Lexicographic Treatment of Negation in Sepedi Paper Dictionaries

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Abstract: Negation in Sepedi is a complex matter — a variety of negative morphemes are used across complicated verbal and copulative structures and these morphemes are not interchangeable. Dictionary users in a text production situation need to be guided to the correct compilation of negative constructions. In most cases negative morphemes are not lemmatised in Sepedi paper dictionaries or if they are, the lexicographic treatment is inadequate. This paper provides an inventory of negation from which an abstraction of the negative morphemes is given. This is followed by a critical evaluation of Sepedi dictionaries and suggested model entries for lexicographic treatment of negative morphemes.

Keywords: NEGATION, SEPEDI, DICTIONARIES, LEXICOGRAPHY, SEPEDI VERBAL MOODS, SEPEDI COPULATIVES

Opsomming: Leksikografiese bewerking van negatiefvorming in Sepedi papierwoordeboeke. Negatiefvorming in Sepedi is kompleks — 'n verskeidenheid negatiewe morfeme word in ingewikkelde verbale en kopulatiewe strukture gebruik, en hierdie morfeme is nie uitruilbaar nie. Woordeboekgebruikers in 'n teksproduksiesituasie moet gelei word om negatiewe konstruksies korrek te kan saamstel. In die meeste gevalle word negatiewe morfeme nie in Sepedi-papierwoordeboeke gelemmatiseer nie, of is die leksikografiese behandeling daarvan onvoldoende. Hierdie artikel bevat 'n inventaris van negatiefvorming waaruit 'n abstraksie van die negatiewe morfeme gegee word. Dit word gevolg deur 'n kritiese evaluering van Sepedi woordeboeke en voorgestelde modelinskrywings vir leksikografiese behandeling van negatiewe morfeme.

Sleutelwoorde: NEGATIEFVORMING, SEPEDI, WOORDEBOEKE, LEKSIKOGRAFIE, SEPEDI WERKWOORD MODI, SEPEDI KOPULATIEWE

1. Introduction

For negation in isiZulu, Bosch and Faaβ (2018: 1) state that "as an important instrument of language use, one would therefore expect aspects of negation to be dealt with in dictionaries". They also emphasize that corpus studies reveal an "impressive number" of complex morphological constructions expressing negatives. The situation for Sepedi is no different. Corpus studies reveal that negative morphemes in Sepedi are frequently used. They are, however, often

not lemmatised and treated in their own right in dictionaries. Prinsloo and Gouws (1996) attempted to reduce the negation strategies into a single so-called *ga/sa/se* convention. This convention has since been implemented in several dictionaries, e.g. *Oxford Bilingual School Dictionary* (ONSD) and *Popular Northern Sotho Dictionary* (POP). It is a powerful convention and reasonably user-friendly. The convention given in (1) caters for multiple negative constructions in the indicative, situative, relative, subjunctive, habitual, consecutive, infinitive and imperative moods and for the lemmatisation of verbs ending in *-e*. With a few exceptions verbs ending in *-e* are not lemmatised in Sepedi dictionaries.

(1)
rêke, rekê must buy; **..ga/sa/se..~** not buy

What is required, however, for negative morphemes is that they should be separately lemmatised with full treatment. Traditional dictionaries reflect a strong word-bias, not focusing on items smaller than words such as morphemes, or multiword items, thus literally taking the alternative term for *lemma*, i.e. *headword* as the norm. This issue, however, falls beyond the scope of this article, cf. Gouws (1989) and Gouws and Prinsloo (2005) for a detailed discussion.

The aims of this article are to (a) give an overview of negation in Sepedi, presented as example driven rules, (b) extract the negation rules, (c) determine the frequency of use of negative morphemes in a Sepedi corpus, (d) critically evaluate the treatment of negation in Sepedi dictionaries and (e) compile model entries for Sepedi paper dictionaries. These model entries will firstly incorporate all the negative morphemes that have to be lemmatised and secondly, give a detailed scope of all the types of information and lexicographic conventions that have to be considered in the treatment of these lemmas.

2.   Overview of negation in Sepedi

Negation is discussed in detail in Sepedi grammars such as Lombard, Van Wyk and Mokgokong (1985) and Poulos and Louwrens (1994) but is fragmented over different sections for the different verbal moods and copulatives. Inexperienced learners could find it difficult to get a full perspective on negation from grammar books. This article departs from such typical grammar-book descriptions but presents a summary of the full scope of negative constructions in only three tables. These tables will reflect an example-driven approach in a systematic way across different verbal moods and copulatives. The tables will also be used as a basis for the extraction of the negation rules, compilation of text boxes, running footers, back matter components, etc. in paper dictionaries. For the interested reader the full scope of verbal moods and copulatives is summarised in appendices A and B.

3.   Negation of verbal moods

In this article the distinction of eight verbal moods for Sepedi by Lombard et al. (1985) is followed. The negation rules indicated in tables 1 to 3 are intended for a step-by-step build-up of the negative morphemes which will be regarded as lemma candidates. These negative morphemes will also be used in the evaluation of 12 Sepedi dictionaries. Tables 1 to 3, as well as appendices A and B, can also be used in the back matter of dictionaries as a reference address for the articles of negation morphemes in the central text. So, for example, references from the articles for *ga, sa* and *se* 'not' in the central text to the back matter contextualise *ga, sa* and *se* in the broader perspective of verbs and copulatives and could be valuable for the user's cognitive needs.

Table 1:   Negation strategies for **verbal moods**

Mood	Negation strategy	Example	Neg.
3.1 Indicative			
3.1.1 Pres.	***ga*** + **subject concord** + **verb stem** ending **-e**	*Ga ke reke* 'I do not buy'	**ga**
3.1.2 Fut.	**subject concord** + ***ka se*** + **verb stem** ending **-e**	*Nka se reke* 'I shall not buy'	**ka se**
3.1.3 Past	1: ***ga se*** + **alternative concord** + **verb stem**	*Ga se ka reka* 'I did not buy'	**ga se**
	2: ***ga se*** + **subject concord** + **verb stem** ending **-e**	*Ga se ke reke* 'I did not buy'	**ga se**
	3: ***ga*** + **subject concord** + **a** + **verb stem**	*Ga ke a reka* 'I did not buy'	**ga**
	4: ***ga*** + **alternative concord** + **verb stem**	*Ga ka reka* 'I did not buy'	**ga**
3.2 Situative			
3.2.1 Pres.	**subject concord** + ***sa*** + **verb stem** ending **-e**	*Ge ke sa reke* 'If I do not buy'	**sa**
3.2.2 Fut.	**subject concord** + ***ka se*** + **verb stem** ending **-e**	*Nka se reke* 'I shall not buy'	**ka se**
3.2.3 Past	**subject concord** + ***sa*** + **verb stem**	*Ge ke sa reka* 'If I did not buy'	**sa**
3.3 Relative			
3.3.1 Pres.	**subject concord** + ***sa*** + **verb stem** ending **-e** + **-go/-ng**	*Yo ke sa rekego* 'I who do not buy'	**sa**
3.3.2 Fut.	**subject concord** + ***ka se*** + **verb stem** ending **-e** + **-go/-ng**	*Yo nka se rekego* 'I who shall not buy'	**ka se**
3.3.3 Past	**subject concord** + ***sa*** + **verb stem** + **-go/-ng**	*Yo ke sa rekago* 'I who did not buy'	**sa**
3.4 Subjunctive	**subject concord** + ***se*** + **verb stem** ending **-e**	*Gore ke se reke* 'So that I do not buy'	**se**
3.5 Habitual	**subject concord** + ***se*** + **verb stem** ending **-e**	*Ke se reke* 'I (usually) do not buy'	**se**
3.6 Consecutive	**alternative concord** + ***se*** + **verb stem** ending **-e**	*Ka se reke* 'I (then) did not buy'	**se**
3.7 Infinitive	**go** + ***se/sa*** + **verb stem** ending **-e**	*Go se reke* 'not to buy'	**se/sa**
3.8 Imperative	***se*** + **verb stem** ending **-e**	*Se reke!* 'Do not buy!'	**se**
	se + **ke** + **alternative concord** + **verb stem**	*O se ke wa reka!* 'Do not buy!'	

4.   Negation of copulatives

Louwrens (1994) gives a brief description of copulatives as follows:

> A term used to refer to structures which incorporate a variety of prefixes (called particles in some grammatical descriptions of Northern Sotho) of which some resemble the subject concord (e.g. o bohlale, le bohlale, e bohlale, etc. 'he/it is clever'), whereas others have a unique form like ke (e.g. ke monna 'it is a man') and ga se (e.g. ga se monna 'it is not a man'), as well as a series of verb forms with the copulative verb stems -bê (e.g. … gore a bê bohlale 'so that he may become clever'), -ba (e.g. … a ba bohlale 'and then he became clever'), -le (e.g. … gê a le bohlale 'if he is clever'), -se (e.g. … gê a se bohlale 'if he is not clever') and -na (e.g. o na le lehufa 'she is jealous'). The copulative expresses the English verb to be, and is therefore translated with 'is', 'was', 'will be', 'has been', etc. (Louwrens 1994: 40)

The copulative in Sepedi is a very complex system — see appendix B for a detailed overview of the structure of static and dynamic copulatives. As for the verbal moods in table 1 the aim of the following section is to list the different negative copulative constructions and to extract the negative morphemes which will also be regarded as lemma candidates for Sepedi dictionaries.

4.1   Static copulatives

Louwrens (1991: 71) defines static as "referring to a state of rest which is characterised by the absence of motion or change". Three semantic relations are distinguished between a subject and a complement within the copulative, i.e. *identification/equality*, *descriptive* or *associative*.

Table 2:   Negation strategies for **static copulatives**

4.1.1 Identifying			
Mood	**Negation strategy**	**Example**	**Neg.**
4.1.1.1 **Indicative**	*ga* + **subject concord + complement** *ga* se + **complement**	*Ga ke morutiši* 'I am not a teacher' *Ga se morutiši* 'It (he/she) is not a teacher'	**ga** **ga se**
4.1.1.2 **Situative**	**subject concord** + *se* + **complement**	*Ge ke se morutiši* 'If I am not a teacher' *Ge e se morutiši* 'If it (he/she) is not a teacher'	**se**
4.1.1.3 **Relative**	**subject concord** + *sego/seng* + **complement**	*Yo ke sego* morutiši 'I who am not a teacher' *Yo e sego morutiši* 'He/she who is not a teacher'	**se(go/ng)**
4.1.2 Descriptive			
4.1.2.1 **Indicative**	*ga* + **subject concord + complement**	*Ga ke bohlale* 'I am not clever' *Ga a bohlale* 'He/she/they is not / are not clever'	**ga**

4.1.2.2 **Situative**	**subject concord** + *se* + **complement**	*Ge ke se bohlale* 'If I am not clever' *Ge a se bohlale* 'If he/she/they is / are not clever'	**se**
4.1.2.3 **Relative**	**subject concord** + *sego/seng* + **complement**	*Yo ke sego* bohlale 'I who am not clever' *Yo a sego bohlale* 'He/she who is not clever'	**se**
4.1.3 Associative			
4.1.3.1 **Indicative**	*ga* + **subject concord** + **na (le)** + **complement**	*Monna ga a na (le) mpša* 'The man does not have (is not with) a dog'	**ga**
4.1.3.2 **Situative**	**subject concord** + *se* + **na (le)** + **complement**	*Ge monna a se na (le) mpša* ' If the man does not have (is not with) a dog'	**se**
4.1.3.3 **Relative**	**subject concord** + *se* + **nago/nang (le)** + **complement**	*Monna yo a se nago (le) mpša* 'The man who does not have (is not with) a dog'	**se**

4.2   Dynamic copulatives

Louwrens (1991: 71) defines dynamic as "referring to a state in which things are in motion and therefore changing". Dynamic copulative constructions are therefore often translated as '(to) become'. Similar to static copulatives, dynamic copulatives distinguish identifying, descriptive and associative relations between the subject and complement.

4.2.1   Identifying dynamic copulatives

As in the case of identifying static copulatives in table 2, first and second persons use their own subject concords, i.e. *ke*, *re*, *o* and *le* but third persons use a neutral subject concord *e*. In table 3 only examples with third person class 1 *monna* 'man' as subject will be given.

Table 3:   Negation strategies for **dynamic copulatives**

4.2 1 Identifying			
Mood	**Negation strategy**	**Example**	**Neg.**
4.2.1.1 Indicative			
4.2.1.1.1 Pres.	*ga* + neutral **subject concord** + **be** + **complement**	*Monna ga e be* morutiši 'The man does not become a teacher'	**ga**
4.2.1.1.2 Fut.	Neutral **subject concord** + *ka se* + **be** + **complement**	*Monna e ka se be* morutiši 'The man will not become a teacher'	**ka se**
4.2.1.1.3 Past	1. *ga se* + neutral **subject concord** + **ba** + **complement** 2: *ga se* + neutral **subject concord** + **be** + **complement** 3: *ga* + **subject concord** + **a** + **verb stem** 4: *ga* + **alternative concord** + **ba** + **complement**	*Monna ga se ya ba morutiši* *Monna ga se e be morutiši* *Monna ga e a ba morutiši* *Monna ga ya ba morutiši* 'The man did not become a teacher'	**ga se** **ga se** **ga** **ga**

4.2.1.2 Situative			
4.2.1.2.1 Pres.	Neutral **subject concord** + *sa* + **be** + **complement**	*Ge monna e sa be morutiši* 'If the man does not become a teacher'	**sa**
4.2.1.2.2 Fut.	Neutral **subject concord** + *ka se* + **be** + **complement**	*Ge monna e ka se be morutiši* 'If the man will not become a teacher'	**ka se**
4.2.1.2.3 Past	Neutral **subject concord** + *sa* + **ba** + **complement**	*Ge monna e sa ba morutiši* 'If the man did not become a teacher'	**sa**
4.2.1.3 Relative			
4.2.1.3.1 Pres.	Neutral **subject concord** + *sa* + **be-go/ng** + **complement**	*Monna yo e sa bego morutiši* 'The man who does not become a teacher'	**sa**
4.2.1.3.2 Fut.	Neutral **subject concord** + *ka se* + **be-go/ng** + **complement**	*Monna yo e ka se bego morutiši* 'The man who does not become a teacher'	**ka se**
4.2.1.3.3 Past	Neutral **subject concord** + *sa* + **ba-go/ng** + **complement**	*Monna yo e sa bago morutiši* 'The man who did not become a teacher'	**sa**
4.2.1.4 **Subjunctive**	Neutral **subject concord** + *se* + **be** + **complement**	*Gore monna e se be morutiši* 'So that the man does not become a teacher'	**se**
4.2.1.5 **Habitual**	Neutral **subject concord** + *se* + **be** + **complement**	*Monna e se be morutiši* 'Usually the man does not become a teacher'	**se**
4.1.2.6 **Consecutive**	Neutral **alternative concord** + *se* + **be** + **complement**	*Monna ya se be morutiši* 'The man (then) did not become a teacher'	**se**
4.2.1.7 **Infinitive**	**go** + *se/sa* + **be** + **complement**	*Go se be morutiši* 'Not to become a teacher'	**se** **sa**
4.2.1.8 **Imperative**	*se* + **be** + **complement** *se* + **ke** + **alternative concord** + **ba** + **complement**	*Se be morutiši!* 'Do not become a teacher!' *O se ke wa ba morutiši!* 'Do not become a teacher!'	**se**

4.2.2 Descriptive dynamic copulatives

Descriptive dynamic copulatives use the same negation strategies as the descriptive identifying copulatives, cf. table 3 but all persons and classes use their own subject concords e.g. *Monna ga **e** be morutiši* 'the man does not become a teacher (4.2.1.1, table 3) becomes *Monna ga **a** be bohlale* 'the man does not become clever' and will not be presented here as a separate full table for the different moods.

4.2.3 Associative dynamic copulatives

Associative dynamic copulatives use the copulative verb stem *ba* instead of *na* which is used in the associative static copulatives (cf. 4.1.3, table 2). Associative dynamic copulatives occur in all of the moods and follow the same negation

rules as ordinary verbs as in table 1. Associative dynamic copulatives also use the same negation strategies as associative static copulatives except for the situative and relative where the negation morpheme *-sa* is used in associative dynamic copulatives, e.g. *a sa be le* 'not be with' instead of *-se* (4.1.3.2, table 2) for static associative copulatives.

Due to space limitations the associative dynamic copulatives will also not be presented here as a separate full table for the different moods.

The reference numbers given in the first columns of tables 1 to 3 for the suggested lemma candidates *ga*, *sa*, *se(go/ng)*, *ga se* and *ka se* in the final columns of these tables, are intended to guide the lexicographer in the microstructural treatment of these lemmas. The lexicographer should, namely, try to include examples representing the moods, morphological changes in subject concords, verbal endings, grammatical structures, etc. in following the reference numbers for each negation morpheme. See discussion below on the suggested scope for treatment and utilization of the reference numbers.

5.   Frequency of use of negative morphemes in a Sepedi corpus

Negative morphemes are frequently used in Sepedi. Consider the following approximate counts for *ga*, *sa*, *se*, *ga se* and *ka se* in a corpus of 1.2 million tokens in table 4.[1]

Table 4:   Frequency counts for negative morphemes in Sepedi

Morpheme	Occurrences
ga	5,000
sa	3,000
se	5,000
ga se	300
ka se	1,800

6.   A critical evaluation of the treatment of negation in Sepedi dictionaries

Twelve Sepedi dictionaries were studied for their lemmatisation and treatment of the negative morphemes *ga*, *sa*, *se*, *ga se* and *ka se* and will be briefly evaluated in this section. The dictionaries consulted were *Comprehensive Northern Sotho Dictionary* (henceforth referred to as GNSW), *Kort Drietalige Sakwoordeboek* (KDS), *Noord-Sotho–Afrikaans woordelys* (NAAN), *New English–Northern Sotho Dictionary* (NEN), *Oxford Bilingual School Dictionary* (ONSD), *Popular Northern Sotho Dictionary* (POP), *Pukuntšutlhaloši ya Sesotho sa Leboa* (PTLH), *Pukuntšu Dictionary* (PUKU), *Pukuntšu woordeboek* (PUKU'89), *Sediba* (SEDIBA), *Sesotho sa Leboa–*

English Pukuntšu Dictionary (SEPD) and *Woordeboek Afrikaans–Noord-Sotho* (WANS). Full references are given in the bibliography.

First, consider table 5 for ten dictionaries where Sepedi is the target language in English–Sepedi or, Afrikaans–Sepedi dictionaries.

Table 5:   Dictionary articles for **not / nie**

PUKU'89	No entry
NEN	**not,** adv. se, ga, ga se
POP	**not** se, ga, ga se
ONSD	**not ***** *adverb* ■ ga; sa; se; ga se ♦ Please do **not** walk on the wet floor. *Hle se sepele godimo ga lebato la go thapa.* ♦ You have **not** done your work. *Ga se wa dira mošomo wa gago.* ♦ I'm **not** very hungry. *Ga se ka swarwa ke tlala.* ◊ it is **not so** ■ ga go bjalo ♦ Your wife is pregnant; is it **not** so? *Mosadi wa gago o mmeleng, ga go bjalo?* ◊ **not be/become** ■ ga/sa/se (...) be; ga se (...) ba ◊ **not do** ■ ga/sa/se (...) dire ♦ They will **not** do: anything. *Ba ka se dire selo.* In English we often shorten **not** to **n't.** For example, **You didn't close the door.** In Northern Sotho, the notion of **not (doing something)** is expressed by a variety of negative morphemes, often combined with a change in the verbal ending. Examples of negative morphemes are shown as translation equivalents at the start of this dictionary entry. **not be** *verb* **(isn't, not being, wasn't/weren't not been)** See ISN'T, AREN'T The verb **not be** is very irregular. In the : Dynamic copulative constructions are therefore often translated as '(to become)'present tense, for example, we have: I **am not,** you **aren't/are not,** she/he/it **isn't/is not,** we **aren't/are not,** both/all of you **aren't/are** not, they **aren't/are not.**
SEPD	**not** *neg* ga; e sego
WANS	**nie** ga-, se-, ga se-
NAAN	**nie**, ga.
PUKU	**nie** ga, sa, se, ga se.
KDS	**nie** e sego not
SEDIBA	**not** ga, sa, *se I do - run* ga ke kitime *he/she/it/they is/are -* ga se *I did - eat* ga se ka ja *he is - clever* ga a bohlale *I do - know* ga ke tsebe [ne] *(while) he is - falling* a sa we *do - go home* se yê gae *do - come (you, s:)* ankê o se tlê *the water should - boil whatsoever* mêêtse a se kê a bela *no longer* se sa **not at all** ke/kê *(a.v.) you should - start fearing* o se kê wa thôma go fšêga *they are not overcome at all* ga ba ke ba šitwa *you (pl.) must not damage it at all* le se keng la di senya **not**, *b.* - se *while we are not far away* re - kgolê *he/she was not* e bê e –

PUKU'89 did not lemmatise *not*, NAAN only lists *ga* as a translation equivalent. NEN, SEPD and POP simply give the translation equivalents of *not* as *se(go)*, *ga* and *ga se*, thus missing out on *sa*. PUKU gives the translation equivalents *ga*, *sa*, *se* and *ga se*. None of the dictionaries with the exception of ONSD and SEDIBA gives information on grammar, pronunciation, examples of use, indicate circumflexes or tone. ONSD and SEDIBA do much better by giving a more exhaustive treatment including translated examples. ONSD also provides frequency and part of speech information as well as additional information in text boxes.

In tables 6 to 8, author inserted English translations for Afrikaans are given in double square brackets.

Table 6: Dictionary articles for **ga**

PUKU'89	**ga** ontk. -morf., ind. L: nie. [[negative morpheme indicative L (tone) not)]]
NEN	**ga,** neg. part., not, not to; -**ke rate**, I do not want.
POP	**ga** not: **ga ke morutiši** I am not a teacher; at: **ga Madika** at Madika's place; if, when
ONSD	**ga¹** *** *negative morpheme* ■ *(generally marks the negative form of indicative verbs)* ♦ **ga** ke nyake go robala ka pela. *I don't want to go to sleep early.* ◊ **ga** (...) **[+ VERB ENDING in -e]** ■ do/does not ♦ Bašemane **ga** ba rate go bala. *Boys do not like to study.*
SEPD	**ga¹** *neg.* the negative morpheme; not; place of; if; when
NAAN	**ga** (negatiewe bywoord), nie. [[(negative adverb) not]]
PUKU	**ga,** van, na, nie, as, by [[of, to, not, if, at]]; - *e sa le,* dit is nie meer [[it is no more]]; - *se ka,* (daar is) baie [[there is plenty]].
SEDIBA	**ga** nie *not* - **ke kitime** ek hardloop nie *I don't run* - **se** hy/sy/dit/hulle is nie *he she/it/they is/are not* - **se** *ka ja* ek het nie geëet nie *I did not eat* - **a** *bohlale* hy is nie slim nie *he is not clever*
PTLH	No entry
GNSW	**GA** (ga-) [ontkennende vormelement] // [negative formative] *ga re bône* ons sien nie // we don't see

There is no entry for *ga* in PTLH but entries are given in the other nine dictionaries. *SEPD* has an entry for *ga* but does not lemmatise the possessive, *place of* and situative particle *if*, *when* as separate entries. This runs against the lemmatisation policy followed in this dictionary i.e. to separate such homonyms and to allocate homonym numbers. POP also treats the negative morpheme *ga* and the locative *ga* as well as *if*, *when* in the same entry. This is also the case in PUKU where *nie* [not] is given amidst four other unrelated translations. At least one of the examples given illustrates the use of *ga* in an identifying copulative containing the progressive *sa*. The second example *ga se ka*, '(daar is) baie' [there is plenty], however, makes no sense for any of the other related meanings, i.e. *of*, *to*, *if*, *by* given. NEN treats *ga* 'not' in a separate entry and gives an example. No examples are given in SEPD, NAAN and PUKU'89 and therefore are not of much help for text production.

The entries for *ga* in SEDIBA and especially ONSD are much more informative. SEDIBA does well in covering four different negative constructions in the example sentences given, i.e. negation in the indicative present (3.1.1, table 1), indicative identifying copulative (4.1.1.1, table 2), indicative past tense (3.1.3(1), table 1) and indicative descriptive copulative respectively. The examples also indicate two other important aspects, i.e. the use of subject concords of the first person as well as class 1 and that the past tense form of the verb changes back to the present tense. They also illustrate that unlike English, for example, Sepedi does not distinguish between *he is*, *she is*, *they are*, and *it is* — they all convert to *ke* 'it is' and *ga se* 'it is not' in the negative. SEDIBA also gives exam-

ples of *ga se* for both verbs and copulatives. PUKU'89 indicates tone by means of the letters L 'low' and H 'high'. GNSW also indicates tone e.g. high tones *é* and *ó* — low tones are unmarked. ONSD's entry for *ga* is of high lexicographic quality. It gives detailed grammatical guidance stating that *ga* is a morpheme, used in the negative of the indicative and that the verbal ending changes to *-e* illustrated by examples. It also gives frequency information by means of a one, two or three star convention — indicating in this case that *ga* is one of the top most frequently used tokens in a Sepedi corpus, cf. table 4.

Table 7:   Dictionary articles for **sa**

PUKU'89	**sa**[4], neg. morf. sit./rel. L; *gê o sa boe,* as jy nie terugkeer nie [[if you do not return]]; *gê o sa boa,* as jy nie teruggekeer het nie. [[if you did not return]]
NEN	**sa**, adv., still, yet, **ke — ja**, I am still eating;[;] — with the negative, no longer, not; **—ntše**, still.
POP	**sa** of, belonging to: **selêpê sa ka** my axe; not: **gê ba sa boe** if they do not return; still, yet: **ba sa ithuta** they are still studying; he/she/it then: **sa fihla** it then arrived; clear, dawn; disappear
ONSD	**sa**[4] *** *negative morpheme* ■ *(marks the negative form of situative verbs)* ♦ Ge ba **sa** ntefele nka se ba thuše gape. *If they don't pay me, I won't help them again.*
SEPD	No entry
NAAN	No entry
PUKU	**sa**, steeds, nog; - saam met die negatief nie meer nie; *ga a - rate,* hy wil nie meer nie; *ge a - rate,* as hy nie wil nie; - *le,* terwyl.
SEDIBA	**sa** nie *not* **a - we** (terwyl) hy nie val nie *(while) he is not falling*
PTLH	No entry
GNSW	**SA** (**sa-**) [ontkennende vormelement in infinitiewe en partisipiale wyses] // [negative formative in infinitive and participial moods]; *go sa bône* om nie te sien nie // not to see; *re sa bône* (terwyl) ons nie sien nie // we not seeing

In table 7 no entries were given for *sa* in SEPD, NAAN and PTLH. NEN and PUKU treat the negative morpheme *sa* within the article of *still*. If the user reads through all four entries given for *sa*, (s)he will eventually find the information given for the use of *sa* in negative constructions but the possibility of missing the information on negation is high. POP does even worse by treating the possessive, negative, subject concord and progressive in a single entry for *sa*. GNSW does well in stating that *sa* is used in negation of the infinitive and situative moods, illustrated by examples. SEDIBA gives the relevant basic information with an example from the situative. ONSD does well in providing a homonym number, frequency indication, part of speech as well as morphological information and a translated example in a relatively short entry. PUKU'89 is the only dictionary indicating negation with *sa* in the relative mood.

Table 8:   Dictionary articles for **se**

PUKU'89	**se**[4], neg. morf. L; [[negative morpheme L (low tone)]] *go se bônê,* om nie te sien nie. [[not to see]]
NEN	No entry
POP	**se** it/he/she; not
ONSD	**se**[4] ***copulative verb ■ is/are/am not ♦ O lebile kae ge e **se** go Tshikidi? *Where are you off to, if not to Tshikidi?* **se**[5] *** *negative morpheme* ■ *(marks the* negative *form of subjunctive, imperative and consecutive verbs)* ♦ Hlokomela gore o **se** forwe ke morekiši. *Watch out that you are not cheated by the trader.* **…** **sego**[1] *** *copulative verb + rel. marker (go)* **c** SE[4] ■ who/which is/are/am not ♦ Ao ke mantsu a gago e **sego** a ka. *Those are your words, which are not mine.*
SEPD	No entry
NAAN	No entry
PUKU	**se**, *(neg.form.),* nie; *se,* onderwerp -, voorwerpskakel v/d. se klas; *se sa,* nie meer nie. [[subject – object concord of the se class, no more]]
SEDIBA	**se** nie *not* - **ye gae** moenie huis toe gaan nie *don't go home* **ka -** mag/kan/sal - *may/ can/shall/will* - **ankê o - tlê** moenie kom nie (jy) *don't come (you, s.)* **ga - ka ja** ek het nie geeet nie *I did not eat* **mêêtse a - kê a bela** die water moet hoegenaamd nie kook nie *the water should not boil whatsoever* - **sa** nie meer nie *no longer* **se** nie w. (negatiewe kop. ww. b. *not (negative cop. v.)* **re- kgolê** terwyl ons nie ver is nie *while we are not far away* **e bê e-** hy/sy was nie *he/she was not*
PTLH	No entry
GNSW	**SE** (**se-**) [ontkenningsvormelement] // [neg. formative] nie // not; *gore re ~ rutê* sodat ons nie onderrig nie // so that we should not teach; *re ka ~ rutê* ons sal nie/kan nie onderrig nie // we shall not/cannot teach; *re ~ sa ruta* terwyl ons nie meer onderrig nie // while we no longer teach; *ga ~ ra ruta* ons het nie onderrig nie // we did not teach; *re ~ rute* ons onderrig nie gedurig nie // we do not teach habitually. **SE** (**-se**) (d.v.) nié // not; *re ~ ra ka ra ruta* terwyl ons nie onderrig het nie // while we did not [t]each

In table 8 no entries were given for *se* in SEPD, NEN, NAAN and PTLH. POP gives a translation equivalent following translation equivalents of *se* as a concord. PUKU treats the negative together with subject and object concords but the information on negation of the progressive is valuable. The entries given in ONSD, SEDIBA and GNSW are much more informative giving a variety of information types such as frequency, part of speech, multiple examples, negation in a number of different constructions, etc. They contain most of the elements required for a model entry for *se* in paper dictionaries, cf. discussion below. As far as *se ke* (3.8, table 1 and 4.2.1.8, table 3) is concerned, Lombard et al. (1985: 188) regard *ke* as an auxiliary verb stem. From a user perspective *se ke* should be lemmatised and treated or at least be treated in the articles of *se* and *ke*. SEPD has an entry for *se ke* with translation equivalents *do not, don't*. GNSW treats *se ke* in the article of *ke* with reference to its seventh lemma for *ka*. POP

has an entry for *se ke* with translation equivalent *must not* but under the lemma *seke*.

Table 9:   Dictionary articles for **ga se**

PUKU'89	No entry
NEN	No entry
POP	No entry
ONSD	**ga se**[1] *** *copulative particle* ■ is/are not ♦ Batho bao **ga se** ba lapa la ka. *Those people are not my family.* **ga se**[2] *** *negative morpheme* ■ did not *(marks the negative form of past tense indicative verbs)* ♦ **Ga se** ke bone gore ke sefatanaga sa mang se se mo fološitšego mo kgorwaneng. *I did not see whose car dropped her off at the gate.*
SEPD	No entry
NAAN	No entry
PUKU	No entry
SEDIBA	No entry
PTLH	No entry
GNSW	No entry

SEDIBA gives an example of *ga se* (313(1)(2), 4.1.1, 4.2.1.1.3(1)(2)) in the negative of the past tense in the article of *se* in table 8 but only ONSD presents it as lemmas with full treatment.

   Ka se (3.1.2, 3.2.2, 3.3.2, table 1) is not lemmatised in any of the dictionaries but ONSD gives *ka se* as part of an example for *sa* in table 7. A model entry for *ka se* will be suggested in the next paragraph.

7.   The compilation of model entries for paper Sepedi dictionaries for the extracted negative morphemes

In the final columns of tables 1 to 3 above the negative morphemes *ga*, *sa*, *se(go/ng)*, *ga se* and *ka se* were extracted from the negation rules for verbal moods and copulatives. These morphemes are proposed as required lemmas in the macrostructure in Sepedi dictionaries. It will also be attempted to formulate the required essential scope of information types and lexicographic conventions to be considered by the lexicographer in their microstructural treatment in terms of grammatical and semantic information. The lexicographer must strive to cover the full scope of use of a specific negation morpheme in the lexicographic treatment. So, for example, should *ga se* not only be lemmatised but the compiler should also cover its use in verbal moods as past tense negative (3.1.3(1)(2), table 1) and as negative copulative (4.1.1.1, table 2). Such guidance is essential for especially text production with copulatives. No formal user studies of negation has as yet been done for Sepedi but a common error observed in tests of undergraduate students is incorrect negation in the indica-

tive of the static, identifying copulative (4.2.1.1.1, table 2). Learners would for example correctly construct the copulative *I am not a teacher* as *ga ke morutiši* but incorrectly apply negation with *ga* to *the man is not a teacher* as **monna ga o morutiši* or even **monna ga ke morutiši* instead *of monna ga se morutiši*. From the 10 dictionaries consulted for their treatment of *ga* in table 6, only ONSD provides the required guidance by lemmatising and treating *ga se¹*.

Lexicographers should firstly decide on the generic scope of information types to be presented, i.e. which data types should be considered in all cases. They should then decide on the conventions, structural markers and layout strategies to be used consistently. Consider the following recommended information types for negative morphemes in Sepedi:

— Homonym differentiation, preferably by homonym numbers presented as superscripts, cf. ONSD, SEPD, PUKU'89 in tables 6 to 9.
— Frequency information by means of a specific convention such as stars or filled/unfilled diamonds, cf. ONSD in tables 6 to 9.
— Part of speech.
— Translated examples.
— Pronunciation guidance.
— Grammatical and text production guidance, cf. ONSD in tables 6 to 9.
— Tonal indication low/high, cf. PUKU'89 in tables 6 to 8.
— Indication of circumflexes, cf. SEDIBA, GNSW and POP.
— Text boxes.
— Front and back matter.
— Cross references to internal and external sources.
— Running footers.

Consider also the following recommendations for dictionary conventions and structural markers:

— Lemma in boldface.
— Translation equivalents in Roman.
— Source language examples in boldface and italics.
— Translations of examples in italics.
— Use of indicators such as blocks and diamonds to separate data types, cf. ONSD.
— Hard carriage returns, i.e. information on a new line, cf. ONSD in table 6.

Note, however, that there are no binding rules for conventions and structural markers but the lexicographer will be well-advised to follow the practices that users became used to in other dictionaries such as presenting the lemma in lowercase and in boldface, translation equivalents in Roman, etc.

The suggested scopes and model entries for each of the negative morphemes *ga*, *sa*, *se*, *ga se*, and *ka se* are briefly presented in the following paragraphs.

For *ga* the scope includes the indicative present (3.1.1) and past (3.1.3(3)(4)) for verbs and all copulatives in the indicative of identifying (4.1.1.1), descriptive (4.1.2.1) and associative (4.1.3.1), static copulatives and the indicative of dynamic copulatives (4.2.1.1.1), (4.2.1.1.3(3)(4)). ONSD's entry in (2) gives good treatment for *ga* in respect of the negative of the indicative present (3.1.1).

(2)

ga[1] *** *negative morpheme* ■ *(generally marks the negative form of indicative verbs)*
♦ **ga** ke nyake go robala ka pela. *I don't want to go to sleep early.*
◊ **ga** (...) **[+ VERB ENDING in -e]** ■ do/does not
♦ Bašemane **ga** ba rate go bala. *Boys do not like to study.*

A reference to the lemmas *ga se[1]* and *ga se[2]* is advisable so that the user will not miss the treatment of the indicative past for verbs (3.1.3(3)(4), table 1) and the copulatives (4.1.1.1, table 2 and 4.2.1.1.3.(1)(2), table 3). This entry could be further enhanced by an example from class 1 to indicate that the subject concord changes from an *o* in the positive to *a* in the negative. Indication of circumflexes as in POP and PUKU is also recommended.

For *sa* the scope includes situative present (3.2.1), past (3.2.3), relative present (3.3.1), and past (3.3.3) in table 1 for verbs and all dynamic copulatives in the situative (4.2.1.2.1), (4.2.1.2.3) and relative (4.2.1.3.1), (4.2.1.3.3) in table 3.

PUKU'89 provides a good entry for *sa* given in (3).

(3)

sa[4], neg. morf. sit./rel. L; *gê o sa boe*, as jy nie terugkeer nie [[if you do not return]]; *gê o sa boa*, as jy nie teruggekeer het nie. [[if you did not return]]

The different *sa*-morphemes are separated and lemmatised with superscript homonym numbers. It was the only entry found indicating that *sa* is used as negation morpheme for both the situative and relative moods, illustrated by translated examples from present and past tense forms of the situative and indicating tone. The entry can be improved by adding frequency information, treatment and examples in respect of the past tense negatives (3.2.3 and 3.3.3, table 1) and dynamic copulatives (4.2.1.2.1, 4.2.1.2.3, 4.2.1.3.1 and 4.2.1.3.3) in table 3. Indication of circumflexes, cf. POP and PUKU, as well as tone on the vowels themselves is also recommended.

For *se* the scope includes consideration of the subjunctive (3.4), habitual (3.5), consecutive (3.6), infinitive (3.7) and imperative (3.8) for verbs (table 1); for static copulatives: identifying, situative (4.1.1.2), relative (4.1.1.3), descriptive, situative (4.1.2.2), relative (4.1.2.3), associative, situative (4.1.3.2), relative (4.1.3.3) (table 2) and for dynamic copulatives situative (4.2.1.2.1), (4.2.1.2.3) and relative (4.2.1.3.1), (4.2.1.3.3) in table 3.

SEDIBA provides good entries for *se* given in (4):

(4)

se nie *not* - **ye gae** moenie huis toe gaan nie *don't go home* **ka -** mag/kan/sal - *may/ can/shall/will* **- ankê o - tlê** moenie kom nie (jy) *don't come (you, s.)* **ga - ka ja** ek het nie geeet nie *I did not eat* **mêêtse a - kê a bela** die water moet hoegenaamd nie kook nie *the water should not boil whatsoever* **- sa** nie meer nie *no longer*

se nie w. (negatiewe kop. ww. b. *not (negative cop. v.)* **re- kgolê** terwyl ons nie ver is nie *while we are not far away* **e bê e-** hy/sy was nie *he/she was not*

SEDIBA's entries are strong on coverage, they give examples from the impera-tive, future tense, subjunctive mood, indicative past tense, use with the auxil-iary verb stem *-ke*, negation with the progressive, copulative descriptive, and even some guidance on the use of a copula in a past tense construction. The run-on layout, although indented, is less user friendly, e.g. compared to ONSD's entry for *se* which also gives grammatical and frequency information. Homonym indication by means of superscript numbers is recommended.

For *ga se* the scope includes indicative past (3.1.3(1)(2)) for verbs in table 1 and dynamic copulatives (4.2.1.1.3(1)(2)) in table 3.

ONSD is the only dictionary treating *ga se* in an excellent way distin-guishing with homonym numbers between the copulative particle and the negative morpheme.

(5)

ga se[1] *** *copulative particle* ■ is/are not
♦ Batho bao **ga se** ba lapa la ka. *Those people are not my family.*
ga se[2] *** *negative morpheme* ■ did not *(marks the negative form of past tense indica-tive verbs)* ♦ **Ga se** ke bone gore ke sefatanaga sa mang se se mo fološitšego mo kgorwaneng. *I did not see whose car dropped her off at the gate.*

Consider also the suggestion for model entries for *ga se* by Prinsloo (2002: 36) in example (6):

(6)

ga se [cop. part. neg.] it is not, **ga se phošo ya gago** it is not your fault; he/she/it is not, **Satsope ga se morutiši, ke mongwaledi** Satsope is not a teacher, she is a secretary; they are not, **dingaka ga se mahodu** doctors are not thieves ► **ke** ► BM1.1; ■■■■■
…
se, ga ~ ► **ga se**

In (6) a cross-reference marker "►" informs the user that more information is available in the back matter of the dictionary. For the user who looked up *se* but actually need information about *ga se* a reference entry is given at *se* with a cross-reference to *ga se* where a full treatment is given.

Provision of a text box at *ga se*[1] in (5) for indicative, identifying, static copulatives (4.1.1.1, table 2) is recommended as learners or inexperienced users are often unfamiliar with the fact that no distinction is made in Sepedi for *he* is

not, *she* is not, *they* are not and *it* is not and often result in incorrect utterances for, e.g. he/she is a teacher or they are teachers such as *ga a morutiši or *ga ba barutiši respectively.

> Unlike in English there are not different constructions in Sepedi for *he* is not, *she* is not, *they* are not and *it* is not — all convert to the same construction: **ga se** 'it is not'

Treatment of *ga se²* should include examples from the alternative negative strategies (3.1.3(1)(2), table 1) and could also be nicely complemented by a page footer containing the set of alternative concords used or a reference to the front, middle or back matter where all the alternative concords are presented together.

> 1st Person singular **ka**, 1st Person plural **ra**, 2nd Person singular **wa**, 2nd Person plural **la**, Class: 1 **a**, 2 **ba**, 3 **wa**, 4 **ya**, 5 **la**, 6 **a**, 7, **sa**, 8 **tša**, 9 **ya**, 10 **tša**, 14 **bja**, 15 – 18 **gwa**

For *ka se* the scope includes the future tense of the indicative (3.1.2), situative (3.2.2) and relative (3.3.2) in table 1, and the future tense of all dynamic copulatives in the indicative (4.2.1.1.2), situative (4.2.1.2.2) and relative (4.2.1.3.2) in table 3.

As mentioned above, none of the dictionaries lemmatised *ka se*. Consider an attempt towards a model entry for *ka se* in (7).

(7)

ka se¹ *** [kɑ se] (*negative of the potential **ka***) ■ can not, may not. ***Maripane a ka se kgônê***. *Maripane will not be able to **nka se arabê potšišô yê** I can not answer this question*

ka se² *** [kɑ se] (*negative of the future tense indicator **tlo***) ■ shall/will not ***re ka se boê*** *we shall not come back **gê ba ka se arabê** if they will not answer **yô a ka se ithutêgo ka mafolofolo** he who will not study hard*

Provision of a text box at *ka se* is also recommended to inform the user about an important difference between the negative of the future in English and Sepedi.

> In Sepedi there is no distinction between the negative forms for shall/will not (future tense) and can not (potential), both are expressed by **ka se**. You have to determine from the context which meaning applies.

The examples in *ka se¹* indicate that the subject concord of class 1 is *a* and that *ke + ka* changes to *nka* and in *ka se²* illustrate and confirm the use of *ka se* in the indicative, situative and relative. In this way the use of examples are not merely intended to confirm the existence of a word in the language but adds to the meaning information.

The text boxes at *ga se* and *ka se* appropriately illustrate the nature and purpose of text boxes in terms of Gouws and Prinsloo (2010: 501):

> Text boxes are salient dictionary entries and as such they are used to place more than the default focus on a specific data item … guidance in terms of sense, contrasting related words, restrictions on the range of application, register, pronunciation, et cetera. … Where dictionaries have a text production function data could be included in a text box to emphasise the use or non-use of certain combinations and collocations as well as proscriptive guidance.

As far as the required information for the treatment of negative morphemes is concerned, one should not attempt to compile a one-size-fits-all set of information types. For paper dictionaries the lexicographer should keep in mind that the size of the dictionary, i.e. available physical space for an article is always a crucial consideration. Therefore, one cannot expect lengthy detailed articles for negative morphemes in small bilingual dictionaries such as POP, NEN, PUKU, PUKU'89, SEDIBA, etc. The challenge is maximum utilization of limited space and from the dictionaries discussed in reference to tables 6 to 9, ONSD comes closest to covering the most important information types in relatively short articles and in a user-friendly layout.

As a final suggestion for model entries consider also the front matter entry in figure 1:

Lemma in **boldface**

Homonyms (unrelated meanings) **superscript number**

Frequency indicator

Phonetic transcription

Grammar guidance

Translations

Sepedi examples in bold italics

Translation of Sepedi examples in italics

Tonal indication

Circumflexes

ka se² *** [kɑ se] (kà sè) *(negative of the future tense indicator tlo)* ■ shall/will not *re ka se boê* we shall not come back *gê ba ka se arabê* if they will not answer *yô a ka se ithutêgo ka mafolofolo* he who will not study hard

Shaded / text box for additional guidance

In Sepedi there is no distinction between the negative forms for shall/will not (future tense) and can not (potential), both are expressed by **ka se**. You have to determine from the context which meaning applies.
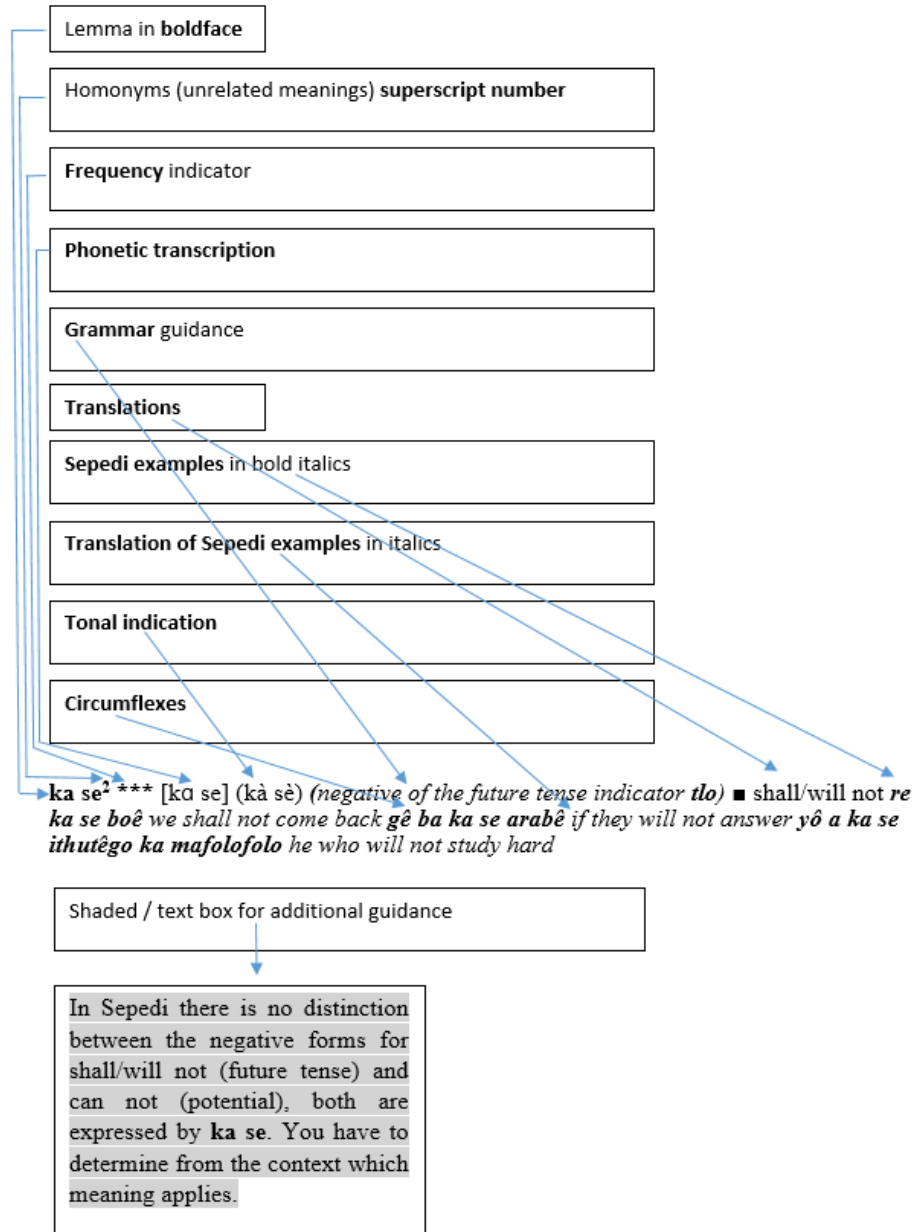
Figure 1:   Suggestion for a model entry in the user's guide

Presenting figure 1 in the user's guide to the dictionary will guide the user to appreciation of the information types presented in the articles.

8.   Conclusion

Within the space limitations of an article it has been attempted to give an overview of negation in verbs and copulatives and the frequency of occurrence of negative morphemes in Sepedi. The focus was on the different negation strategies and the compilation of a list of lemma candidates to be treated in dictionaries for this language. A critical evaluation of a number of Sepedi dictionaries and suggestions for the scope and conventions for the treatment of negative morphemes were given. Model entries for dictionary articles for negative morphemes and user guidance in the front matter as well as comprehensive back matter entries were proposed.

Acknowledgements

Endnote

1.   The Sepedi corpus is marked-up for part of speech which helped to determine frequency counts for the different negative morphemes. However, in order to verify these counts, manual calculations were also done on sections of the corpus to compensate for tagging errors or tags not refined enough to rule out false positives. The counts given in table 4 are therefore only intended to confirm that negative morphemes are frequently used in Sepedi.

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Appendix A: Verbal moods in Sepedi

	Positive	Negative
Indicative		
Pres	monna o bolela Sepedi 'the man speaks Sepedi'	monna ga a bolele Sepedi 'the man does not speak Sepedi'
Fut	monna o tlo bolela Sepedi 'the man will speak Sepedi'	monna a ka se bolele Sepedi 'the man will not speak Sepedi'
Past	monna o boletše Sepedi 'the man spoke Sepedi'	monna ga se a bolela Sepedi 'the man did not speak Sepedi'
Situative		
Pres	(ge) monna a bolela Sepedi '(if) the man speaks Sepedi'	(ge) monna a sa bolele Sepedi '(if) the man does not speak Sepedi'
Fut	(ge) monna a tlo bolela Sepedi '(if) the man will speak Sepedi'	(ge) monna a ka se bolele Sepedi '(if) the man will not speak Sepedi'
Past	(ge) monna a boletše Sepedi '(if) the man spoke Sepedi'	(ge) monna a sa bolela Sepedi '(if) the man did not speak Sepedi'
Relative		
Pres	monna yo a bolelago Sepedi 'the man who speaks Sepedi'	monna yo a sa bolelego Sepedi 'the man who does not speak Sepedi'
Fut	monna yo a tlogo bolela Sepedi 'the man who will speak Sepedi'	monna yo a ka se bolelego Sepedi 'the man who will not speak Sepedi'
Past	monna yo a boletšego Sepedi 'the man who spoke Sepedi'	monna yo a sa bolelago Sepedi 'the man who did not speak Sepedi'
Subjunctive		
	(gore) monna a bolele Sepedi '(so that) the man must speak Sepedi'	(gore) monna a se bolele Sepedi '(so that) the man must not speak Sepedi'
Habitual		
	monna a bolele Sepedi 'the man (usually) speaks Sepedi'	monna a se bolele Sepedi 'the man (usually) does not speak Sepedi'
Consecutive		
	monna a bolela Sepedi '(then) the man spoke Sepedi'	monna a se bolele Sepedi '(then) the man did not speak Sepedi'
Infinitive		
	go bolela Sepedi 'to speak Sepedi'	go se bolele Sepedi 'not to speak Sepedi'
Imperative		
	bolela Sepedi! 'speak Sepedi!'	se bolele Sepedi! 'do not speak Sepedi!'

Appendix B: Static and dynamic copulatives in Sepedi

STATIC COPULATIVE	Identifying			
		1	Indicative	
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
Ke moruti	ga ke moruti	1	monna ke moruti	monna ga se moruti
		2	Situative	
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
(ge) ke le moruti	(ge) ke se moruti	1	(ge) monna e le moruti	(ge) monna e se moruti
		3	Relative	
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
yo ke lego moruti	yo ke sego moruti	1	monna yo e lego moruti	monna yo e sego moruti
STATIC COPULATIVE	Descriptive			
		1	Indicative	
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
Ke bohlale	ga ke bohlale	1	monna o bohlale	monna ga a bohlale
		2	Situative	
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
(ge) ke le bohlale	(ge) ke se bohlale	1	(ge) monna a le bohlale	(ge) monna a sa se bohlale
		3	Relative	
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
yo ke lego bohlale	yo ke sego bohlale	1	monna yo a lego bohlale	monna yo a sa sego bohlale
STATIC COPULATIVE	Associative			
		1	Indicative	
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
Ke na le bohlale	ga ke na (le) bohlale	1	monna o na le bohlale	monna ga a na (le) bohlale
		2	Situative	
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
(ge) ke na le bohlale	(ge) ke se na (le) bohlale	1	(ge) monna a na le bohlale	(ge) monna a se na (le) bohlale
		3	Relative	
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
yo ke nago le bohlale	yo ke se nago (le) bohlale	1	monna yo a nago le bohlale	monna yo a se nago (le) bohlale

DYNAMIC COPULATIVE	Identifying			
		1 Indicative		
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
Ke ba moruti	ga ke be moruti	1 monna e ba moruti		monna ga e be moruti
		2 Situative		
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
(ge) ke eba moruti	(ge) ke sa be moruti	1 (ge) monna e eba moruti		(ge) monna e sa be moruti
		3 Relative		
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
yo ke bago moruti	yo ke sa bego moruti	1 monna yo e bago moruti		monna yo e sa bego moruti
		4 Subjunctive		
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
(gore) ke be moruti	(gore) ke se be moruti	1 (gore) monna e be moruti		(gore) monna e se be moruti
		5 Habitual		
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
ke be moruti	ke se be moruti	1 monna e be moruti		monna e se be moruti
		6 Consecutive		
Person: 1PS - 2PP				Classes 1-18
Pos	Neg		Pos	Neg
ka ba moruti	ka se be moruti	1 monna ya ba moruti		monna ya se be moruti
		7 Infinitive		
Pos	Neg			
go ba moruti	go se be moruti			
		8 Imperative		
Pos	Neg			
eba moruti!	se be moruti!			

DYNAMIC COPULATIVE	Descriptive					
			1	Indicative		
Person: 1PS - 2PP						Classes 1-18
Pos	Neg				Pos	Neg
Ke ba bohlale	ga ke be bohlale			1	monna o ba bohlale	monna ga a be bohlale
			2	Situative		
Person: 1PS - 2PP						Classes 1-18
Pos	Neg				Pos	Neg
(ge) ke eba bohlale	(ge) ke sa be bohlale			1	(ge) monna a eba bohlale	(ge) monna a sa be bohlale
			3	Relative		
Person: 1PS - 2PP						Classes 1-18
Pos	Neg				Pos	Neg
yo ke bago bohlale	yo ke sa bego bohlale			1	monna yo a bago bohlale	monna yo a sa bego bohlale
			4	Subjunctive		
Person: 1PS - 2PP						Classes 1-18
Pos	Neg				Pos	Neg
(gore) ke be bohlale	(gore) ke se be bohlale			1	(gore) monna a be bohlale	(gore) monna a se be bohlale
			5	Habitual		
Person: 1PS - 2PP						Classes 1-18
Pos	Neg				Pos	Neg
ke be bohlale	ke se be bohlale			1	monna a be bohlale	monna a se be moruti
			6	Consecutive		
Person: 1PS - 2PP						Classes 1-18
Pos	Neg				Pos	Neg
ka ba bohlale	ka se be bohlale			1	monna a ba bohlale	monna a se be bohlale
			7	Infinitive		
Pos	Neg					
go ba bohlale	go se be bohlale					
			8	Imperative		
Pos	Neg					
eba bohlale!	se be bohlale!					

DYNAMIC COPULATIVE	Associative				
			1 Indicative		
Person: 1PS - 2PP					Classes 1-18
Pos	Neg			Pos	Neg
Ke ba le bohlale	ga ke be le bohlale		1	monna o ba le bohlale	monna ga a be le bohlale
			2 Situative		
Person: 1PS - 2PP					Classes 1-18
Pos	Neg			Pos	Neg
(ge) ke eba le bohlale	(ge) ke sa be le bohlale		1	(ge) monna a eba le bohlale	(ge) monna a sa be le bohlale
			3 Relative		
Person: 1PS - 2PP					Classes 1-18
Pos	Neg			Pos	Neg
yo ke bago le bohlale	yo ke sa bego le bohlale		1	monna yo a bago le bohlale	monna yo a sa bego le bohlale
			4 Subjunctive		
Person: 1PS - 2PP					Classes 1-18
Pos	Neg			Pos	Neg
(gore) ke be le bohlale	(gore) ke se be le bohlale		1	(gore) monna a be le bohlale	(gore) monna a se be le bohlale
			5 Habitual		
Person: 1PS - 2PP					Classes 1-18
Pos	Neg			Pos	Neg
ke be le bohlale	ke se be le bohlale		1	monna a be le bohlale	monna a se be le moruti
			6 Consecutive		
Person: 1PS - 2PP					Classes 1-18
Pos	Neg			Pos	Neg
ka ba le bohlale	ka se be le bohlale		1	monna a ba le bohlale	monna a se be le bohlale
			7 Infinitive		
Pos	Neg				
go ba le bohlale	go se be le bohlale				
			8 Imperative		
Pos	Neg				
eba le bohlale!	se be le bohlale!				