign.



generally infrequent. The expression of possession in AdaSL depends to a large extent on macro-functional constructions with primarily non-possessive meanings. Possible exceptions to this general tendency are the few instances found of HAVE. However, this sign is probably a borrowing from Ghanaian Sign Language (GSL) and is accompanied by the mouthing [af].

- (1) IX<sub>1</sub> SEE<sub>2</sub> <sup>[af]</sup>HAVE NOT-THERE  
 ‘I can see you have nothing.’

Five types of possessive constructions are discussed here: juxtaposition of noun phrases (§5.1), implied possessors (§5.2), constructions using the sign NOT-THERE (§5.3), role shifts expressing possession of physical or mental states (§5.4) and lastly the localisation of signs to express possession (§5.5).

### 5.1 Juxtaposition of two noun phrases

The juxtaposition of two NPs generally leads to a possessive interpretation of the relation between them. Juxtaposition is found to express possession in terms of goods and in terms of kinship relations. Examples of juxtaposed full nouns were less frequent in the data than examples involving a pronoun; however, three examples of possessive juxtaposed full nouns are given in (13) and (14) below.

- (13) HEARING MONEY A-LOT-OF-MONEY | DEAF MONEY  
 SMALL  
 ‘Hearing (men) have a lot of money; deaf (men) have but little.’

- (14) HEARING MONEY LOT-OF-MONEY | IX<sub>1</sub> MARRY  
 ‘A hearing man who has a lot of money is the one I will marry.’

A possessive phrase consisting of a personal pronoun and noun only is more common in the data. Examples (15) to (16) below show juxtaposition of a full noun and a pronoun.

The fragment in (15) and (16) are taken from a bible story. Somebody sitting next to the signer was holding a picture bible, featuring an illustration of the story. During the narration, the signer refers to the persons depicted in the illustration by pointing at them.

- (15) SHEEP ALL SHEEP ALL IX:man-a(on picture) IX:man-b(on picture)  
WATER-YAM CASSAVA YAM COCO-YAM PINEAPPLE ALL  
IX:man-b  
'This man had many sheep, but this (other) man had many kinds of  
vegetables.'

- (16) IX:man-b WATER-YAM BIG PUT-ASIDE  
'This man had a very big water-yam (edible root), which he kept aside.'

The example in (17) is part of a personal narrative.

- (17) IX<sub>1</sub> holds-trousers ONE WRAPPER | CLOTHES NO  
'I had only one piece of clothing, which was a wrapper. I had no  
clothes on.'

In all examples so far, the possessor precedes the possessum, with the exception of the first possessor in (15).

In the data, only two examples of possessive question phrases were found. These are illustrated in (18) and (19). In both examples, the possessum precedes the possessor. The string of manual signs is accompanied by non-manual question marking. To establish whether word order in possessive questions is fixed in AdaSL, more examples are needed.

- \_\_\_\_\_y/n  
(18) MONEY IX<sub>2</sub>  
'Do you have money?'

- \_\_\_\_\_y/n  
(19) CASSAVA IX<sub>2</sub>  
'Do you have cassava?'

## 5.2 Implied possessors

A considerable number of possessive phrases with implied possessors appeared in the data, as in examples (20) to (21) below. The example in (20) is drawn from a narration of the bible story about Moses in the basket. The examples in (21) and (22) are from personal narratives.

- (20) IX:baby BABY ONE  
'This is the only baby I have.'

- (21) WOMAN HEARING  
'My mother was hearing.'

- (22) WOMAN OLD-PERSON ALL DEAF ALL BEG CHIEF IX:palace  
 BEG IX<sub>1</sub> WITHDRAW-HAND GO-LEFT  
 ‘My grandmother and all the deaf people begged the chief to  
 release me.’

The above examples all involve kinship relations with the first person or ego as the possessor. Two factors may be motivating the absence of overt marking of the possessor in the above examples; the inalienability of the possessum or the fact that ego is the prototypical possessor (Seiler 1983; Lehmann 1998). In (23) below, the possessum is not a family member, but a person’s clothes, which in some spoken languages are treated as inalienable possessums.<sup>5</sup> The possessor is a third person. The fragment below is taken from a narration of the bible story of the good Samaritan. The person who is beaten up is the possessor of the clothes. His identity has been established in the preceding context, but no explicit reference is made in the utterance in (23).

- (23) BEAT^REP CLOTHES GRAB ALL GRAB MOVE FROM  
 ‘They beat him up, grabbed his clothes and ran off.’

### 5.3 NOT-THERE expressing (lack of) possession

The sign NOT-THERE was particularly frequent in instances of negated possession. In all such cases, the possessor remains implicit, as in (24) to (26).

- (24) STRENGTH lip trill NOT-THERE<sub>x</sub>  
 ‘That (bike) has no power/ is not strong.’
- (25) SEE CLOTHES^NOT-THERE SEE MOVE HIDE  
 ‘They saw they had no clothes on and quickly hid themselves.’
- (26) BREAST NOT-THERE  
 ‘I did not have breasts (yet).’

In (27) below, no possessum is mentioned in conjunction with NOT-THERE, asserting the absence of possession.

- (27) IX<sub>1</sub> NOT-THERE  
 ‘I have nothing.’

<sup>5</sup> Examples of a spoken languages that treat one’s clothes as inalienable are Q’eqchi’-Maya, spoken in Guatemala (Kockelman 2007) and some Melanesian languages (Lévy-Bruhl 1914).

#### 5.4 Possession of physical and mental conditions: the use of role shift

The examples discussed thus far have concerned possessive relations of kinship and goods, including animals, which are expressed by sequential structures. In contrast, possession of characteristics can be articulated both by sequential structures and by simultaneous structures, using role shift and non-manual features. In spoken languages, physical and personal characteristics or states of being may be expressed by possessive constructions, e.g. ‘I have a headache’ or ‘He has long hair’ (cf. Heine 1997).

In AdaSL, physical and mental conditions are expressed by reference projections on the body of the signer. This strategy is also known as role shift. In role shifts, referents, typically animates, are projected on the signer. During a role shift, any reference to the signer refers to the being projected onto the body of the signer. Role shifts facilitate the expression of physical or mental conditions through iconicity: the signer may display some of the physical features prototypically associated with the relevant condition.

To describe physical or other characteristics of an entity in AdaSL, descriptive signs may be located on the body, or expressed by a non-manual sign, i.e. a facial expression and/or a body posture. An example of the first strategy is found in (28) below, where a supernatural being is described as having a particular pattern of lines on the face. In this utterance, the sign MAN is produced. It may be interpreted as identifying the referent that is projected on the signer, and hence the ultimate possessor of the particular appearance. Alternatively, the sign MAN may merely serve as a further attribute, indicating that looking like a male is part of the appearance of the being projected on the signer.

(28) LINES-ON-CHEEK MAN DOT QUALITY LINES-ON-FACE  
 LINES-ON- CHEEKS IX: pink-wall LINES-ON-FACE BLACK  
 LINES-ON-FACE DIRTY

‘It’s a man with lines all over his face, a dirty spot on his forehead, pink lines along his mouth, and black lines on his forehead; it is a nasty sight.’

In other cases, the descriptive sign is non-manual, as in (29). In this example, there is no manual sign indicating the ‘possessor’ of the headache and stomach-ache. Yet, the expression of suffering on the face of the signer while signing HEAD<sup>^</sup>PAIN PAIN-IN-BELLY ILL indicates that the physical states mentioned are associated with the referent projected onto the signer.

- suffering face
- (29) GREET HEAD^PAIN PAIN-IN-BELLY ILL  
 ‘You greet everyone and then (you say), “My head aches and my belly is not well; I am ill”.’

In short, reference projection on the signer, also known as role shift, is an effective strategy in AdaSL, but probably in other sign languages as well, to express physical and mental conditions that are expressed by possessive constructions in other languages.

### 5.5 Localisation expressing possession

Another strategy to express possessive relations in AdaSL is localisation. In (30), in which a signer explains that he and his daughter have the same name sign, the name sign is spatially modified and performed once at the locus associated with the daughter and once closer to the body of the signer. This spatial modification of a sign, though repeated several times both with the present name sign and an older variant, was not found anywhere else in the data and thus does not seem to be a frequently used strategy.

- (30) IX<sub>1</sub> K(name sign)<sub>up</sub> K(name sign)<sub>1</sub> K(name sign) SAME  
 ‘Her name is K, and my name is K; we have the same (name).’

## 6. Discussion

### 6.1 Existence and possession

With the exception of the borrowed HAVE, no markers are found that exclusively or primarily marking exist or possession. Expression of these concepts depends mainly on juxtaposition. The most frequent structure expressing existence found in the data were juxtapositions of a noun sign and an indexical sign or a noun sign and a quantifier sign. However, a noun sign alone with non-manual marking was also found to express existence. The most frequent structure found to express possession in the data is juxtaposition of two noun phrases. However, several instances of possessed nouns lacking an overtly expressed possessor were found as well.

The above is summarised in (31), where NP stands for noun phrase, Q for a quantifier sign, IX<sub>LOC</sub> for an indexical sign with a locative interpretation, and V for a verbal sign or a sign denoting an action or state.

- |      |            |                              |
|------|------------|------------------------------|
| (31) | Existence  | NP IX <sub>LOC</sub><br>NP Q |
|      | Possession | NP NP<br>NP V                |

When additional signs, e.g. a quantifier or a locative index, follow the juxtaposed noun phrases, it becomes hard to distinguish attributive from predicative possession.

## 6.2 Predicative and attributive possession

The possessive examples discussed so far seem to be straightforward examples of full or pronominal noun phrases with a possessive predicate. When a locative noun phrase follows two juxtaposed noun phrases, it becomes hard to tell what the structure of the utterance is. Is the relation between the possessor and the possessum noun phrases predicative or attributive? Consider the example in (32).

In (32), the signer talks about his two daughters, using the PERSON sign. The height of the sign may be modified to show the height of a person on a vertical line next to the signer. An articulation of this sign low on this vertical line has lexicalised to mean CHILD. In the context of (32), a higher and a lower articulation of the CHILD/PERSON sign is used to refer to the older and the younger daughter.

\_\_\_\_\_nod

(32) IX<sub>1</sub> PERSON:short

A: 'I have a younger daughter.'

B: 'There is my younger daughter.'

The reading under A suggests a possessive predicate, whereas the reading under B suggests an existential predicate. The same ambiguity is found in examples (33) and (34), where locative signs follow two juxtaposed noun phrases.

\_\_\_\_\_ [wɔ]

(33) IX<sub>1</sub> SIBLING IX:accra

A: 'I have relatives in Accra.'

B: 'My relatives are there/live in Accra'

In example (34), the possessor follows the possessum. This is an unusual order in possessive constructions in the data.

\_\_\_\_\_ [wɔ]

(34) SAME/SIBLING IX<sub>1</sub> THREE IX:accra

'Three of my relatives are there in Accra.' / 'I have three relatives in Accra.'

The ambiguity between an attributive and a predicative reading of the examples above is unusual cross-linguistically according to Heine (1997:27), who states that

“predicative and attributive possession usually involve entirely different construction types”.

A more drastic ambiguity arises when we look at other examples of the type NPNP QUANTIFIER, as in (35). The relation expressed in the above examples (32) to (34) is possessive, as well as in example (35) below. The relation between the juxtaposed noun phrases in (36), structurally similar to the examples of possessive juxtaposition, should be interpreted as equative-existential, and not possessive.

(35) IX<sub>1</sub> holds-trousers ONE WRAPPER | CLOTHES NO  
 ‘I had only one piece of clothing, which was a wrapper. I had no clothes on.’

(36) IX<sub>1</sub> DEAF ONE  
 ‘I am the only deaf person.’

Similarly, two signs referring to two entities in juxtaposition can be interpreted as expressing a possessive relation or an equative relation, as in (37) and (38) respectively.

(37) IX<sub>1</sub> PERSON:short  $\frac{\text{nod}}{\text{---}}$  IX<sub>1</sub> ILL  $\frac{\text{nod}}{\text{---}}$   
 ‘I was a child and I was ill.’

(38) IX<sub>1</sub> PERSON:short  $\frac{\text{nod}}{\text{-----}}$   
 ‘And I have a younger child.’ / ‘And then there is the younger one.’

The same ambiguity is found in the juxtaposition of a sign referring to an entity followed by the sign NOT-THERE, as illustrated by (39) and (40).

(39) IX<sub>1</sub> NOT-THERE  
 ‘I have nothing.’

(40) AMA NOT-THERE  
 ‘Ama isn’t there/ is not around.’

The relation expressed by juxtaposition thus seems to be polysemous in principle. The correct, specific interpretation of the relation depends on context and the semantic features of the noun phrases involved in the juxtaposition. In this respect, AdaSL resembles Riau Indonesian as described by Gil (2005), who claims that the relation between juxtaposed elements depends solely on what is contextually and logically appropriate. He refers to these juxtaposed structures as macrofunctional. At this point, expressions of possession and -to a lesser extent- of existence appear

to be macrofunctional in AdaSL. However, more data are needed to solidify this analysis. The macrofunctionality of syntactic constructions in AdaSL is an interesting topic for further research.

## 7. Summary and conclusion

In the preceding sections, the structures found to express existence and possession in AdaSL were described.

Four types of structures are found to express existence. A noun phrase followed by an index to a location or by a quantifier is the most common way to express existence in the data. In one case, noun signs were followed by a head nod to express existence. Negated existence is expressed by a noun phrase followed by the sign NOT-THERE.

Five types of structures were found to express possession in the data. The structure most frequently found in the data is the juxtaposition of two noun phrases. Often, at least one of the noun phrases consists of a pronominal index. Negated possession or the possession of nothing can be expressed by a noun phrase followed by the sign NOT-THERE. Signs denoting a possessum can on their own express possession without the possessor being overtly marked. Role shift involving manual and/or non-manual signs can be used to express a physical or mental state. Only one case was found of the spatial modification of a sign to distinguish two different possessors.

Possessive expressions may be ambiguous with respect to attribution and predication. Moreover, juxtaposed noun phrases may generate not only a possessive reading, but also an equative or even existential reading. More research is needed to establish whether more types of relations can be expressed by mere juxtaposition of two noun phrases. It would be very interesting to see to what extent the syntax of AdaSL is characterised by macro-functionality, in a way similar to Gil's (2005) analysis of Riau Indonesian.

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