Chapter 10
Expression of motion

In this chapter the focus of analysis is on the expression of motion in YSL and other sign languages. It is well known that sign languages may represent these expressions through spatial modifications. The aim of this chapter is to see how motion is expressed in YSL and whether it differs from other sign language descriptions.

This chapter is structured as follows. Before proceeding to classifier types and their distributional characteristics in sign languages, I will say a few words about spoken language classifiers in section 10.1. Section 10.2 provides a basic description of sign language constructions usually referred to as classifiers, which have been identified in all DCSLs analyzed so far\textsuperscript{120}. The next section presents the most frequent and unmarked way of expressing motion in YSL, i.e. by the use of the so-called “directionals” (Nyst, 2007). This is followed by a section on the use of classifier constructions in the YSL data. Section 10.3.2.1 reveals that YSL signers do not employ entity classifier predicates for expression of path motion. It will be shown that the signs resembling such predicates may be used to express the manner of motion. Section 10.3.2.2 examines the use of handling classifiers in the available YSL data and finds that the set of these constructions is very small and their occurrence in the dataset is relatively infrequent. Overall, this chapter identifies surprising similarities between YSL and other shared sign languages such as AdaSL (due to the lack of classifiers) and KK (due to the use of directionals) in expressing motion. Section 10.4 contains a short summary of the findings presented in this chapter.

10.1. Classifiers in spoken languages

Phenomena that are subsumed under the label ‘classifier’ have been identified in many spoken languages (Aikhenvald, 2000; Senft, 2000). The \textit{numeral classifier} is the most frequent and the best described type of classifiers found in the world’s languages. The languages in Asia and Oceania are renowned for their extensive use of numeral classifier constructions (Craig, 1994; Allan, 1977). For illustration, consider the example of a numeral classifier from Mandarin Chinese in (1):
The free morphemes 车liàng and 支zhī in (1) are obligatory numeral classifiers in Mandarin Chinese. The classifier in (1) is used for all vehicles types with wheels and the classifier in (1) is used for all rodlike and bar-shaped longish thin objects such as tree branches, lipstick or incense sticks in numeral and quantified noun phrases. They classify the objects according to their salient semantic properties.

Typological studies show that spoken languages display a broad range of different classifier types including numeral, noun, possessive, locative, deictic and verbal classifiers (Aikhenvald, 2000). In contrast to many classifier types occurring within the NP, verbal classifiers are expressed in a verb, classifying a noun - which is always an argument of the verb: the non-subject of a transitive verb or the subject of an intransitive verb (Aikhenvald, 2000, p. 149). It is important to note that the verbal classifier does not classify the verb itself. Comparable to other types of classifiers, their use does not seem to be obligatory. Semantically verbal classifiers resemble numeral classifiers, since they categorize their referent in terms of its shape, size, structure, consistency, position and/or animacy. Verbal classifiers have so far been found in languages of the Americas, Papua New Guinea and Australia and come in three different types: 1) classificatory verbs, 2) classifying verbal affixes and 3) incorporated verbal classifiers (Grinevald, 2000; see Aikhenvald, 2000, p. 150 for slightly different terminology). The first subtype can be exemplified by Chiricahua Apache in (2); the second one by Waris, a Papuan language in (3) and the third type of verbal classifiers that originate from noun incorporation is presented in (4).

(2) hà- n-əʔ h
out of-2SUBJ.IMPF.handle.a.round.object:IMPF.MOMENTANEOUS
‘you take a round object (out of enclosed space)’

(Hoijer 1945 in Aikhenvald, 2000, p. 154)
10.2. Classifiers in sign languages

Influenced by the extensive research of classifiers in spoken languages (Allan, 1977), many researchers drew parallels between these spoken language constructions (shown in (2)–(4)) and sign language morphemes, expressed by a particular handshape construction denoting a non-specific referent, known today as ‘classifiers’ in sign language literature (Supalla, 1982, 1986; Schick, 1990; Zwitserlood, 2003, 2012). These handshape constructions may represent various entities according to their perceptible characteristics such as its shape, size, structure, consistency, position and/or animacy. Sign language classifiers best lend themselves to a comparison with only two subtypes of verbal classifiers in spoken languages, namely subtypes 2 and 3 described above: the classifying verbal affixes and the incorporated verbal classifiers (Sandler & Lillo-Martin, 2006; Zwitserlood, 2003). Similar to sign language classifiers, classifying verbal affixes (see example in (3)) are bound classifying morphemes adjacent to verbs and cannot occur separately.

Despite the abundant attention sign language classifiers have received, the literature is still in disagreement with regard to their function and terminology. It seems almost impossible to escape the terminological issue in the research on classifiers in sign languages. This study uses the established term ‘classifier’ without losing sight of the “unique characteristics” of sign language classifiers in comparison with spoken language classifiers (Schembri, 2003). The term ‘classifier’ is thus reserved here for a sign language morpheme in a particular context (usually within a verb of motion, location and existence) expressed by a particular handshape, which denotes non-specific referent. The assumption is pursued...
that sign language classifiers represent a linguistic system “that bears certain significant similarities” to classifier systems in spoken languages (Sandler & Lillo-Martin, 2006, p. 76). Using the terminology of the spoken language does not in fact claim that these forms must be identical. Rather, as Aronoff, Meir, Padden, & Sandler (2003, p. 64) put it, “using the same label for these morphemes in spoken and signed language – justified on definitional grounds – has the advantage of encouraging comparison among the various classifier systems”.

The lack of consensus in sign language literature also exists in the categorization of classifiers. There is a variety of proposals to account for different classifier types, their functions and structure of classifiers. This paper adheres to the current view that most sign languages analyzed so far have verbal classifiers including two main subtypes, viz. entity and handling classifiers (Zwitserlood, 2003, 2012). These classifiers occur in classifier predicates, i.e. in verbs expressing motion, existence or/and location of a referent in space. Additionally, Size and Shape Specifiers (henceforth: SASSes), which are sometimes counted to the domain of classifiers (Supalla, 1986), will rather be treated here as “modifiers” due to their different morphosyntactic properties discussed in this section below (Zwitserlood, 2003; 2012; Glück, 2005).

10.2.1. Entity classifiers

The first subtype of verbal classifiers, entity classifiers, refers to general semantic classes. One major semantic class is, for example, ‘animacy’ with two subcategories: ‘human’ and ‘animal’. Both handshapes are exemplified by an ASL example in Figure 84.

In Figure 84, the handshape is used to refer to a human being and the handshape denotes some legged creature. Entity classifiers are morphemes that indicate a particular semantic class, such as human beings, animals or vehicles, expressed by a particular handshape (cf. Figure 84).

Beyond their classifying function, entity classifiers appear to have an anaphoric function (Zwitserlood, 2003). A similar argument has been made for verbal classifiers in spoken languages. With regard to the usage of entity classifiers, it is important to point out, that they appear on intransitive verbs of motion, location and existence and function as referent-tracking devices. That means they constantly keep track of the movement and location of the referent in the discourse. Thus, they are systematically connected to the theme argument of the verb. Take, for example, Figure 85 into consideration.
Expression of motion

Figure 84. ASL constructions using entity classifiers

‘Person is moving ahead, pulling a recalcitrant dog zigzagging behind’

Figure 85. HKSL constructions using entity classifiers

The signer located a tree on his left and a moving car on his right side. Before that, he has introduced a tree in the discourse by signing TREE. After presenting the referent, its entity classifier can be used to represent the referent and to locate it. A similar technique was used with ‘a car’. It is signed before its classifier and is used to show the movement of the referent. This referent-tracking function is comparable to the function of verbal classifiers in spoken languages (Aikhenvald, 2000).

Sign languages differ in the choice of a handshapes for an entity classifier. Compare, for instance, the \( \overline{\uparrow} \) handshape used for animate entities in...
Classifiers in sign languages

ASL, DGS, Auslan and IPSL (Zeshan, 2003a, p. 115) with the \( \mathcal{A} \) shape for animate entities in HKSL, Taiwan and Thai sign language (Tumtavitikul, Niwatapant, & Dill, 2009; Chang, Su, & Tai, 2005). In DGS and ISL the \( \mathcal{B} \) handshape is used to denote vehicles, while KK uses this handshape to refer to large animals such as buffaloes (Zwitserlood, 2012). ASL makes use of the \( \mathcal{B} \) handshape and HKSL of the \( \mathcal{A} \) to denote vehicles (see Figure 85). These constructions give a direct representation of the object and are thus always restricted to the presentation of an entity as a whole. They do not necessarily represent the actual shape of the referent and do not look like their referents. An exception might be the \( \mathcal{A} \) handshape on a vertical forearm denoting a tree as illustrated by a HKSL example in Figure 85, where one recognizes the shape as an outline of a conventional tree.

Sign languages have been reported to vary with regard to the inventories and the degree of consistent use of classifier constructions. NGT, for example, exhibits 16 different frequently occurring entity classifiers (Zwitserlood, 2003), IUR appears to distinguish between 4 (Schuit, Baker, & Pfau, 2011), IPSL seems to have only 2 entity classifiers (Zeshan, 2000) and in AdaSL entity classifiers are reported to be virtually absent (Nyst, 2007). Studies show that even if sign languages have similar number of entity classifiers, the distribution of their use might vary substantially in different constructions (Perniss & Özyürek, 2008).

10.2.2. Handling classifiers

The second type of verbal classifiers, handling classifiers, represents the shape of the hand handling, manipulating or gripping the referent, rather than directly representing the entity itself (also called instrumental hand classifiers (Supalla, 1986). Examples of handling classifiers are shown in an ISL example in Figure 86.

The handling classifiers in Figure 86 include handshapes \( \mathcal{M} \) and \( \mathcal{C} \), which represent hands holding various objects, a book and a cup. These handshapes represent the manipulation of (a part of) an entity and are also attached to verbs as shown in (5).

\[
\text{(5)} \quad \text{BOOK IX}_3 \text{a IX}_3 \text{a} \text{CL-flat-object}\text{-GIVE} \quad \text{[ISL]}
\]

\text{‘He gave me a book’}

(Meir & Sandler, 2008, p. 108)
In (5) the classifier refers to the way the object (in this case the book) is held and moved by a person as shown in Figure 86.

By contrasting the two types of verbal classifiers, the properties of handling classifiers and the necessity for distinguishing them from entity classifiers become clear. In contrast to an entity classifier, which refers to the whole object, a handling classifier indicates the configuration of the hand as it uses the object. The focus is laid here on the action of manipulating the object in an event. The manipulation of the object does not necessarily have to be accomplished by the hand; it could also be the foot, as when kicking something (Supalla, 1986, p. 196). Zwitserlood (2003) also calls handling classifiers an indirect representation of an entity, whereas entity classifiers are the direct representations of it. Additionally, there is morphosyntactic evidence for the separation of the two subtypes of verbal classifiers. The two classifier types play different syntactic roles in sign languages, i.e. whereas entity classifiers occur on intransitive verbs, handling classifiers appear on transitive verbs only (Zwitserlood, 2003). Cross-linguistically, handling classifiers seem to be more similar in form than entity classifiers (Zwitserlood, 2012).

The last two sections have shown that verbal classifiers in sign languages fall into the two subtypes: entity, occurring on intransitive verbs, and handling classifiers, occurring on transitive verbs. Their distribution, usage and their meaning have been briefly discussed. A view at the cross-modal comparison reveals a great dissimilarity between signed and spoken languages. Whereas various classifier systems have been reported for spoken languages, namely numeral, noun, possessive, verbal, locative and deictic classifiers, sign language classifiers are generally taken to be verbal in nature (Zwitserlood, 2003, 2012; Benedicto & Brentari, 2004; Glück & Pfau, 1998; Glück, 2005).
10.3. Expression of motion in YSL

10.3.1. YSL Directionals

YSL signers prefer expressing direction of motion by directionals and not by classifier constructions, as has been observed in other sign languages. Two frequent directionals (DIR-COME-HERE and DIR-GO-THERE) were identified in the YSL data. The form of the two directionals is very similar. Both forms are usually signed with a lax \(\text{\textcircled{B}}\) (Bopen) or \(\text{\textcircled{5}}\) handshapes. The difference is in the beginning and end point of the sign’s movement indicating the source and goal location of the motion event.

Figure 87 presents the initial and final position of the directional DIR-COME-HERE. The movement of the sign is directed towards the goal, i.e. the signer’s body. The direction of the sign is normally motivated by the location of a person or an entity. Example (6) shows the use of this directional.

Figure 87. The initial and final position of DIR-COME-HERE

(6) GAPU DIR-COME-HERE [YSL]
water come-here
‘The tide is coming’

Figure 88 shows the initial and final position of the directional DIR-GO-THERE. This sign is used with all discourse participants and is not limited to the first person. The sign is always formed in a similar way, i.e. the movement is away from the body on a straight axis in front of the signer’s body.
The directionals may also be produced on the diagonal axis being spatially modified with respect to the goal location of the movement as shown in example (7) depicted in Figure 89. In this narrative, the signer is explaining that her husband has gone to the beach to gather some shells, and because there are too many rocks on the beach, she is not going to join him.

(7) DHARRWA GUNDA IX₃ᵃ DARRA YAKA DIR-GO-THERE₃ᵃ [YSL]
many stone there 1SG NEG go-over-there
‘There are too many rocks on the beach, I am not going there’.
In (7) the orientation and direction of the DIR-GO-THERE is motivated by the geographic goal location, i.e. the beach. The directional is interpreted as ‘go from here to the beach’. The directionals do not always occur spatially modified with respect to the geographic goal locations in the YSL data (see section 9.3.1.1 for the analysis of spatial modification in YSL non-plain verbs). In cases where the directionals are not directed towards geographic locations, they can be interpreted as ‘move’, ‘leave’ or ‘come’. Similar use of directionals has also been reported for other sign languages, such as AdaSL (Nyst, 2007) and KK (De Vos, 2012). Nyst identified five directionals in AdaSL data: FROM, TOWARDS, PATH, ENTER and ABRUPT (Nyst, 2007, p. 173). The two YSL directionals seem to be identical in form to their AdaSL equivalents, i.e. FROM and TOWARDS. De Vos (2012, p. 178) also finds two instances of exophoric general directionals in KK data: COME-HERE-FROM-A and GO-FROM-HERE-TO-B.

Interestingly, YSL directionals follow the up is far rule already described for the pronominal pointing signs in section 8.4.6. Consider Figure 90 showing the DIR-GO-THERE sign directed upward. The figure captures the sign DIR-GO-THERE in example (8), which is interpreted as ‘go far way’. In this narrative, the signer is describing the final scene of the story “Frog, where are you?”, in which the boy leaves with the dog and the frog.

![Figure 90. Elevated end point of a directional sign](Sequence07_G_D_frog story.mpg)

(8) **WUDGAN YOTHU WADGANY KARKMAN** DIR-GO-THERE
dog child one frog go-there
‘The dog, the child and one of the frogs go away’.

Sequence07_G_D_frog story.mpg
In the YSL directional signs as well as in pointing signs (also discussed in 8.4.6), the height of the extended arm depends on the proximity of the goal location. If the locus or the referent is close to the signer, the angle of the arm from the body is smaller. Conversely, the angle of the arm is larger if the locus or the referent is far away. Additionally to the elevation of the sign, a distal location is indicated by the fast movement of the verb and the fully extended arm in the final position of the sign.

The DIR-GO-THERE was also found to occur in combination with other verbs. As shown in (9), it may be combined with the verb MARRTJI expressing manner of locomotion to indicate the directional motion.

\[ \text{marrtji} \quad \text{dir-go-there} \quad \text{miyalk} \quad \text{dir-go-there} \]

\[ \text{walk} \quad \text{go-there} \quad \text{woman} \quad \text{go-there} \]

‘The woman is going away’.

Sequence08_13JUL_E2_2010.mpg

The sequences of a manner verb and a directional have also been reported for AdaSL (Nyst, 2007) and KK (De Vos, 2012). Moreover, De Vos (2012, p. 180) also finds a similar strategy of mapping the height-to-distance in KK directional signs.

10.3.2. YSL Classifiers

Constructions known as classifiers have been shown to be present in almost all sign languages investigated to the present day (see Zwitserlood, 2012 for an overview). Exceptions are sign languages, such as AdaSL, which has been reported to lack entity classifiers in verbs of motion and location (Nyst, 2007). Also in ABSL, no occurrences of classifier predicates have been identified so far (Sandler et al., forthcoming). Section 10.2 of this book has shown that a clear distinction between the two types of verbal classifiers, viz. entity and handling classifiers, is generally made in the sign language literature. Entity classifiers provide information on the inherent properties of an entity, such as animacy or shape, and occur in verbs of movement, existence or location. Handling classifiers denote the way in which an entity is handled.

The following sections focus on verbs indicating a referent’s motion, existence, location as well as the manipulation of a referent, in order to see whether YSL signers use classifier predicates expressing motion and location of referents in space as it has been reported for many other sign languages in the literature (Schick, 1990; Collings-Ahlgren, 1990; Supalla, 1986; Glück...
Expression of motion in YSL

197

& Pfau, 1998; Z witserlood, 2003; Zeshan, 2003a; Schembri, 2003; Aronoff, Meir, Padden, & Sandler, 2003). The data to be analyzed in the following sections are taken from the spontaneous monologs, dialogs and stimulus-based elicited signing (see section 4.2 for the information about stimulus material). The stimulus material deployed in this study for elicitation of classifier verb constructions has already been successfully used in the foregoing studies and elicited a great number of entity and handling classifier constructions in NGT, ASL or HKSL (Zwitserlood, 2003; Eccarius & Brentari, 2007).

In the available YSL data, only a handful of constructions have been found to be reminiscent of entity and handling classifiers described for other sign languages. In the following sections, I describe these constructions and consider their function, usage and distribution in YSL.

10.3.2.1. Entity classifiers in YSL

As has been already described in 10.2.1, entity classifier constructions are typically understood as complex intransitive predicates expressing motion and location of a referent. An often-cited ASL example is the (Index) handshape attached to the verb of motion representing an upright human being moving from A to B. Such classifier constructions were reported in sign languages to simultaneously express a particular entity (in this example a human being) in motion or location by the handshape, the path and the direction of motion or the location of an entity by the movement, and the type or manner of motion (walking in a slow manner) by an additional movement such as wiggling (see Zwitserlood, 2012 for an overview).

The collected YSL data reveal three handshapes as depicted in Figure 91 that superficially resemble entity classifier constructions in other signed languages such as ASL. They will be tentatively glossed as classifiers in the following examples. The first handshape in Figure 91a may refer to legged entities. The second and the third handshapes (see Figure 91bc) appear to denote one object only, namely a didgeridoo and a boat respectively.

Figure 91. Three YSL handshapes
10.3.2.1.1. The $\text{\textdegree}$ handshape

In the YSL dataset, five occurrences of the $\text{\textdegree}$ (V) handshape (Figure 91a) were found which appeared to refer to human beings, and one to a turtle (see examples below). In all six cases, the $\text{\textdegree}$ handshape occurred on a verb of motion, which is glossed here as MOVE.

(10) **DARRA**

1SG

‘I go to bed’.

\[\text{\textdegree}\text{legged entity}-\text{MOVE} \quad \text{SLEEP} \quad [\text{YSL}]\]

\[\text{\textdegree}\text{legged entity}-\text{walk} \quad \text{sleep}\]

Sequence12_G_sentences_2009.mpg

(11) **MIYAPUNU**

turtle

‘The turtle walks slowly’.

\[\text{\textdegree}\text{legged entity}-\text{MOVE} \quad \text{BUNHA} \quad [\text{YSL}]\]

\[\text{\textdegree}\text{legged entity}-\text{walk} \quad \text{slowly}\]

Sequence12_G_sentences_2009.mpg

The usage of the $\text{\textdegree}$\text{legged entity} attached to the verb of motion in (10) denotes that the referent is walking and not going by car. Similar function of the $\text{\textdegree}$\text{legged entity} is observed in example (12). In this conversation, the signer is asking where they are walking.

In all examples, the usage of the $\text{\textdegree}$ handshape attached to the verb differs remarkably from what is known about classifier constructions in other sign languages such as ASL. In the YSL data, the $\text{\textdegree}$ classifier construction does not incorporate particular locations in space expressing sources or goals, nor does it express the path motion of a referent. The $\text{\textdegree}$\text{legged entity} construction solely indicates the manner of locomotion (i.e. go by foot).
However, to express the meaning ‘to walk’ a lexical verb MARRTJI is found to be used in the YSL data more frequently than the CL_{legged entity} construction as in (10)–(12). It is a whole body sign as depicted in Figure 92, in which the arms of the signer represent the arms of someone walking. The signer’s legs may also be moving if the signer is standing.

![Image of a signer demonstrating the MARRTJI sign]

Figure 92. YSL verb MARRTJI ‘to walk’
The verb MARRTJI regularly occurs in the YSL corpus and has a wide range of motion related interpretations ‘walking’, ‘going’, ‘moving’, ‘jogging’, or even ‘chasing’ as shown in example in (13). Interestingly, the sign MARRTJI is very similar to the AdaSL verb MOVE, which also has a wide range of movement-like meanings such as ‘to flee’, ‘to escape’ and more commonly ‘to run’ (Nyst, 2007, p. 184)\textsuperscript{127}.

\begin{verbatim}
(13) WARRAKAN MARRTJI YOTHU [YSL]  
    bird walk child  

‘The bird was chasing the child’.
\end{verbatim}

It is not yet clear from the available YSL data, why in some cases the whole body sign MARRTJI and in other cases, the entity classifier is used to express the manner of motion. It is yet evident that the verb MARRTJI is preferred by the YSL signers over a combination of entity classifier attached to the verb of motion to express the meaning ‘to walk’.

\subsection*{10.3.2.1.2. The \textsuperscript{B} handshape}

Another example bearing resemblance to an entity classifier in other sign languages is the \textsuperscript{B} (B) handshape attached to the verb of motion, which occurred twice in the data designating a boat. Consider example (14).

In example (14), the signer is talking about his plan to go out fishing on a boat. The last still image in the second row features the verb CL\textsubscript{boat}-MOVE with the \textsuperscript{B} handshape, which expresses a boat in motion. Prior to using this construction, the referent, i.e. the boat, is first introduced into discourse (see the third still image from left in the first row). The difference between the two forms seems to be in movement. While the lexical sign BOAT is articulated with a quick, short movement in front of the signer, CL\textsubscript{boat}-MOVE (cf. the last image in the second row) is signed in a much larger signing space with the arm slightly extended from the body expressed by a slow and distinct movement.

As already noticed in the previous section, the construction CL\textsubscript{boat}-MOVE expresses only the manner of motion (i.e. \textit{go by boat}). The path of motion stays unexpressed and the direction of motion is defined by the index signs in example (14).

There is also some variation found in the data with regard to the handshape used. One signer used the \textsuperscript{B} handshape, the second signer used the \textsuperscript{Bopen} (Bopen) handshape as shown in Figure 93.
Expression of motion in YSL  201

(14)  DALL.INCL
      DU.INCL

MARRTJI  BOAT  IX$_{3a}$
 walk        boat     over-there

GUYA-HANTID  IX$_{3a}$  CL$_{boat\text{-move}}$
 to-fish     over-there  CL$_{boat\text{-move}}$

‘We will be going on the boat over there (to the south of the island) to catch some fish’.

Sequence6_13JUL_E_M_2010.mpg

Figure 93. YSL handshape resembling an entity classifier
10.3.2.1.3. The Ⓙ handshape

Section 10.3.2.1.1 showed that the Ⓙ handshape (Figure 91a) may refer to two entities, human beings and turtles (as presented in the YSL examples (10)–(11)). A third construction reminiscent of an entity classifier is the Ⓐ (Index) handshape combined with the verb of location, which was used to refer to one entity only, i.e. a didgeridoo.

In example (15), the signer describes an elicitation image displaying many didgeridoos standing upright (see Figure 103 in Appendix II). \( \text{CL}_{\text{didgeridoo}} \) consist of the Ⓙ handshape that indicates the shape of a didgeridoo, viz. a long and thin object. The construction seems to be used very similar to what has been described for other sign languages (see example (15)). First, a referent is introduced into the discourse, which is a didgeridoo in this case. Afterwards, the \( \text{CL}_{\text{didgeridoo}} \) is combined with the verb of location DHÄRLA ‘to stand’ to indicate the referents were standing in rather unordered manner.

(15) \( \text{YIDAKI} \) didgeridoo
\( \text{CL}_{\text{didgeridoo}} - \text{DHÄRLA} +++++ \) [YSL]
\( \text{CL}_{\text{didgeridoo}} - \text{stand} \)
‘There are many didgeridoos standing vertically’.

While this elicitation picture was shown to all participants, only one occurrence of \( \text{CL}_{\text{didgeridoo}} - \text{DHÄRLA} \) was attested in the collected YSL data as illustrated in (15). Thus, against all expectations, entity classifier constructions were surprisingly infrequent in the overall YSL dataset. Furthermore, no simultaneous constructions involving entity classifiers were found in the available YSL data.
All three YSL constructions resembling entity classifiers in other signed languages (Supalla, 1986; Glück & Pfau, 1998; Zwitserlood, 2003; Zeshan, 2003a) differ remarkably from previous descriptions of entity classifiers, for they are only used to express the manner of motion. YSL does not employ classifier predicates for expression of the path or the direction of motion. For expression of directional motion, directionals (cf. Figure 94) are habitually used in YSL, as already discussed in 10.3.1.

It is noteworthy that no combinations of the entity classifier constructions and directionals were attested. The combination of the verb marrtji ‘to walk’ (cf. Figure 92) and a directional (cf. Figure 94) were however relatively frequent in the collected YSL data (see section 10.3.1 for examples).

Cross-linguistic research on the size of classifier inventories is rather scarce. The studies available on this issue show that most DCSLs possess a large set of entity classifiers. Zwitserlood (2003), for example, describes 16 different entity classifiers in NGT. The stimulus material used for identifying classifiers in YSL previously elicited a large set of entity classifier handshapes in other sign languages (Zwitserlood, 2003; Eccarius & Brentari, 2007). Yet, only three handshapes combined with verbs were found to resemble entity classifiers in the YSL data (see examples (10)–(15)). Overall, the YSL data reveal that these constructions are extremely scarce in number and occur sporadically in the data: only nine single instances in almost 4,000 signed YSL tokens.

Section 10.2.1 of this book explained that entity classifiers in sign languages refer to general semantic classes. Major semantic classes are, for example, humans, animals or vehicles. In DGS, the h handshape is used to refer to a class of human beings, the l handshape denotes a class of legged
creatures and the \( \text{handshape} \) refers to a class of vehicles. Entity classifiers are thus morphemes indicating a particular semantic class expressed by a particular handshape. However, two out of three YSL handshapes described above refer not to a class of referents, but to a single referent, i.e. a didgeridoo and a boat.

Notably, the three YSL handshapes resembling entity classifiers are never used to express the path and the direction of motion as has been reported for classifier constructions in DCSLs. Rather, they were always used to express the manner of movement. Thus, the \( \text{handshape} \) and the verb of motion expressed the manner of motion, i.e. ‘go on foot’; the \( \text{handshape} \) with the verb of motion denoted ‘go by boat’. Both occurrences are also comparable with lexical verbs expressing the vehicle of motion and if this assumption is correct, these do not qualify to be considered as complex entity classifier predicates.

The analysis of the available YSL data leads to the conclusion that YSL does not make use of a system of classifier predicates to express the path and the direction of motion. The three handshapes found in the YSL data clearly diverge from the entity classifiers reported for other sign languages (Schembri, 2003; Sandler & Lillo-Martin, 2006): i) they occur marginally in the dataset and ii) they refer to one referent and not to a class of referents and iii) they do not express the path and the direction of motion.

The study of intransitive predicates in the YSL data reveals an interesting fact that YSL signers prefer two generic directionals (\( \text{DIR-COME-HERE} \) and \( \text{DIR-GO-THERE} \)) for expression of path and directional motion (see section 10.3.1 for an overview). Hence, YSL appears to be very similar to AdaSL in expressing motion events. The manner of motion in YSL is by preference expressed with the whole body sign MARRTJI.

10.3.2.2. Handling classifiers in YSL

The handling classifier handshapes occur on transitive verbs of motion and location representing the way the object is handled. Handling classifiers in non-lexical YSL signs expressing the handling of an object were very infrequent in the dataset\(^{128} \).

The YSL constructions shown in Figure 95 present the way the human hand handles or manipulates referents and thus look very similar to what has been described as the handling classifier handshapes in other sign languages. The handshapes in Figure 95 were found to be used as handling classifiers in the YSL data to refer to the manipulated motion of such objects as some type
of food, a bottle, a ball, a banana skin, money (or paper) and a hair comb in particular constructions.

*Figure 95. YSL handling classifier handshapes*

Similar to handling classifiers in DCSLs (see section 10.2.2), the handshape constructions in Figure 95 represent the indirect object of transitive motion constructions such as in (16) (see Figure 96 for the still image). The handshape used reflects the handling of a thin object, namely a dollar bill.

(16) \[ \text{WAKU IX.PRO}_2 \text{ DARRA RRUPIYA } \text{CL-thin-object-GURRUPA}_2 \text{ money } \text{CL-thin-object-give} \]

\[ \begin{array}{cccc}
\text{son} & \text{2SG} & \text{1SG} & \text{money} \\
\text{‘Son, I give you the money’}. & & & \\
\end{array} \]

*Sequence14_19JUL_L_2010.mpg*

*Figure 96. YSL handling classifier*

As seen in (17), a different handling classifier is used to express manipulated motion of a ball.
Handling classifier constructions occurred very rarely in the YSL data. Instead, YSL signers used verbs without reflecting properties of the handled or manipulated referents. In the majority of cases where manipulated motion was expressed, this was not done with a handling classifier construction. As shown in examples (18)–(19) the handshape of the verb GÄD ‘to carry’ does not change according to the several kinds of referents types such as a crocodile or knife being manipulated.

While the lists of entity classifiers are usually presented in the sign language studies on this topic (Zwitserlood, 2012), the inventories of handling classifiers in various sign languages are generally not provided in the literature and unfortunately, no quantitative information is yet available on the frequency of these constructions in any sign language. As a result, it is impossible to compare the size of a set of handling classifiers found in the YSL data. Five various handling handshapes used in such constructions have been attested in the collected YSL data (see Figure 95).

As for the choice of a handshape, a fair amount of intra- and inter-signer variation was observed in the data. There is a considerable variation with regard to the handshape chosen in similar contexts. For example, to represent handling of the same object, such as a knife, one signer has chosen the 🗑 (A) and the other the 🗑 (B curved) handshape. Another signer has used the same handshape 🗑 (x closed) for representing two various objects, a stick and a boat (see Appendix I for larger handshape images).

A conclusion emerging from the discussion of the data on handling classifier constructions is that YSL makes little use of handling classifiers to indicate the way the object is manipulated. The majority of transitive verbs of motion in the corpus lack explicit reference to handling of a referent.
Additionally, a great amount of variation in the handshape choice was found in the dataset.

\[\text{[YSL]}\]

\begin{align*}
(18) & \quad \text{NÄTHI} & \quad \text{GÄD} & \quad \text{BÄRU} \\
\text{grandfather} & \quad \text{carry} & \quad \text{crocodile} \\
\text{‘The grandfather is carrying a crocodile’} \\
\end{align*}

\begin{align*}
(19) & \quad \text{NÄTHI} & \quad \text{GÄD} & \quad \text{YIKI} \\
\text{grandfather} & \quad \text{carry} & \quad \text{knife/blade} \\
\text{‘The grandfather is carrying a knife’}. \\
\end{align*}

10.4. Summary

The YSL data discussed in the previous sections suggest that the system of verbal classifiers in YSL is found to diverge from what has been previously described for the documented Deaf community sign languages (Sandler & Lillo-Martin, 2006). Section 10.3.2.1 concluded that a motion event in YSL, similar to AdaSL and KK, is indicated by general directionals, i.e.
DIR-GO-THERE and DIR-COME-HERE, which may be spatially modified with respect to the geographic source and goal location of the movement.

YSL does not employ a system of entity classifiers for expression of path and direction of motion. Hence, it is the third sign language without a system of entity classifiers for expression of path motion (see Nyst, 2007 for AdaSL; Aronoff, Meir, Padden, & Sandler, 2004; Sandler et al., forthcoming for ABSL). YSL does employ handling classifiers for expression of manipulation of referents. However, these constructions are very infrequent in the YSL discourse and show a lot of variation with regard to the handshape used. The relative scarcity of verbal classifiers in YSL and other shared sign languages mentioned in this chapter might seem surprising in light of classifier use by homesigners in Nicaragua (see e.g. Brentari, Coppola, Mazzoni, & Goldin-Meadow, 2012). The following chapter considers the expression of size and shape in YSL.