

### 3. Non-verbal predication

#### 3.0. Introduction

In this chapter I give basic definitions of some notions central to this study, while at the same time providing a first approximation of the subject matter. In 3.1 I define the concept of *predication*, in 3.2 the concept of *non-verbal predication*. In 3.3 I go into the question of how the main predicate status of non-verbal predicates can be established. In 3.4 I study two kinds of auxiliary element regularly used in non-verbal predications, copulas and semi-copulas, and distinguish them from pseudo-copulas, i.e. verbs which are easily mistaken for copulas or semi-copulas. The chapter is summarized in 3.5.

#### 3.1. Predication

The noun *predication* has two different readings. Under the first reading it designates the application of a predicate to an appropriate number of arguments, where the predicate specifies a relation or a property.<sup>1</sup> This reading is prevalent in the philosophical literature. Under the second reading it designates an instance of predication-under-the-first-reading. This reading is prevalent in the linguistic literature. *Predication* is an action noun under the first reading, and a common noun under the second one. It takes articles and/or plural marking under the second reading only. The two readings may thus be related by stating that *a predication* is an instance of *predication* or, alternatively, that *predications* are instances of *predication*. This grammatical reflection of the ambiguity of the noun will disambiguate the two readings in what follows.

Of the two readings of the noun *predication*, one has a formal equivalent in Functional Grammar. As indicated in chapter 1, a predication can be represented by means of the following formula:

$$(1) \quad (e_i: [\text{pred}_\beta (\alpha_1) \dots (\alpha_n)] (e_j))$$

where  $\text{Pred}_\beta$  is a predicate,  $\beta$  represents the category of the predicate (V, A, etc.), and  $(\alpha_1) \dots (\alpha_n)$  are the arguments required by that predicate. An example in which values are assigned to these variables is given in (2):

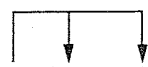
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1. The first reading may also be defined in ontological terms as the attribution of a property or relation to one or more entities (see chapter 5), in which case there is no corresponding second reading.

- (2)  $(e_i; [read_V (d1x_i; man_N (x_j)_{Ag} (i1x_j; book_N (x_j)_{Go})] (e_i))$   
 'The man read- a book.'

The predication in (2) can be conceived of as the product of the application of the verbal predicate *read* to the two arguments it requires, the first order (x) Agent (Ag) argument *the man* and the first order (x) Goal (Go) argument *a book*. The structure in (2) thus represents a predication as the product of predication.

*Predication* in its action noun reading has no direct formal equivalent. It will be useful to have a way to represent the predicating relation expressed by the noun under this reading in what follows. This will be achieved in the following way:

- (3)  $(e_i; [pred_B (\alpha_1) \dots (\alpha_n)] (e_i))$
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### 3.2. Non-verbal predication

*Non-verbal predication* can now be defined as the application of a non-verbal predicate to an appropriate number of arguments. Any instance of non-verbal predication is called a *non-verbal predication*. This term is used to refer to all constructions with a non-verbal main predicate regardless of whether or not this predicate is accompanied by a copula. The overall abstract structure of non-verbal predications may thus be represented as in (4):

- (4)  $(e_i; [pred_B (\alpha_1) \dots (\alpha_n)] (e_i))$   
 $(B \neq V)$

A non-verbal predication is not the same as a nominal or verbless sentence. A predication, as e.g. represented in (4), is a unit of semantic analysis, whereas a sentence is a unit of morpho-syntactic analysis. Thus, a non-verbal predication can be expressed by means of a verbal sentence, i.e. a copula construction. The relevant relations between predications and sentences are shown in Figure 7.

It follows from the definition of non-verbal predications as units of semantic analysis which may be expressed by either verbal or nominal sentences that the non-verbal predicate should be considered the main predicate of a non-verbal predication, even in those cases in which it is accompanied by a copula. In the following section I provide some arguments for this view.

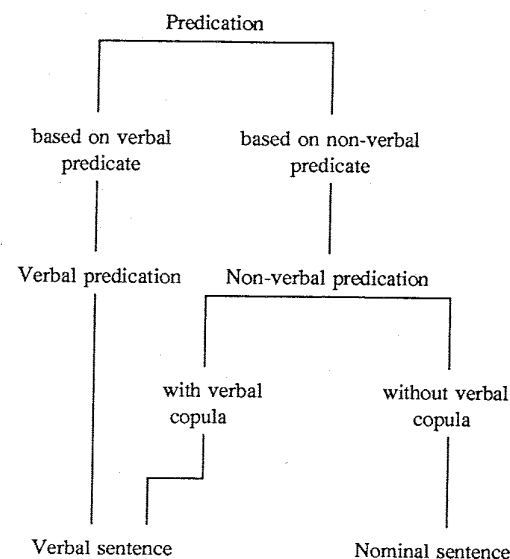


Figure 7. Predication and sentence

### 3.3. Non-verbal predicates

For the purposes of this section a non-verbal predicate may be defined negatively as a predicate that is not a verb. A verb may be defined as a predicate which, without further measures being taken, has a predicative use only. A verb can assume a non-predicative function only after undergoing a further measure such as nominalization or participialization, whereas a non-verbal predicate can be put to some non-predicative use without any of these measures being taken. The differences between classes of predicates will be dealt with in chapter 4, in which generally applicable definitions of the parts of speech are given. A full classification of basic and derived non-verbal predicates is given in chapter 5.

For many languages all the elements necessary for arriving at a proper non-verbal predication are, under certain conditions, (i) a non-verbal predicate and (ii) one or more arguments. One of these languages is Turkish. In (5) the non-verbal predicate *ıssız* 'unemployed' is applied to a first person singular argument without the intervention of a copula:

Turkish (Altaic; Ersen-Rasch 1980: 203)

- (5) *İşsiz-ø-im.*  
unemployed-PRES-1.SG  
'I am unemployed.'

In some tenses, such as the present tense illustrated in (5), Turkish does not require a copula to appear in non-verbal predications. In others a copula is obligatory or optional. The following examples illustrate the different possibilities:

Turkish (Altaic; Ersen-Rasch 1980: 203)

- (6) a. *İşsiz ol-acağ-ım.*  
unemployed COP-FUT-1.SG  
'I will be unemployed.'  
b. *\*İşsiz-eceğ-im.*  
unemployed-FUT-1.SG  
'I will be unemployed.'
- (7) a. *İşsiz i-di-m.*  
unemployed COP-PAST-1.SG  
'I was unemployed.'  
b. *İşsiz-di-m.*  
unemployed-PAST-1.SG  
'I was unemployed.'
- (8) a. *\*İşsiz ol-ø-um/i-ø-yim.*  
unemployed COP-PRES-1.SG/COP-PRES-1.SG  
'I am unemployed.'  
b. *İşsiz-ø-im.*  
unemployed-PRES-1.SG  
'I am unemployed.'

In the future tense Turkish requires the copula *ol-*, as is illustrated in (6). In the past tense the copula *i-* appears optionally, as is illustrated in (7). In the present tense neither of these auxiliaries is allowed, as is illustrated in (8). In the English translations a copula is obligatory in all cases.

The fact that, both from an intra-linguistic and an inter-linguistic point of view, the same type of semantic relation can be expressed in non-verbal predications with or without a copula may be taken as an indication that, from a typological perspective, the non-verbal predicate is the main predicate of these constructions, and that therefore those constructions in which a copula accompanies a non-verbal predicate can be seen as non-verbal predications, i.e. constructions with a main predicate of the non-verbal category.

But even for those languages which always require a copula to appear in constructions comparable to (6)-(8) there are some generally applicable criteria to demonstrate the main predicate status of the non-verbal predicate.

The first criterion concerns the operation of selection restrictions. In constructions based on a non-verbal predicate it is this predicate that imposes the selection restrictions on the argument terms, not the copula (Falk 1979: 19). This can be demonstrated by means of the following examples:

- (9) a. *Sheila is ill.*  
b. *\*This table is ill*
- (10) a. *\*Sheila is round.*  
b. *This table is round*

The property *ill* in (9) cannot be predicated of inanimate arguments, the property *round* in (10) cannot be predicated of animate arguments. Each of the sentence pairs (9)-(10) shows different possibilities, yet each pair contains a form of the copula *be*. This shows that the selection restrictions which are at stake in (9)-(10) are imposed by the non-verbal predicates, not by the verbal copula.

The second criterion concerns the valency of non-verbal predicates. In constructions based on a non-verbal predicate it is this predicate that determines the number of obligatory constituents, i.e. arguments, in the predication. Compare the following sentences:

- (11) *This book is fascinating.*
- (12) a. *This book is identical to that one.*  
b. *\*This book is identical.*

The adjective *fascinating* requires one argument, the adjective *identical* requires two. Both adjectives combine with the copula *be*, which shows that the number of arguments is determined by the non-verbal predicate, not by the verbal copula.

Given that (i) in many languages a non-verbal predicate does not have to be accompanied by a copula, (ii) the non-verbal predicate imposes the selection restrictions, and (iii) the non-verbal predicate determines the number of arguments, it may be concluded that the non-verbal predicate is the main predicate in non-verbal predications, and that a copula used in non-verbal predications is not (part of) the main predicate of those predications.

In order to account for these facts, non-verbal predicates are represented in Functional Grammar in the same way as verbal predicates, as in the following examples:

- (13) *intelligent<sub>A</sub> (x<sub>1</sub>)<sub>Ø</sub>*
- (14) *carpenter<sub>N</sub> (x<sub>1</sub>)<sub>Ø</sub>*

In this form, these predicates can be applied directly in the formation of terms, as in:

- (15)  $(i1x_i; \text{carpenter}_N(x_i)_\emptyset; \text{intelligent}_A(x_i)_\emptyset)$   
'an intelligent carpenter.'

Within the term structure given in (15) the properties *carpenter* and *intelligent* are predicated of the variable  $(x_i)$ , representing the indefinite (i) singular (1) individual towards which the speaker wants to direct the addressee's attention.

The underlying structure of a predication based on the predicate given in (13) would be as in (16):

- (16)  $(e_i; [\text{intelligent}_A(d1x_i; \text{carpenter}_N(x_i)_\emptyset)_\emptyset] (e_i))$   
'The carpenter (is) intelligent.'

This predication describes a state of affairs concerning a definite (d) singular (1) carpenter's being intelligent. A similar representation can be given to predications based on a two-place non-verbal predicate, as is illustrated in (17)-(18):

- (17)  $\text{identical}_A(x_i)_\emptyset (x_2)_{\text{Ref}}$   
(18)  $(e_i; [\text{identical}_A(d1\text{prox } x_i; \text{book}_N(x_i)_\emptyset)_\emptyset (d1\text{rem } x_j; \text{book}_N(x_j)_\emptyset)_{\text{Ref}}] (e_i))$   
'This book (is) identical to that book.'

Representations such as those given in (16) and (18) contain all the necessary elements for those languages which do not make use of a copula in the specified contexts, but are also used for those languages which do make use of a copula, as will be explained in the next section.

### 3.4. Copula, semi-copula, pseudo-copula

#### 3.4.0. Introduction

The facts presented in the previous section led to the conclusion that the non-verbal predicate is the main predicate in non-verbal predications, and that a copula used in non-verbal predications is not (part of) the main predicate of those predications. This raises the question of what the status of the copula in non-verbal predications is, and requires a method to distinguish between non-verbal predications with a verbal copula and constructions in which the verbal element is the main predicate.

Copulas form a subclass of the class of auxiliaries. Auxiliaries are recognized by the fact that they do not show the features characterizing lexical predicates, such

as selection restrictions and valency. As long as a word shows any of these features it cannot be considered a true auxiliary.

Auxiliaries can be of two major types. The first type is used in combination with verbal predicates only and is referred to here as  $\text{Aux}^V$ . The second type is used in combination with non-verbal predicates only and is referred to here as  $\text{Aux}^{-V}$ . In some cases one and the same auxiliary can be used with both types of predicate, and may be referred to as  $\text{Aux}^{V/-V}$ . Note that the superscripts used here do not give an indication of the word class of the auxiliary itself, but only of the word class of the predicate with which it may be combined, i.e. the superscript of the auxiliary corresponds with the subscript of the main predicate, as shown in the following examples:

- (19)  $\text{Aux}^V \text{Pred}_V$ : *have gone*  
 $\text{Aux}^{-V} \text{Pred}_V$ : *become ill*

The categorial status of the auxiliary itself is indicated by means of a subscript. For instance, an  $\text{Aux}_V^{-V}$  is an auxiliary of the major class of verbs which may be combined with non-verbal predicates only.

The auxiliary types listed in Table 4 can be accounted for by means of this notational system.

Table 4. Auxiliaries

Word class of auxiliary	Word class of main predicate	
	V	-V
V	a. $\text{Aux}_V^V$	b. $\text{Aux}_V^{-V}$
-V	c. $\text{Aux}_V^V$	d. $\text{Aux}_V^{-V}$

The following examples illustrate the possibilities:

- (20) a. *John has<sub>V</sub><sup>V</sup> gone.*  
b. *Peter became<sub>V</sub><sup>-V</sup> ill.*  
c. *Peter PAST<sub>V</sub><sup>V</sup> speaks*  
d. *David he<sub>V</sub><sup>-V</sup> the thief.*

The pseudo-English examples (20c-d) are literal translations of the following examples from Tongan and Hebrew:

Tongan (Austronesian; Churchward 1953: 37)

- (21) *Na'e lea 'a Pita*  
 PAST speak ABS Peter  
 'Peter spoke'

Hebrew (Semitic; Junger 1981: 129)

- (22) *David hu ha-ganav.*  
 David he DEF-thief  
 'David is the thief.'

Sentence (21) is an illustration of the use of particles to express tense and aspect distinctions in Tongan. As illustrated in (22), Hebrew uses a pronominal copula in the present tense. Thus, Tongan and Hebrew make use of non-verbal auxiliaries in combination with verbal and non-verbal predicates, respectively.

So far I have used the term *copula* in a rather loose way for auxiliaries of the type  $Aux^V$ . In what follows I will use it in a more restricted sense for those members of the  $Aux^V$  class which are semantically empty, i.e. which have no independent contribution to make to the meaning of the sentence. The term *semi-copula* is reserved for all other members of the  $Aux^V$  class. Thus, the  $Aux^V$  class has two subclasses, which are treated more extensively in sections 3.4.1 and 3.4.2.

### 3.4.1. The copula

The most salient feature of the copula is that it makes no independent contribution to the meaning of the sentence. This feature is reflected in the fact that in some languages and under varying circumstances the copula can be left out without affecting the meaning of the sentence, as illustrated in 3.3. In chapter 5 it will be demonstrated that the shades of meaning often attributed to a copula can be traced back to other characteristics of the sentence, such as the nature of the non-verbal predicate and its arguments.

The fact that a copula is semantically empty immediately raises the question of what its function in the sentence is. Here this function may be broadly defined as a supportive one. A copula enables a non-verbal predicate to act as a main predicate in those languages and under those circumstances in which this non-verbal predicate could not fulfil this function on its own. In chapter 8 the nature of these circumstances will be further specified.

From its supportive function it follows that the copula itself is not a (part of the) predicate, but an auxiliary accompanying a non-verbal predicate and its argument(s).

This supportive function is not confined to verbal copulas, but may also be exerted by elements other than verbal, such as particles and pronouns, as will be illustrated in chapter 8. A construction containing a copula may thus be represented as in (23):

- (23)  $(e_1: [\text{copula}_\tau \text{ pred}_\beta (\alpha_1) \dots (\alpha_n)] (e_i))$   
 $(\beta \neq V)$

where  $\beta$  represents the category of the predicate (A, N, etc.) and  $\tau$  the category of the copula (V, Pro, etc.).

Within the context of Functional Grammar, Dik (1980: chapter 4) proposes to introduce the copula by means of a *copula support rule*, which, following Dik (1989: 167) may be formulated informally for English in the following way:

- (24) *Be*-support  
 input:  $\pi \text{ pred}_\beta (\alpha_1) (\alpha_2) \dots (\alpha_n)$   
 conditions:  $\pi =$  any specified  $\pi$ -operator  
 $\beta \neq V$   
 output:  $\pi \text{ be}_V \text{ pred}_\beta (\alpha_1) (\alpha_2) \dots (\alpha_n)$

Since in English  $\pi$ -operators can be expressed on verbal predicates only, a verbal copula has to be introduced as soon as an operator is specified in a clause structure based on a non-verbal predicate. Rule (24) introduces the copula *be* under these conditions.

The structure given in (25) matches the conditions of rule (24):

- (25)  $(\text{pres } e_i: [\text{intelligent}_A (d1x_i: \text{carpenter}_N (x_i)_{\theta})] (e_i))$   
 'The carpenter (is) intelligent.'

Application of rule (24) to (25) leads to (26):

- (26)  $(\text{pres } e_i: [\text{be}_V \text{ intelligent}_A (d1x_i: \text{carpenter}_N (x_i)_{\theta})] (e_i))$   
 'The carpenter is intelligent.'

Once a copula has been introduced, the operator, in this case the present tense operator (Pres), can be expressed on this copula.

Thus, the copula support rule treats the copula as a semantically empty supportive device, functioning as a carrier for tense, mood, aspect, and possibly other distinctions. A clear advantage of this approach is that no deletion rules are needed in those contexts in which the copula does not actually appear. The approach furthermore allows for a unified treatment of the predicative and non-predicative uses of non-verbal predicates. Compare in this connection once again the following representations:

- (27)  $(d1x_i; \text{carpenter}_N(x_i)_{\emptyset}; \text{intelligent}_A(x_i)_{\emptyset})$   
 'the intelligent carpenter.'  
 (28)  $(\text{pres } e; [\text{intelligent}_A(d1x_i; \text{carpenter}_N(x_i)_{\emptyset})] (e_i))$   
 'The carpenter (is) intelligent.'

The term (27) and the predication (28) make use of the same predicates, *carpenter* and *intelligent*. Only in (28) is a copula necessary. The absence of a  $\pi$ -operator in (27) and the presence of such an operator in (28) are sufficient to account for this.

Languages differ with respect to the conditions under which the copula must be inserted. A full account of these differences will be given in chapter 8. Here it may suffice to refer to the Turkish examples given in 3.3. Turkish requires the copula *ol-* in certain tenses, allows the copula *i-* in other tenses, and disallows either of these copulas in all other tenses. It follows from these facts that at least two copula support rules have to be formulated for Turkish, an *ol* support rule and an *i*-support rule, and that the conditions to be specified in these rules are far more specific than those in the *be*-support rule given above.

#### 3.4.2. The semi-copula

The following examples contain a semi-copula:

- (29) *Sheila became ill.*  
 (30) *Peter remained healthy.*

The constructions in (29)-(30) share a number of properties with the copula-constructions discussed in the preceding section:

(i) The non-verbal predicate imposes the selection restrictions on the arguments:

- (31) a. *This person became happy.*  
 b. *\*This table became happy.*  
 (32) a. *\*This person became round.*  
 b. *This table became round.*

(ii) The valency of the non-verbal predicate determines the number of arguments within the construction:

- (33) *Sheila became ill.*  
 (34) a. *Sheila became fond of chocolate.*  
 b. *\*Sheila became fond.*

(iii) To some extent, copula and semi-copula show the same distribution as regards the non-verbal predicate that may follow them:

- (35) *Sheila was/became ill/a doctor.*

A further illustration of this is given by the following examples:

- (36) *John is/became president.*  
 (37) *\*John is/became carpenter.*  
 (38) *John is/became a carpenter.*

In English only words designating a unique role, such as *president* in (36), may be used predicatively in their bare form. Other nouns, such as *carpenter* in (37)-(38), have to be provided with an article. These nouns show this behaviour both when following a copula and when following a semi-copula, as illustrated by (36)-(38).

(iv) In languages in which there is agreement between a non-verbal predicate and its first argument in a copula construction this type of agreement also occurs in semi-copula constructions:

Spanish (Indo-Hittite)

- (39) *Es-a-s chica-s son muy orgullos-a-s.*  
 DEM-F-PL girl-PL COP.PRES.3.PL very haughty-F-PL  
 'Those girls are very haughty.'  
 (40) *Es-a-s chica-s se han vuel-to muy orgullos-a-s.*  
 DEM-F-PL girl-PL REFL.3 AUX.PRES.3.PL  
 turn-PAST.PART very haughty-F-PL  
 'Those girls have become very haughty.'

The main difference between constructions containing a copula and those containing a semi-copula is that the semi-copula can never be left out without changing or affecting the meaning of the resulting construction. In other words, the semi-copula adds an element of meaning to the construction in which it occurs, whereas the copula does not.

Although this difference is significant, it should not obscure the fact that semi-copulas to a large extent may fulfil the same function as copulas, namely to enable a non-verbal predicate to act as the main predicate of a predication. The main predicate status of the non-verbal predicate in this construction can be demonstrated by the fact that the non-verbal predicate imposes the selection restrictions and determines the number of arguments in the construction, as illustrated above.

The elements of meaning that semi-copulas contribute to the final interpretation of the constructions in which they appear are often of an aspectual nature (Goossens 1990: 182-183). The most frequent values are illustrated by English *become*, which has an ingressive value, and *remain*, which has a continuative value. If compared with copula-constructions, which describe a state as such, semi-copula constructions add elements of meaning which might be called *aspects of being*. The ingressive construction describes a change, the coming about of a state, the continuative construction describes a lack of change, the continuation of a state.

Another element of meaning which may be found in a semi-copula is a distinction of positive versus negative polarity, which is particularly frequent in the case of existential copulas, as in the following Turkish examples:

*Turkish* (Altaic; van Schaaik, personal communication)

- (41) *Bahçe-de köpek var-dı-ø/yok-tu-ø.*  
 garden-LOC dog COP-PAST-3.SG/COP.NEG-PAST-3.SG  
 'There was/wasn't a dog in the garden.'

The negative semi-copula *yok* in (41) cannot be considered a negative particle since it may be inflected for tense and person in the same manner as *var*.

The relation between copulas and semi-copulas can be made more explicit by looking at a language which uses inflectional means to express the elements of meaning which in another language are expressed by means of semi-copulas. Consider, for instance, the following examples from !Xü:

!Xü (Khoisan; Snyman 1970: 134, 135)

- (42) *G!heĩ o mi ga.*  
 tree COP 1.SG one  
 'The tree is mine'
- (43) *Ha ɰxae g/e-o mi ma.*  
 3.SG daughter INGR-COP 1.SG one  
 'His daughter becomes mine.'

Sentences (42)-(43) are examples of the regular way in which possession of a definite entity is expressed in !Xü. Both contain the copula *o*. Ingressive aspect can be marked on this copula, as in (43), the resulting meaning being 'become'. Thus, !Xü uses separate morphemes for the two functions of the semi-copula *become* in English: one to express ingressive aspect, and one to provide verbal support for the non-verbal predicate.

A similar example can be given for the expression of continuative aspect in non-verbal predications. In English the semi-copula *remain* expresses continuative aspect, but in Yessan-Mayo the continuative aspect marker *-men* is added to the regular copula *ti*, as in:

*Yessan-Mayo* (Sepik-Ramu; Foreman 1974: 39)

- (44) *Ni gwatek ti-men.*  
 2.SG here COP-CONT  
 'You stay here.'

A final example concerns the expression of progressive aspect. The possibility of expressing this aspectual value in a non-verbal predication is limited, but not excluded. Compare the following Spanish examples:

*Spanish* (Indo-Hittite; Hengeveld 1986: 396)

- (45) *Antonio es loco.*  
 Antonio COP.PRES.3.SG crazy  
 'Antonio is crazy.'
- (46) *Antonio está loco.*  
 Antonio COP.PRES.3.SG crazy  
 'Antonio is being silly.'

In Spanish both the copula *ser* and the semi-copula *estar* can be used with adjectival predicates. In the latter case the property expressed by the non-verbal predicate is presented as temporarily relevant, a feature which in English can be expressed by means of the progressive form of the regular copula *be*, but in Spanish is part of the meaning of the semi-copula *estar*.

Apart from showing the relation between copulas and semi-copulas, these examples show that languages may differ in the extent to which they make use of true copulas. In non-verbal predications in English progressive aspect is expressed on a verbal copula, as in the translation of (46). In Spanish progressive aspect is itself expressed by means of a semi-copula, thus precluding the necessity for copula insertion to obtain.

In Functional Grammar semi-copulas cannot be treated in the same way as copulas. In 1.10 two types of expression rule affecting the form of constituents were recognized, support rules and replacive rules. Copula support, as formulated in the preceding section, is of the first type. Rules introducing semi-copulas have to be of the second type, since semi-copulas contribute an element of meaning to the sentences in which they occur. This element of meaning is represented in the structure of the clause by means of an operator. Semi-copulas replace this operator in the expression of the underlying structure.

The elements of meaning expressed by semi-copulas can be seen as pertaining to the domain of predicate operators (ingressive, continuous, progressive) and predication operators (negative), as discussed in 1.6. Semi-copulas are the expression of these operators when applied to non-verbal predicates, the result being a construction containing an auxiliary verb, on which operators present at higher levels can be expressed. This is illustrated in the derivation of (47) given in (48).

Here application of the ingressive operator to the adjectival predicate *ill* by means of rule 1 yields *become ill*. Application of the past operator to *become ill* by means of rule 2 yields *became ill*. This approach accounts both for the main predicate status of the non-verbal predicate and for the element of meaning provided by the semi-copula.

- (47) *Sheila became ill.*  
 (48) Derivation of (47)  
 Representation:  
 (past e; [ingr *ill*<sub>A</sub> (d1x; *Sheila*<sub>N</sub> (x)<sub>θ</sub>)] (e<sub>i</sub>))  
 Expression of ingressive aspect:  
 ingr pred<sub>v</sub> → *become*<sub>v</sub> pred<sub>v</sub>  
 Result:  
 (past e; [*become*<sub>v</sub> *ill*<sub>A</sub> (d1x; *Sheila*<sub>N</sub> (x)<sub>θ</sub>)] (e<sub>i</sub>))

If one compares this derivation with the one that would be needed for the derivation of a comparable sentence in a language such as !Xū, which expresses ingressive aspect by means of an affix, the essential differences in the treatment of copulas and semi-copulas can be illustrated. A derivation of the !Xū example (49) is given in (50). For the sake of simplicity, I treat the constituents *mi ma* 'my one' and *ha /xae* 'his daughter' as if they were basic non-verbal predicates.

!Xū (Khoisan; Snyman 1970: 135)

- (49) *Ha /xae gle-o mi ma.*  
 3.SG daughter INGR-COP 1.SG one  
 'His daughter becomes mine.'  
 (50) Derivation of (49)  
 Representation:  
 (pres e; [ingr *mi ma*<sub>N</sub> (d1x; *ha /xae*<sub>N</sub> (x)<sub>θ</sub>)] (e<sub>i</sub>))  
 Copula support (partial formulation):  
 π pred<sub>v</sub> → π o<sub>v</sub> pred<sub>v</sub>  
 Result:  
 (pres e; [ingr o<sub>v</sub> *mi ma*<sub>N</sub> (d1x; *ha /xae*<sub>N</sub> (x)<sub>θ</sub>)] (e<sub>i</sub>))  
 Expression of ingressive aspect:  
 ingr pred<sub>v</sub> → *g/e*-pred<sub>v</sub>  
 Result:  
 (pres e; [*g/e*-o<sub>v</sub> *mi ma*<sub>N</sub> (d1x; *ha /xae*<sub>N</sub> (x)<sub>θ</sub>)] (e<sub>i</sub>))

As this derivation shows, !Xū uses two different rules for the expression of ingressive aspect on non-verbal predicates: one to introduce the copula *o-* and one to express ingressive aspect on this copula. In English these two steps are combined

into one, as shown in (47)-(48). Thus, the copula support rule in !Xū has a wider application than its equivalent in English.

### 3.4.3. The pseudo-copula

3.4.3.0. Introduction. Copulas and semi-copulas should be distinguished from pseudo-copulas. Pseudo-copulas are lexical predicates which are easily mistaken for (semi-)copulas. This situation arises in at least the following cases, to be illustrated below: (i) the pseudo-copula occurs with a reduced complement based on a non-verbal predicate; (ii) the pseudo-copula occurs with a predicative adjunct based on a non-verbal predicate; (iii) the pseudo-copula occurs with a predicative argument based on a non-verbal predicate; (iv) the pseudo-copula has a non-verbal quotative argument. These constructions show similarities with (semi-)copula constructions in their actual appearance, but at the same time they show important differences in behaviour.

3.4.3.1. Reduced complements. The first construction type can be illustrated by means of the following examples (Kahn 1973: 201-205):

- (51) *Sheila seems ill.*  
 (52) *It proved true.*

The difference between these constructions and semi-copula constructions can be brought out by means of a paraphrase:

- (53) *Sheila seems to be ill/It seems that Sheila is ill.*  
 (54) *It proved to be true.*  
 (55) \**Sheila became to be ill.*  
 (56) \**Peter remained to be healthy.*

The verbs *seem* and *prove* do not link a non-verbal predicate with its argument(s). The predicative relation between *Sheila* and *ill* in (51) and *it* and *true* in (52) obtains in the complements of these predicates, as the paraphrases show. Semi-copulas, on the other hand, cannot operate as complement-taking predicates. They take the place of a copula, as the ungrammaticality of the paraphrases (55)-(56) shows.<sup>2</sup>

This first type of pseudo-copula construction may be represented as in (57):

2. Kahn (1973:203-205) uses the label 'be'-modifier for verbs like *seem* and 'be'-replacer for verbs like *become*.



- (57) [ $seem_V (X_i: \dots [ill_A (x_i: Sheila_N (x_i)_{\theta}]) \dots (X_i)_{\theta}]$ ]
- 'It seems that Sheila is ill.'
  - 'Sheila seems to be ill.'
  - 'Sheila seems ill.'

The verb *seem* is represented here as a one-place predicate taking a propositional argument (see 1.10). This proposition contains a predication (see 1.5), within which a non-verbal predicative relation obtains between *ill* and *Sheila*, as indicated in (58):



- (58) ( $e_i: [seem_V (X_i: \dots [ill_A (x_i: Sheila_N (x_i)_{\theta}]) \dots (X_i)_{\theta}] (e_i)$ )

Thus, examples such as (51)-(52) do contain instances of non-verbal predication, but these are not supported but governed by verbs like *seem*, which can therefore not be considered to be copulative verbs. The possible expressions of the underlying structure are related through a rule of subject raising<sup>3</sup> ((57a) versus (57b-c)) and optionality of *be*-support ((57b) versus (57c)).

3.4.3.2. Predicative adjuncts. The second construction type that semi-copula constructions should be distinguished from can be illustrated by means of the following examples, again taken from Kahn (1973: 202-203):

- (59) *He died a beggar.*  
 (60) *He married young.*

The feature which distinguishes these constructions from semi-copula constructions is that in the former the non-verbal predicate can be left out without rendering the resulting constructions ungrammatical, whereas in the latter it cannot be left out, at least not in the intended reading:

- (61) *He died.*  
 (62) *He married.*  
 (63) \**Sheila became.*  
 (64) \**Peter remained.*

The constituents *a beggar* in (59) and *young* in (60) can thus be seen as optional constituents added to the predications in (61)-(62). The verbal predicates in these

3. See Dik (1979) for the treatment of raising constructions in Functional Grammar.

constructions are therefore not copulative verbs, but independent lexical predicates, to which a predicative adjunct is added. This predicative adjunct itself can be paraphrased by means of a non-verbal predication, as in:

- (65) *He died while he was a beggar.*  
 (66) *He married while he was young.*

This second type of pseudo-copula construction may be represented as in (67):<sup>4</sup>

- (67) ( $e_i: [marry_V (x_i: he (x_i)_{\theta})] (e_i): [young_A (x_i)_{\theta}] (e_i)$ )  
 'He married young.'

In (67) a situation  $e_i$  is characterized as concerning the marriage of a third person in the circumstance of that person being young. The predicative adjunct itself has the internal structure of a non-verbal predication, i.e. there is a predicative relation between the non-verbal predicate *young* and its coreferential argument  $x_i$ , as indicated in (68):



- (68) ( $e_i: [marry_V (x_i: he (x_i)_{\theta})] (e_i): [young_A (x_i)_{\theta}] (e_i)$ )

Thus, examples such as (59)-(60) do contain instances of non-verbal predication, but these are not supported by the matrix verb, but simply added to the main predication.

Note that there are many cases in which the difference between semi-copula constructions and constructions involving a lexical predicate with a predicative adjunct is not as clear-cut as in the examples discussed above. Take, for instance, the following examples:

- (69) *John stood alone.*  
 (70) *Sheila stood in need of help.*

Although in these cases too the constructions remain acceptable if the italicized constituent is left out, it is not correct to paraphrase them as 'John stood while he was alone' and 'Sheila stood while she was in need of help', respectively. The unacceptability of the latter points in the direction of the interpretation of *stand* as a semi-copula. The predicative adjunct seems to provide the crucial information. On the other hand, the verb *stand*, although it cannot be taken literally here, retains

4. This representation for predicative adjuncts was first proposed in Vester (1983).

some relations to its original meaning. For instance, the predicative adjunct should be such that it is not in conflict with an upright position of the subject, as is illustrated by the ungrammaticality of (71):

(71) \**Peter stood ill.*

Thus, the verb *stand* in constructions such as (69)-(70) shares characteristics with both semi-copulas and lexical predicates. In chapter 10 I will show that this reinterpretation of a positional verb as a (semi-)copular verb is a common phenomenon in some systems of non-verbal predication.

3.4.3.3. Predicative arguments. The third construction-type that is easily mistaken for a semi-copula construction is illustrated in (72):

(72) *Mary looked ill.*

Perceptual impression verbs such as *look*, *smell*, and *taste* may be followed by a non-verbal predicate, such as *ill* in (72). This constituent is neither a reduced complement, nor a predicative adjunct, witness the ungrammaticality of (73)-(74):

(73) \**Mary looked to be ill.*

(74) \**Mary looked.*

The difference between perceptual impression verbs and semi-copulas is that the former cannot be considered auxiliaries expressing a modification of a non-verbal main predicate, since they are clearly lexical in nature, witness the fact that they impose selection restrictions, the most important one being that their first argument should be perceivable through one of the senses. This means that the non-verbal predicate should be considered an argument, albeit not a very prototypical one, of the perceptual impression verb.

Anticipating on a proposal to be made in chapter 4, this fact may be accounted for by assuming that perceptual impression verbs have an argument position for a (non-verbal) predicate. This non-verbal predicate has one or more arguments which it shares with the perceptual impression verb. In a formalization of this account the verb *look* has the predicate frame given in (75):

(75)  $look_V (f_1)$

where  $(f_1)$  is an argument position that may be filled with a predicate, as illustrated in (76):

(76)  $look_V (f_1; ill_A (f_1)) (x_1)_\theta$

The predicate  $(f_1)$  inserted in the argument position of *look* brings along its own term position  $(x_1)$ . After insertion of a term the representation of (72) given in (77) is arrived at:

(77)  $(e; [look_V (f_1; ill_A (f_1)) (x_1; Mary (x_1)_\theta]) (e_1))$

This representation correctly represents *Mary* as an argument of both *look* and *ill*. A similar account is proposed in Hengeveld (1992a) for several other classes of predicates which impose the Like-subject constraint.<sup>5</sup>

This third type of pseudo-copula construction shows some interesting correlations with the two previous ones. With the first type, which involves a reduced complement, it shares the argument-status of the non-verbal constituent. With the second type, which involves a predicative adjunct, it shares the predicative nature of the non-verbal constituent.

3.4.3.4. Quotative arguments. A final construction type that should be distinguished from the semi-copula construction is illustrated by the following Dutch examples:

Dutch (Indo-Hittite)

(78) *Die jongen heet-ø Peter.*  
DEM boy be.called-PRES.SG Peter  
'That boy is called Peter.'

(79) *We noem-en die jongen Peter.*  
1.PL call-PRES.PL DEM boy Peter  
'We call that boy Peter.'

Here again the constituent *Peter* is obligatory, as in the case of semi-copula constructions. Yet it does not seem right to state that *heten* 'be called' and *noemen* 'call' specify certain aspects of 'being Peter', as a semi-copula would do. A simple typographical correction may point out the nature of the constructions illustrated in (78)-(79) and the way in which they differ from copula constructions:

Dutch (Indo-Hittite)

(80) *Die jongen is Peter.*  
DEM boy COP.PRES.3.SG Peter  
'That boy is Peter.'

5. This approach is an alternative to the predicate formation rules that would otherwise be necessary to account for this construction type.

- (81) *Die jongen heet-ø* "Peter".  
DEM boy be.called-PRES.SG "Peter"  
'That boy is called "Peter".'
- (82) *We noem-en die jongen* "Peter".  
1.PL call-PRES.PL DEM boy "Peter"  
'We call that boy "Peter".'

As the quotation marks suggest, the verbs *heten* 'be called' and *noemen* 'call' have in fact more in common with speech act verbs<sup>6</sup> used in direct speech reports than with copular verbs. The particular speech act described is one of naming or calling. "Peter" (the name) is the word one utters when calling Peter (the person).

The quotative nature of the second argument of this type of predicate can be made visible by looking at languages which make use of a quote particle for introducing reported speech. One such language is Krongo. The same quote particle, *ání*, is used in Krongo to introduce the second argument of verbs of naming (83) and of speech act verbs (84):

*Krongo* (Kordofanian; Reh 1985: 325, 384)

- (83) *ŋ-áná yáari ání Lúwáalá.*  
CONN.M-have name QUOT Luwaala  
'And he has the name "Luwaala".'
- (84) *ŋ-áa t-íkki ání òomúnó-ŋ kátú.*  
CONN.M-COP INF-say QUOT IMP.PL.call-TR people  
'And he says: "Call the people".'

A similar phenomenon may be observed in Nama, where the quote particle *tí* is used for the second arguments of both classes of verbs:

*Nama* (Khoisan; Hagman 1973: 255)

- (85) *||'iip ke pítap tí ra ≠aíhè.*  
3.SG DECL Peter QUOT IMPF call  
'He is called "Peter".'
- (86) *'oo-s ke ||'iisà ||xaápá kè míí*  
then-3.SG DECL she again REM.PAST say  
*l'úu-ta 'a tí.*  
not.know-1.SG COP.PRES QUOTE  
'She said again "I don't know".'

6. For the position of naming verbs within a typology of speech act verbs, see Verschueren (1989).

It may be concluded, then, that verbs like Dutch *heten* are not semi-copulas but belong to a class of predicates of naming, which may be considered a subclass of the class of speech act verbs. These predicates take a quotative second argument.

A Functional Grammar representation of the Dutch example (78) is given in (87):

- (87)  $(e_i; [heten_V (x_i; 3.sg (x_i)_\theta]_\theta (E_\tau; [Peter] (E_\tau)_\theta)_{G_\theta}] (e_i))$

The use of different variables in the structure of the clause allows for different levels of analysis. One of these levels is the speech act as a whole. In 1.5. this level has been provided with the variable E. This same variable is used in (87) to indicate the speech act nature of the Goal argument of *heten* 'be.called', just as in (57) the variable X was used to indicate the propositional nature of the Zero argument of *seem*. In (87) it is furthermore indicated that there is no non-verbal predicative relation between *Peter* and *hij* 'he'. Both are arguments of the lexical verb *heten* 'be called'.

### 3.5. Summary

In this chapter non-verbal predications are analyzed as the product of the application of a non-verbal predicate to an appropriate number of arguments. Accordingly, they have the underlying structure given in (88):

- (88)  $(e_i; [pred_\beta (\alpha_1) \dots (\alpha_n)] (e_i))$   
 $\beta \neq V$

Copulas and semi-copulas are defined as auxiliary elements accompanying a non-verbal predicate, the main predicate status of which can be deduced from the valency and selection restrictions it imposes on the construction as a whole.

Following the hypothesis put forward in Dik (1980: chapter 4), copula constructions are assumed to have the same underlying structure as nominal sentences, i.e. (semi-)copulas are claimed to be elements introduced by the expression component of the grammar. This approach allows for a unified analysis of constructions based on a non-verbal predicate with and without an auxiliary.

The potential expression structures of non-verbal predications can thus be represented as in (89):

- (89)  $(e_i; [((semi-)copula_\tau) pred_\beta (\alpha_1) \dots (\alpha_n)] (e_i))$   
 $\beta \neq V$

where  $\beta$  is the category of the predicate and  $\tau$  the category of the (semi-)copula, which may or may not be present. Due to the fact that the data available do not

allow a systematic treatment of semi-copulas, they will receive little attention in following chapters.

An exhaustive classification of the construction types that conform to the format given in (89) will be given in chapter 5. Before this classification can be given it is necessary to study the defining characteristics of non-verbal predicates, the most central element of non-verbal predications. In the following chapter these defining characteristics will be studied in some detail.