Chapter 2  Previous analyses of classifier predicates

2.1 Introduction

In order to provide a background to my research of classifiers and the predicates in which they occur in NGT, I address in this chapter one of the first works, and by all accounts the most influential one, on classifier predicates in sign language, namely that by Supalla (1982, 1986) on ASL. Supalla claims that classifier predicates are morphologically complex and suggests a morphological structure in which he accounts for the morphemes (among which classifiers) in these predicates and (partially) for their hierarchical structure. Although analyses of classifier predicates such as Supalla’s have been called into question by some researchers (such as Engberg-Pedersen; Cogill-Koez 2000; Liddell 2003), many researchers have accepted at least parts of Supalla’s account. I will give a brief overview of some of these subsequent analyses.

My own account will eventually owe a debt to Supalla’s seminal work, too, although I will suggest various adaptations which considerably reduce the complexity of classifier predicates in Supalla’s analysis.
Furthermore, I will develop a suggestion made in the literature that classifiers in some of these predicates function as agreement markers. The accounts discussed therefore not only provide background to the reader, but also serve as the basis for my own morphosyntactic analysis.

This chapter is organized as follows. In section 2.2, I summarize Supalla’s account. Section 2.3 gives an overview of some of the analyses of the roots and classifiers in classifier predicates that have been given subsequently in the literature, and a summary is provided in section 2.4.

### 2.2 A morphological analysis of classifier predicates

Supalla (1982, 1986) basically distinguishes roots and a variety of affixes in classifier predicates in ASL. I will first address the roots that he suggests (section 2.2.1), followed by a discussion of the affixes in section 2.2.2. One of these affixes, namely the classifier affix, will be discussed in detail in section 2.2.3. Affixes that attach to classifiers are treated in section 2.2.4. This section will be concluded with a discussion and summary in subsection 2.2.5.

#### 2.2.1 Roots

Supalla regards the movement of the hands in a classifier predicate as the root, since it denotes an event, and, furthermore, cannot be changed without a change in the meaning of the predicate. Supalla distinguishes three types of basic roots: i) stative roots, ii) contact roots, and iii) active
Previous analyses of classifier predicates

roots. Each of these has two forms: anchored and displaced. These are exemplified and illustrated below.  

I) **Stative roots** indicate a static position in space. The *anchored* form does not show any motion or activity, and indicates that an entity is stationary at a particular position in signing space. The *displaced* form does have a movement, which does not indicate the motion of an entity, but the outline (that is, the shape and/or size) of an entity.

Anchored stative root:  
Displaced stative root:

(1)a. **be-vehicle**  
b. **be-house**

II) **Contact roots** have a short, usually downward movement towards a specific position in signing space. The *anchored* form shows contact (with the other hand or with a part of the body), while the *displaced* form shows only a stamping (downwards) motion.

---

1 Supalla (1982, 1986) does not himself provide illustrations; the signs in these examples are my reconstructions of the descriptions in his text.
III) **Active roots** express an activity of an entity. The *anchored* form shows a change in handshape or in the orientation of the hand, thus indicating a change in the form or the orientation of the entity. The *displaced* form shows a change in location and indicates the motion of an entity through space. There are three types of such roots: linear, arc and circular.

According to Supalla it is possible to combine several roots sequentially within a verb. These roots can be - simultaneously - combined with various types of affixes (to be discussed below). An example of a classifier predicate that is sequentially complex is given in (4), where
three active roots are combined. The first and third root are anchored and involve a handshape change, while the second root is displaced.

(4) FLASHLIGHT-BEAM-GOES-ON- THEN-MOVES- THEN-GOES-OFF

ASL (Supalla 1982:18, Fig. 5a)

2.2.2 Root affixes

The roots can be combined with numerous affixes. The system is complex, and I do not intend to give a full overview. Instead, I present the main points of Supalla’s account. One type of affix are movement affixes, that have the same movement features as the roots. They can indicate the manner of the motion, its size, the directionality and (if any) repetitions of the movement. A second type of affix is comprised of classifiers that are obligatorily affixed to the verb root. A root can be affixed with a classifier marking the central object and, optionally, with an additional classifier marking a secondary object.2 A central object is a single object that is involved in the event expressed by the verb, and a secondary object is the object with which the central object interacts (in semantic terms, the central object is the Figure, the secondary object the Ground). The classifiers occurring on these verbs will be described in more detail in section 2.2.3.

---

2 The term object is used in the meaning of entity, not as a grammatical term.
An example of a classifier predicate root with manner affixes and a classifier affix is given in Figure 1, in which a linear root (represented by a straight arrow) is combined with movement affixes indicating manner (arc), size (small), and repetition, and a classifier affix (indicating a human being).

Figure 1  Simultaneous combination of root and (some) affixes

<table>
<thead>
<tr>
<th>root</th>
<th>movement affixes:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>manner</td>
</tr>
<tr>
<td></td>
<td>size</td>
</tr>
<tr>
<td></td>
<td>repetition</td>
</tr>
<tr>
<td></td>
<td>classifier affix:</td>
</tr>
<tr>
<td></td>
<td>human</td>
</tr>
<tr>
<td>verb stem:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘person walk by’</td>
</tr>
</tbody>
</table>

Yet another type of affix is formed by a variety of placement affixes. These specify the reference point for each classifier in relation to a reference frame and in relation to other classifiers. Essentially, placement affixes mark agreement, like classifiers. In contrast to classifiers, they do not agree with the noun that indicates the moving or located entity, but
with the location of a Ground. Placement affixes that are attached to stative roots relate the position of the classifier to the Ground; placement affixes attached to active roots relate the path of the classifier to the Ground. To each placement morpheme an independent locative morpheme is attached that specifies the locative relation of the classifier with respect to the Ground (for example ‘on’, ‘below’, ‘beside’, ‘at-bottom’, ‘inside’). Furthermore, location morphemes may be affixed with orientation morphemes that indicate the orientation of the classifier with respect to the Ground (for instance ‘vertical’, ‘diagonal’). Each locative morpheme is also affixed with a marker for the distance between the classifier and the Ground (‘unmarked’, ‘minimum’, ‘maximum’).

### 2.2.3 Classifiers

Recall from section 1.3 that the hand configuration in a subset of signs is meaningful and can represent noun referents in Supalla’s (1982, 1986) analysis. He claims that these hand configurations are similar in meaning and morphological characteristics to classifiers in spoken languages. With regard to their function, Supalla suggests that they function as noun agreement markers. Subsequent suggestions of classifiers as agreement markers or proforms are also found in work by Kegl & Wilbur (1976), Edmondson (1990), Bos (1990), Sutton-Spence & Woll (1999), and Tai.

---

3 The Ground can, but need not, be represented by a classifier itself.

4 Also recall Supalla’s claim in section 1.3 that not only hand configurations, but also the body can be used as a classifier, representing entities. As indicated there, I will not focus on ‘body classifiers’ in this thesis.
et al. (2003). This suggestion is worked out in some detail by Glück & Pfau (1998). Supalla distinguishes four main types of manual classifiers, each with their own semantics and characteristics. The classifier types are:

1) Size and Shape Specifiers (SASSes);
2) Semantic classifiers;
3) Body Part classifiers;
4) Instrumental classifiers.

Some of these are subdivided into two types. All SASSes indicate entities by their shape and/or size, and within this type of classifier Supalla (1986) distinguishes static SASSes (consisting of a hand configuration only) and tracing SASSes (consisting of a hand configuration and movement of the hand(s) that traces the size and shape of the entity). All SASSes are morphologically complex. They are composed of smaller units, such as the fingers, the hand and even the lower arm, and morphemes that indicate particular shapes such as roundness or angularity. Supalla argues that each of the fingers can be meaningful, because the hand indicates one thin and straight entity, and addition of one or more fingers in a spread fashion adds the same number of thin and straight entities; addition of one or more fingers in a non-spread fashion (such as the and hands) no longer indicates a thin and straight entity, but a narrow and straight, or wide and straight, entity. The middle, ring
Previous analyses of classifier predicates

and pinky finger cannot occur by themselves; they are bound morphemes, whereas the left hand is a basic classifier and can occur by itself.

Tracing SASSes have an especially complex form, because they do not just consist of handpart morphemes, but also of a movement of the hand(s). Some examples of static SASSes from ASL are shown in Figure 2. The hand configurations in the right column have the same complexity in finger arrangement as the ones in the left column, but a morpheme indicating ‘roundness’ is added to the latter hand configurations.

Figure 2  Examples of static SASSes in ASL

<table>
<thead>
<tr>
<th>THIN &amp; STRAIGHT</th>
<th>FLAT &amp; ROUND</th>
</tr>
</thead>
<tbody>
<tr>
<td>NARROW &amp; STRAIGHT</td>
<td>SHALLOW &amp; ROUND&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>WIDE &amp; STRAIGHT</td>
<td>DEEP &amp; ROUND</td>
</tr>
</tbody>
</table>

<sup>a</sup> ‘shallow & round’ is expressed by extension degree of bending of the index and middle finger (and thumb), in contrast to the hand configuration expressing ‘flat & round’, which has only an extended and bent the index finger (and thumb).

5  I assume that Supalla implies a hierarchy in the morphological complexity of the classifier predicate, because all classifiers, including ‘basic classifiers’ (such as left and right) are affixes and therefore, bound morphemes. Supalla’s ‘bound classifiers’ probably indicate a certain hierarchy in affixation: the middle finger can only be affixed to the index finger, the ring finger only to the middle finger and the pinky finger only to the ring finger.
In contrast to SASSes, Supalla does not analyse *semantic classifiers* as morphologically complex, admitting that they may have been complex historically and derived from SASSes. Some examples are given in Figure 3.

**Figure 3** Examples of Semantic SASSes in ASL

<table>
<thead>
<tr>
<th></th>
<th>HUMAN</th>
<th>AIRPLANE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMALL ANIMAL</td>
<td>VEHICLE</td>
<td>TREE</td>
</tr>
</tbody>
</table>

(after Supalla 1982:41, Fig. 16)

*Body Part Classifiers*, as the name indicates, represent body parts. These can be represented in several ways. First, static SASSes that indicate body parts are sometimes, but not necessarily, articulated near the real-world position of these body parts (for instance, extended fingers placed near the mouth indicating teeth, or flat horizontal hands representing feet). Second, Body Part Classifiers can be indicated by Tracing SASSes that outline the shape of a body part near the real-world position of that particular body part (for instance the tracing of a vertical circle in front of the head, indicating the face). Third, body parts can represent themselves (such as eyes, the nose, the shoulder). Some Body Part Classifiers are
Previous analyses of classifier predicates

morphologically complex because they consist of SASSes (which are themselves complex), and are, moreover, often combined with a location morpheme on the body.

Supalla (1986) devises *Instrument Classifiers* into two groups: i) a group of hand configurations that indicate that the represented entity is held in the hand and manipulated; and ii) a group of hand configurations indicating that a tool is held with which the represented entity is manipulated. Supalla mentions that these are morphologically complex as well, but does not indicate their morphological structure or the morphemes involved.

2.2.4 Classifier affixes

According to Supalla, all classifiers combine with affixes. First, every classifier has at least one *orientation affix* that represents the orientation of the represented entity with respect to the external world, for instance, whether the entity is vertical or horizontal. Furthermore, classifiers that appear on an active root are affixed with orientation markers that indicate the orientation of the entity with respect to the path. A classifier that represents a person can be combined with another orientation affix that indicates that the person is upright and with one orientation affix that indicates that the person is facing forward into the direction in which he is moving. Such an ‘external world orientation affix’ or ‘path orientation affix’ can, in turn, be optionally combined with yet another affix, namely the ‘opposite affix’. Attachment of the ‘opposite affix’ to the ‘external world orientation affix’ indicates that the entity is upside down, and
affixation of the ‘opposite affix’ to the ‘path orientation affix’ indicates that the entity moves backwards.

A second type of affix that can be attached to classifiers is a morphological marker, such as the ‘broken’ or ‘wrecked’ morpheme. A construction in which a classifier is combined with a ‘wrecked’ morpheme is provided in (5). (5a) shows a ‘simple’ semantic classifier, indicating a tree; in (5b), this classifier is combined with a ‘wrecked’ morpheme, indicated by the particular bending (or clawing) of the fingers.6 This indicates the deformation of the tree and leaves as a result of fire.

Supalla thus argues that a construction involving a classifier is often morphologically complex; that is, that classifier constructions consist of a number of morphemes, both roots and affixes. Classifiers themselves can be morphologically complex, and can be combined with other affixes, such as orientation affixes and ‘broken’ and ‘wrecked’ affixes.

---

6 The signs in (5) do not appear as such in Supalla’s account, but are reconstructed on the basis of the descriptions in Supalla (1982).
2.2.5 Discussion and summary

Supalla’s morphological analysis is attractive: it offers an overview of the components that can occur within a classifier predicate, and a structured account of the grammatical status of these parts. The movements of the hand are roots, other components are affixes, claims also made by other researchers. Some affixes (for instance placement affixes, manner of motion affixes, classifiers) attach to a root, other affixes (orientation affixes, ‘broken’ and ‘wrecked’ morphemes) attach to classifiers. Nevertheless, several matters remain unclear and Supalla’s account also raises questions. For instance, his claim that SASSes are morphologically complex (that is, every finger can be morphemic), does not make clear what the morphological structure of a complex SASS is. Furthermore, Supalla suggests that classifiers are noun agreement markers, but it is unusual in (spoken) languages to find agreement markers that are affixed with several morphemes. (Of course, it may be possible that sign languages and spoken languages differ in this respect.) Supalla also claims that classifiers in ASL are similar to classifiers in spoken languages. However, the proposed complexity of the ASL classifiers is not attested in classifier systems in spoken languages. Although there are a few classifiers in spoken language classifier systems that can be argued to consist of two elements,7 complex classifiers are the exception rather

---

7 For instance, the literature on Kilivila (an Austronesian language spoken in Papua New Guinea) mentions classifiers such as *bililo* (trip) and *lola* (stroll, journey, repeatedly go somewhere), which are formed with the verb *lo* (to go) as a component (Senft 1995; p.c.).
than the rule. It has also been claimed in the literature that Supalla’s proposed morphological structure of classifier predicates is unnecessarily complex (see for instance Liddell 2003).

I will address these issues in my account of classifiers in NGT. Furthermore, I will show that there is no need to assume some of the proposed morphemes in the classifier predicate and reduce the proposed morphological complexity of classifier predicates on the basis of NGT data. I will give a clear account of the structure of these predicates, based on but adapting Supalla’s proposed basic structure.

2.3 Subsequent analyses of classifier predicates

Supalla’s analyses have been used as a basis in many subsequent investigations of classifier predicates, which propose several adaptations and elaborations. One issue concerns the types of classifiers involved in classifier predicates and their semantics (see Zwitserlood 1996 and Schembri 2001 for comparison and discussion). Various alternative proposals have also been made regarding the structural root of classifier predicates. In this section I will give a brief overview of the most important accounts that follow Supalla’s analyses. I will focus on the issues crucial for my analysis, namely the root in classifier predicates and the complexity and function of the classifiers. In section 2.3.1, I will treat the analyses of the root of classifier predicates, and in section 2.3.2,

---

8 I do not include here the accounts in which classifier predicates are considered as extra-linguistic (Cogill-Koez 2000) or non-componential (Liddell 2003); these will be discussed in Chapter 6.
Previous analyses of classifier predicates

classifiers and their morphological complexity. I will focus on analyses of the function of the classifiers in section 2.3.3.

2.3.1 The issue of the root

This section considers the views in the sign language literature on the most basic element in the classifier predicate. Following Supalla, most researchers regard the movement as the basic element (root) in the classifier predicate, although they differ in the conclusions about the number and nature of these roots. In contrast to Supalla’s three-way distinction into stative, contact, and active roots, Shepard-Kegl’s (1985) account contains basically one root (or ‘base’, as she calls it) that indicates a movement (MOVE). MOVE can also be zero movement. In addition to the root, a classifier predicate contains several affixes. Shepard-Kegl first proposes two types of placement affixes, namely terminators, that indicate the beginning or end of the movement. Second, locations specify the location in signing space of the beginning or end point. Finally, classifiers are affixes. New in Shepard-Kegl’s analysis is the claim that affixation is cyclic and hierarchical, following X’-theory.

An example of the structure of a simple predicate is in Figure 4 on page 52 (the structure is as yet category-neutral). As usual in X’-structure, nothing is implied (yet) about the position (left or right) of the respective elements with regard to each other; if all is well, this follows from independent principles.
In this view, classifiers are not part of the root, base, or stem of the predicate, but occur in the periphery of the sign structure. Shepard-Kegl thus regards the classifier the head of the sign. Its function is to mark the Theme argument of the predicate (the argument representing the entity in motion).

Other proposals on the root in classifier predicates have been made by Liddell & Johnson (1987) and Schick (1990a), who distinguish three root types, which overlap partially in form and semantics with those proposed by Supalla. Particular roots can often indicate more than one event. For instance, the root called ‘MOV’ by Schick and the root called ‘stative-descriptive’ by Liddell & Johnson can indicate the path of a referent, but also the extent (outline) of a referent. Wallin (1996; 2000) supplements Supalla’s three roots with a stationary movement root, which expresses a change in orientation of the referent.

In contrast to the previously discussed claims with respect to the characterizations of the root in classifier predicates, McDonald (1982) and Engberg-Pedersen (1993) argue that the movement is not the root. McDonald suggests that the movement in a classifier predicate is
Previous analyses of classifier predicates

polysemous and can express three different things: i) the independent motion of an entity; ii) the dependent motion of an entity; and iii) the extension (outline) of an entity. Engberg-Pedersen adds another possible meaning to the movement, namely the distribution of entities, arguing that it is not always easy to disambiguate between the different meanings of the movement in a classifier predicate. This polysemy of the predicate is illustrated in (6).\(^9\)

\[
\begin{align*}
\text{(6a) & indicates the dependent motion of a (flat) entity (for instance: a sheet of paper), (6b) the independent motion of a entity (for instance: a car).} \\
\text{Whereas (6c) indicates the distribution of many entities (for instance:} & \\
\end{align*}
\]

\(^9\) These signs are reconstructed here from verbal descriptions in Engberg-Pedersen (1993:245).
cars) that are standing in a line, (6d) shows the extension (outline) of a flat entity (for instance: a table top). Indeed, the movement is the same in all these signs.

McDonald and Engberg-Pedersen further claim that the hand configuration (as well as the motion) determines the meaning of the verb. This is supported by the fact that the particular handshape used indicates or determines the valence of the verb: classifiers of one type (Engberg-Pedersen calls these whole entity classifiers) occur only in intransitive verbs, whereas classifiers of another type (called handling classifiers) are used with transitive and/or agentive predicates (this is also noted by, among others, Shepard-Kegl 1985 and Wallin 1996). McDonald and Engberg-Pedersen conclude that the meaning contribution of the hand configuration in classifier predicates is at least as (if not more) important than the movement, and therefore claim that the hand configuration should be considered as the basic unit, not the movement.\(^\text{10}\) The status of the movement is as yet unclear. Engberg-Pedersen indicates that it could be classified as a stem, a derivational affix or an inflectional affix, but that none of these is entirely satisfactory.

A third view on the structure of classifier predicates is advocated by Slobin et al. (2003). They argue that none of the components of a classifier predicate is meaningful without the other components, that each component can be substituted (for instance the handshapes can be

\(^\text{10}\) Engberg-Pedersen (1993:247) calls this basic element the stem of the classifier predicate, in accordance to the analysis of classificatory verbs in Koyukon, which, according to her, are similar in structure.
Previous analyses of classifier predicates

substituted for other handshapes), and that none of these components can stand alone as complete lexical items. Therefore, they claim that these predicates do not have a single root, but consist of several roots. In this, they are similar to bipartite verbs in spoken languages such as the Hokan and Penutian languages of northern California and Oregon, which consist of two necessary parts that cannot form lexical items on their own.

Most researchers thus adopt Supalla’s analysis of the movement as the root in classifier predicates, although they suggest (slightly) different roots. In contrast, Engberg-Pedersen and McDonald claim that the hand configuration is the most basic element and Slobin et al. adhere to the view that classifier predicates do not have a single root.

In my analyses of NGT classifier predicates, I will argue that Supalla’s assumption of the movement as the root is correct, and that the other meaningful components in these predicates are affixed.

2.3.2 Complexity of classifiers

Although it is generally accepted in the sign language literature that Supalla’s SASSes are morphologically complex, most researchers do not (explicitly) analyse other classifier types (such as semantic, instrumental, or body part classifiers) as morphologically complex. Some researchers do explicitly indicate that classifiers are morphologically complex, but the complexity is different from that in Supalla’s proposals. For instance, Shepard-Kegl (1985:92-93), who distinguishes two types of classifiers
Chapter 2

(SASS/Semantic Classifiers\textsuperscript{11} and Handling classifiers) claims that both types can be morphologically complex. In her view, complex Handling Classifiers consist of two classifiers: a classifier representing the fingers of a hand and a classifier representing the thumb, the latter opposing the fingers. Furthermore, (all) Handling Classifiers have relation morphemes (indicating contact with the manipulated entity). Complex SASS/Semantic Classifiers are combinations of a SASS/Semantic Classifier (consisting of one or more fingers) and a \textit{copy classifier}.\textsuperscript{12} The latter classifier consists of an opposing thumb and ‘copies’ the classifier that is formed by the finger(s). For instance, the \(\overline{\text{m}}\) SASS/Semantic Classifier is analysed as consisting of the \(\overline{\text{m}}\) classifier for long and thin entities, and the ‘copy classifier’. The \(\overline{\text{m}}\) and \(\overline{\text{m}}\) SASS/Semantic Classifiers show the same morphological complexity.

Furthermore, Wallin (1990) indicates that Handling classifiers in SSL can be morphologically complex, in that the fingertips can denote ‘intrinsic front’ or ‘a particular orientation in the room’ and the base of the hand denotes ‘intrinsic back’. For instance, the fingertips of the \(\overline{\text{b}}\) hand representing a car indicate the front of the car. The hand palm indicates ‘moveability’ of the entity that is represented by the hand. Thus, if the \(\overline{\text{b}}\) hand represents a tile, it is oriented towards the surface to which it is indicated to be attached. This orientation means ‘non-moveable’. In contrast, a painting hanging on a wall is represented by the same

\textsuperscript{11} Shepard-Kegl considers SASSes and semantic classifiers as one classifier type, which she calls \textit{shape/object classifiers}.

\textsuperscript{12} Presumably, the ‘copy classifier’ is a SASS/Semantic Classifier, too.
Previous analyses of classifier predicates

classifier, but the hand palm faces away from that surface to indicate that the represented entity is moveable (Wallin 1990, 1996).\textsuperscript{13}

In summary, the morphological complexity of classifiers as suggested by Supalla is not fully adopted by other researchers. Those researchers who analyse classifiers as complex suggest a different kind of complexity. For NGT, I will show that classifiers are not morphologically complex.

2.3.3 The function of classifiers

Recall from section 2.2.3 that Supalla and other researchers suggest that classifiers are agreement markers. However, several other analyses of classifiers have been suggested. The suggested functions are: i) incorporated classifier nouns (Meir 2001); ii) verb stems (McDonald 1982; Engberg-Pedersen 1993, see section 2.3.1); iii) agentive markers (Benedicto & Brentari to appear), and iv) aspectual markers (Brentari & Benedicto 1999). Recently many researchers analyse classifiers as functional elements. There remain several good arguments for the early suggestion of classifiers as agreement markers, which I will use in my analyses of classifiers in NGT. Only Glück & Pfau (1998) work out the agreement analysis in some detail. As a background to my own analysis (in section 6.2.4), I will describe their analysis here.

The basis for the claim made by Glück & Pfau (1998) on the agreement analysis of classifiers is the fact that classifiers share some

\textsuperscript{13} Wallin (1990) suggests that visibility, for instance the visibility of the face of a painting, may be involved as well.
features with the arguments that they classify. Focusing on the syntactic properties of classifiers, they argue that these features are inherent properties of DPs. Their argument concerns pro-drop phenomena with agreement verbs (partially following proposals for ASL by Lillo-Martin (1991)), and runs as follows. As other sign languages, DGS has a set of verbs that show agreement by means of locations in signing space: intransitive verbs have an agreement marker for the subject; transitive verbs can agree with both subject and object. These agreement markers consist of the locations of the referents in signing space (as explained in section 1.5). When the verb in a sentence shows agreement with an argument, this argument can be dropped, as illustrated in (7), where the brackets indicate that the argument can, but need not be, expressed overtly.

(7a) MAN INDEX₁, CHILD THINK, (HE₁) WOMAN INDEX₂ BOOK ₁SHOW₂
   ‘This man, the child thinks, (he) shows the book to the woman.’

(7b) WOMAN INDEX₂, CHILD THINK, MAN INDEX₁ (HER₂) BOOK ₁SHOW₂
   ‘This woman, the child thinks, the man shows (her) the book.’

(Glück & Pfau 1998:69, Ex. 10c/11c)

Glück & Pfau claim that when no overt DPs are present in argument positions, these are filled by empty elements (pro), which are licensed by the agreement marker (cf. Chomsky (1981) and Rizzi (1986)). (At first glance, (7) may seem an example of topic-drop rather than pro-drop. However, the ungrammaticality of (8) shows that empty arguments
Previous analyses of classifier predicates

cannot be licensed by topics.) This is not possible with verbs that do not show agreement (usually called *plain verbs*): none of the arguments can be dropped, as can be seen in (8):

(8) * BOOK INDEX₁, CHILD THINK, MAN proᵦ BUY

'This book, the child thinks, the man buys it.'

(adapted from Glück & Pfau 1998:69, Ex. 11a)

Glück & Pfau observe that null arguments can occur in DGS sentences with classifiers, too. They claim that the pro-drop possibilities in these constructions are correlated with the presence of a classifier. In intransitive constructions, the classifier is always linked to the subject, and the subject position can (but need not) be empty. The classifier in a transitive clause is linked to the object, and the object position in the clause can be empty. This is illustrated in (9), in which the classifier and the related argument position are indicated in boldscript.

(9)a. *Intransitive classifier predicate:*

______ topic

DOGᵦ INDEX₁, CHILD THINK, (IT₁) STREET₂ GO-CLᵦ

'This dog, the child thinks, (it) is crossing the street.'

b. *Transitive classifier predicate:*

______ topic

GLASSᵦ INDEX₁, CHILD THINK, MAN (IT₁) TABLE₂ TAKE-CLᵦ

'The glass, the child thinks, the man takes it, off the table.'

(Gluck & Pfau 1998:70-71, Ex. 14b/12c)
Since there is no person (or location) agreement marker present that could license the empty argument, it must be licensed by the classifier. Therefore, Glück & Pfau argue, classifiers function as agreement markers. 14

The work by Glück & Pfau (and Benedicto & Brentari) represents an attractive body of ideas, but the argumentation backing them up is relatively weak, since cross-linguistic investigations of pro-drop and agreement phenomena has already shown that null arguments are not necessary licensed by agreement (Huang 1984; Y. Huang 1995). Lillo-Martin (1986, 1991), whose analysis is followed by Glück & Pfau, shows that ASL allows null arguments in the absence of agreement; Van Gijn & Zwitserlood (2003) show the same for NGT.

---

14 Benedicto & Brentari (to appear) also indicate that classifiers may function as agreement markers, and that they can license pro, as in (i), where ‘Cj’ is a classifier (representing the manipulation of the object that is in a base-generated topic position). This classifier licenses pro in the object position.

(i) THAT BOOKj, INDEX1sg THINK MARIE pro3
    that book  pron.1sg think M.  pron.3sg
    CLj+MOVE
    obj_grabhang+move_vertical_horizontal
    ‘That book, I thought Mary took it and layed it down on its side’
    (Benedicto & Brentari to appear, ex. 15)

Unfortunately, their account is as yet somewhat unclear, because the claim is that not only do the classifiers function as agreements markers, they also function as elements that trigger argument structure alternations.
Nevertheless, because of the prevalent suggestion in the literature that classifiers may function as agreement markers and because this analysis appears at least partially promising, it will be further pursued in this investigation. I will show that the basic idea is correct and give an extended analysis that fits in with sign language agreement phenomena in general.

2.4 Summary

In this chapter, I have given an overview of the most important theoretical accounts of classifier predicates in sign languages and of the function of the classifier. These predicates are analyzed as complex, consisting of roots and various affixes such as manner, orientation, placement and classifier affixes. Classifiers themselves can be morphologically complex, too. The analyses of the function of the classifier differ, although there is a substantial number or suggestions that they are agreement markers, two of which are formalized to some extent and discussed in this chapter.

In the following chapters I will investigate the classifiers and the predicates with which they occur in NGT. I will provide an inventory of the classifiers that occur in NGT and elaborate the morphological structure of the predicates. On the basis of the results, I will argue that classifiers in NGT are related to arguments and that an agreement analysis accounts best for the NGT facts. The work of Supalla (1982, 1986) and Glück & Pfau (1998, 1999) thus form the basis for my own proposals. The data that underlie the analysis come from several
experiments. These experiments and their results will be discussed in the following chapters.