

The ‘new adjectives’ of Tswana

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Abstract. This paper analyzes a set of Tswana words expressing meanings of the type commonly expressed by adjectives, occurring in the same syntactic positions as the words traditionally identified as adjectives, but different from them in class agreement morphology. Most of these words also have nominal uses, and the paper concludes that the ‘new adjectives’ constitute an emerging word class whose development follows from the use of nouns as descriptive predicates in the same predicative construction as adjectives.

1. Introduction

In Bantu languages, a class of adjectives can generally be delimited on the basis of the following two criteria: adjectives show class prefixes identical to those of nouns, of differing from them only marginally, but noun stems are compatible with a limited number of class prefixes, and this constitutes a lexical property of nouns, whereas adjectives have forms for all noun classes (i.e., for all possible combinations of gender and number values), and their prefix is determined by agreement rules. Such a class of adjectives is supposed to have already been present at Proto-Bantu level. However, Southern Bantu languages also have a class of words that do not meet this morphological characterization, although their syntactic behavior and semantic properties suggest identifying them as adjectives too. The question addressed in this paper is the emergence of a second class of adjectives in the languages in question.

The situation analyzed in this paper will be illustrated by Tswana.¹ I am not in a position to determine the exact extension of this phenomenon among Bantu languages, but at least the major Southern Bantu languages for which detailed descriptions are available (Southern Sotho, Northern Sotho, Zulu, Xhosa, Swati) show a situation identical to that of Tswana in all relevant respects. For readers having some familiarity with Swahili, it may be useful to mention immediately that the ‘new adjectives’ found in Southern Bantu languages are very different in all respects from the non-agreeing adjectives found in Swahili. In particular, the contact with Arabic presumably played a crucial role in the development of this class of Swahili adjectives, whereas language contact played no role in the emergence of a class of ‘new adjectives’ in Southern Bantu languages.

¹ Tswana is spoken by approximately 5 million speakers in Botswana and South Africa. For general information about Tswana grammar, see (Cole 1955), (Creissels & al. 1997), (Creissels 2003).

The paper is organized as follows: in section 2, I give an overview of some basic aspects of Tswana morphosyntax directly relevant to the question addressed in this paper. In section 3, I present the morphosyntactic behavior of words belonging to the category traditionally labeled 'adjective', the reflex of the adjective category reconstructed at Proto-Bantu level. In section 4, I discuss the notion of 'relative' traditionally used in descriptions of Southern Bantu languages for a set of forms used as noun dependents, and I show that a subset of the set of forms to which this label is traditionally applied constitutes an emerging word class functionally and syntactically similar to the adjective class inherited from Proto-Bantu, but with different morphological properties. In section 5, I propose a possible diachronic scenario accounting for the emergence of this second class of adjectives.²

2. Some basic aspects of Tswana morphosyntax

2.1. Noun classes

In descriptions of Bantu languages, a noun class is a set of nominal *forms* (NOT *lexemes*) that have the same agreement properties: two nominal forms are considered as belonging to the same class if and only if they trigger the choice of the same agreement markers in all constructions in which nouns are involved in agreement mechanisms. Tswana has 12 noun classes whose numbering refers to the traditional numbering of reconstructed Proto-Bantu noun classes.

As a rule, noun forms that have the same agreement properties share a prefix characteristic of the class in question, but the correlation between noun prefixes and agreement classes is not perfect.

Number marking is an important function of noun classes. Some classes include singular forms, others include plural forms, and nominal lexemes can be grouped into genders on the basis of correspondences such as *mosadi* [mò-sádí] (cl. 1) 'woman' / *basadi* [bà-sádí] (cl. 2) 'women'. *Mosadi* 'woman' as a singular form belongs to class 1, but *mosadi* is also the quotation form of a nominal lexeme belonging to gender 1/2. An important feature of Bantu noun classes is that there is no possible decomposition of noun class prefixes or class agreement markers as combinations of number markers and gender markers.

2.2. The structure of Tswana NPs

As illustrated by ex. (1), in which a head noun combines with two adjectives, a relative clause and a demonstrative, Tswana NPs have two very general characteristics: noun dependents follow their head, and express class agreement with their head.

² I thank Leston Buell for his very helpful comments on a previous version of this paper.

cl.8/10	<i>tse</i>	[tsé]
cl.9	<i>e</i>	[é]
cl.11	<i>lo</i>	[ló]
cl.14	<i>jo</i>	[dʒó]
cl.15/17	<i>go, fa, mo, ko</i>	[χó], [fá], [mó], [kó] ⁶

2.3. Canonical verbal predication

Tswana has no case distinction between NPs in core syntactic roles, but the indexation of arguments by means of verbal prefixes provides a firm basis for recognizing a syntactic function 'subject' grouping together the single core argument S of intransitive verbs and the agent A of prototypical transitive verbs, contrasting with a syntactic function 'object' including the patient of prototypical transitive verbs.

Verb forms heading independent assertive or interrogative clauses include an obligatory prefix representing the single core argument S of intransitive verbs and the agent A of prototypical transitive verbs, designated as *subject marker*.⁷

If a co-referent NP is present, the subject marker expresses class agreement with it. In the absence of a co-referent NP, subject markers that do not belong to 1st or 2nd person are interpreted anaphorically, triggering the identification of the argument they represent to a contextually salient referent compatible with the class expressed by the subject marker – ex. (3).

(3) a. *Ngwana o thubile mae.*

ŋ^w-àná ú-t^hùbílé mà-í
 CL1-child CL1-break:PRF CL6-egg
 'The child broke the eggs.'

b. *Ngwana o tsile.*

ŋ^w-àná ú-tsílè
 CL1-child CL1-come:PRF
 'The child came.'

c. *O thubile mae.*

ú-t^hùbílé mà-í
 CL1-break:PRF CL6-egg
 'He/She broke the eggs.'

d. *O tsile.*

ú-tsílè
 CL1-come:PRF
 'He/she came.'

⁶ Agreement in class 15/17 shows some complications whose historical explanation is that this class has absorbed the Proto-Bantu classes 16 and 18. On the changes undergone by the Bantu locative class system in Tswana, see (Creissels 2009).

⁷ On Tswana verb morphology, see (Creissels & al. 1997), (Creissels 2006).

e. **Ngwana thubile mae.*

f. **Ngwana tsile.*

As illustrated by ex. (3a&c), the object of transitive verbs is not obligatorily indexed on the verb form, but topical objects whose precise description is considered superfluous by the speaker are represented by object markers prefixed to verbs. Object markers immediately precede the verb stem and may be separated from subject markers by TAM or negation markers – ex. (3g-h).

(3) g. *Ngwana o a thubile.*

ŋ^w-àná ú-à-t^húbílè
 CL1-child CL1-CL6-break:PRF
 'The child broke them (the eggs).'

h. *Ngwana o tlaa a thuba.*

ŋ^w-àná ú-tl^hà-á-t^húbà
 CL1-child CL1-FUT-CL6-break:PRF
 'The child will break them (the eggs).'

Tswana has a rigid constituent order *Subject-Verb-Objects-Obliques*.

2.4. Other predicative constructions

2.4.1. Identificational predication

NPs are used in predicate function in a construction that can be schematized as (N_1) *ID N₂*, in which *ID* is semantically an identification operator expressing that N_2 is an adequate designation of the entity to which N_1 refers. Depending on the TAM value of the clause, the identification operator may be, either an irregular and defective copulative verb, as in ex. (4), or a form that has no verbal characteristic.

(4) a. (*Nna*) ***ke tlaa bo ke le monna.***

(̀nà) kì-tl^hà-bò kí-lí mò-ínà
 (1SG) 1SG-FUT-AUX 1SG-COP.PTCP CL1-man
 'I **will be** a man.'

b. *Kitso o ne a le ngwana.*

kítsó ú-nè á-lí ŋ^w-àná
 Kitso CL1-AUX CL1-COP.PTCP CL1-child
 'Kitso **was** a child.'

In the indicative present positive, for which no form of the copulative verb is available, the identification operator is, either a proclitic subject marker of 1st or

2nd person,⁸ if the entity to which an identification is attributed is a speech act participant, or the invariable identification marker *ke* [kí] ‘he is, she is, it is, they are’. In the indicative present negative, for which no form of the copulative verb is available either, the identification operator is, either a word consisting of a negation marker and a 1st or 2nd person marker,⁹ or the negative identification marker *ga se* [χàsí], in which *ga* is a negation marker, and *se* can be analyzed as an allomorph of the identification marker *ke*.

- (5) a. *(Wena) o ngwana.*
 (wèná) ù-ŋ^w-àná
 (2SG) 2SG-CL1-child
 ‘You are a child.’
- b. *(Wena) ga o ngwana.*
 (wèná) χà-ú ŋ^w-àná
 (2SG) NEG-2SG CL1-child
 ‘You are not a child.’
- c. *Lepodisi le ke moaki.*
 lì-pòdísi lé kí mú-àkì
 CL5-policeman CL5.DEM ID CL1-liar
 ‘This policeman is a liar.’
- d. *Lepodisi le ga se moaki.*
 lì-pòdísi lé χà-sí mú-àkì
 CL5-policeman CL5.DEM NEG-ID CL1-liar
 ‘This policeman is not a liar.’
- e. *Ngaka e ke moaki.*
 ñàkà é kí mú-àkì
 [CL9]-doctor CL9.DEM ID CL1-liar
 ‘This doctor is a liar.’
- f. *Ngaka e ga se moaki.*
 ñàkà é χà-sí mú-àkì
 [CL9]-doctor CL9.DEM NEG-ID CL1-liar
 ‘This doctor is not a liar.’
- g. *Ke moaki.*
 kí mú-àkì
 ID CL1-liar
 ‘He/she is a liar.’
- h. *Ga se moaki.*
 χà-sí mú-àkì
 NEG-ID CL1-liar
 ‘He/she is not a liar.’

2.4.2. Descriptive predication

The term ‘descriptive predication’ is conventionally used here as a label for a predicative construction that formally differs from identificational predication in the third person of the indicative present only. Descriptive predication is used in particular to express the localization of an entity, as in ex. (6) & (7) below, but has other uses that will be presented in the following sections, since they are directly relevant to the question addressed in this paper.

As illustrated by ex. (6), in descriptive predication, the same copula is used as in identificational predication – ex. (6a), and in the indicative present with 1st or 2nd person subjects, the predicate is preceded by the same person markers as in identificational predication – ex. (6b).

⁸ The 1st and 2nd person subject markers attached to identificational predicates are *ke* [kì-] (1st sg), *o* [ù-] (2nd sg), *re* [rì-] (1st pl), and *lo* [lù-] (2nd pl). They are identical to the subject markers prefixed to verbs in the indicative present positive and some other tenses.

⁹ In combination with the negation marker, the 1st and 2nd person subject markers have the same segmental shape as in the positive, but take a high tone. The same variation in the tone of the 1st and 2nd person subject markers is observed when the negation marker *ga* is prefixed to a verb form.

- (6) a. *Basadi ba ne ba le fa.*
 bà-sádí bá-nè bá-lí fà
 CL2-woman CL2-AUX CL2-COP.PTCP here
 'The women were here.'
- b. *(Wena) o kae?*
 (wèná) ù-kàì
 (2SG) 2SG-where
 'Where are you?'

Ex. (7) illustrates the distinction between identificational and descriptive predication in the indicative present with 3rd person subjects. Instead of the invariable identification marker found in identificational predication, the descriptive predicate is preceded in the positive by a proclitic subject marker expressing class agreement with the subject, and in the negative, by a word consisting of a negation marker followed by a subject marker expressing class agreement.

- (7) a. *Monna o fa.*
 mò-íná ú-fà
 CL1-man CL1-here
 'The man is here.'
- b. *Basadi ba fa.*
 bà-sádí bá-fà
 CL2-woman CL2-here
 'The women are here.'
- c. *Lepodisi ga le fa.*
 lì-pòdísí χà-lí fà
 CL5-policeman NEG-CL5 here
 'The policeman is not here.'

The full list of the proclitic subject markers found in the 3rd person of the indicative present positive in descriptive predication is given in (8).

- (8) *The 3rd person subject markers used with descriptive predicates in the indicative present positive*

cl.1	<i>o</i>	[ó]
cl.2	<i>ba</i>	[bá]
cl.3	<i>o</i>	[ó]
cl.4	<i>e</i>	[í]
cl.5	<i>le</i>	[lí]
cl.6	<i>a</i>	[á]
cl.7	<i>se</i>	[sí]
cl.8/10	<i>dí</i>	[dí]

cl.9	<i>e</i>	[é]
cl.11	<i>lo</i>	[lú]
cl.14	<i>bo</i>	[bú]
cl.15/17	<i>go</i>	[χú]

Note that, as illustrated by ex. (9), this paradigm of subject markers is identical to that used with verbs in some tenses (in this example, the indicative perfect positive).

- (9) a. *Mosadi o fa.*
 mù-sádí ú-fà
 CL1-woman CL1-here
 'The woman is here.'
- b. *Mosadi o tsile.*
 mù-sádí ú-tsílè
 CL1-woman CL1-come:PRF
 'The woman has come.'
- c. *Lepodisi le fa.*
 lì-pòdísí lí-fa
 CL5-policeman CL5-here
 'The policeman is here.'
- d. *Lepodisi le tsile.*
 lì-pòdísí lí-tsílè
 CL1-policeman CL5-come:PRF
 'The policeman has come.'

In the negative, the same subject markers combine with the negative marker *ga* [χá-], with the exception of class 1, in which the subject marker in combination with the negative marker is not *o* [-ó], but *a* [-á]. The same variation is observed with subject markers prefixed to verbs.

A general property of descriptive predicates is that sequences 'proclitic subject marker + descriptive predicate' expressing descriptive predication in the indicative present positive can be converted into noun dependents by simply combining with the attributive linker – ex. (10).¹⁰

- (10) a. *Monna o mo koloing.*
 mù-ńná ú-mó kólóí-ṅ
 CL1-man CL1-in car-LOC
 'The man is in the car.'
- b. *monna yo o mo koloing*
 mù-ńná jó ú-mó kólóí-ṅ
 CL1-man ATTR.CL1 CL1-in car-LOC
 'the man (who is) in the car'

¹⁰ In forms other than the indicative present positive, the conversion of a descriptive predicate into a noun dependent necessitates the use of the relative form of the copulative verb.

3. The traditional adjectives

3.1. The inflection of traditional adjectives

The words traditionally classified as adjectives in Tswana grammars and dictionaries lend themselves to the morphological characterization commonly put forward in Bantu grammars: adjectives include a class prefix that differs from the class prefix of nouns only marginally, but they have forms for all classes, whereas each nominal lexeme can occur in a limited number of classes only, and this constitutes a lexical property of nominal lexemes taken individually. This obviously reflects the fact that the class prefix of adjectives expresses agreement with nouns. The paradigm of class prefixes of Tswana adjectives is given in (11).

(11) *The class prefixes of Tswana adjectives*

cl.1	<i>mo-</i>	[mò-]
cl.2	<i>ba-</i>	[bà-]
cl.3	<i>mo-</i>	[mò-]
cl.4	<i>me-</i>	[mì-]
cl.5	<i>le-</i>	[lì-]
cl.6	<i>ma-</i>	[mà-]
cl.7	<i>se-</i>	[sì-]
cl.8/10	<i>di(n)-</i>	[dì(ḥ)-]
cl.9	<i>(n)-</i>	[(ḥ)-]
cl.11	<i>lo-</i>	[lò-]
cl.14	<i>bo-</i>	[bò-]
cl.15/17	<i>go-</i>	[χò-]

Syntactically, adjectives are used in attributive and predicate function.

3.2. Traditional adjectives in attributive function

In many Bantu languages, attributive adjectives are just juxtaposed to their head. In Tswana, they must be preceded by the attributive linker.

As illustrated by ex. (12), due to the obligatory presence of the attributive linker, the agreement of attributive adjectives with their head is expressed redundantly by the variation of the adjectival prefix and the choice of the corresponding form of the attributive linker.

- (12) a. *mosadi yo moleele*
 mò-sádi jó mò-léèlé
 CL1-woman CL1.ATTR CL1-tall
 'a tall woman'

b. *basadi ba babe*

bà-sádì bá bà-bí
 CL2-woman CL2.ATTR CL2-ugly
 ‘ugly women’

c. *mesese e meša*

mì-sísì é mì-šá
 CL4-dress CL4.ATTR CL4-new
 ‘new dresses’

d. *lefika le letona*

lì-fíkà lé lì-tóná
 CL5-rock CL5.ATTR CL5-big
 ‘a big rock’

Like other types of noun dependents, adjectives in attributive function allow the elision of their head. The attributive linker is retained when the head is elided. For example, *le letona* [lé lìtóná] can constitute an NP interpreted as ‘the/a big one’ with reference to a notion expressed by a class 5 noun and retrievable from the context.

3.3. Traditional adjectives in predicate function

Adjectives are used predicatively in the construction presented in section 2.3.2 above, conventionally labeled ‘descriptive predication’, with however the following particularity: with 3rd person subjects in affirmative clauses expressing the TAM value ‘indicative present’, adjectives in predicate function are commonly found with the same proclitic subject marker as the other forms used as descriptive predicates (for example, locatives – see section 2.3.2), but they also have the ability to be simply juxtaposed to the subject NP – ex. (13).

(13) a. *Mosadi (o) moleele.*

mù-sádí (ó-)mù-léèlé.
 CL1-woman CL1-CL1-tall
 ‘The woman is tall.’

b. *Mosadi ga a moleele.*

mù-sádí χà-á mù-léèlé.
 CL1-woman NEG-CL1 CL1-tall
 ‘The woman is not tall.’

c. *Mesese (e) meša.*

mì-sísí (í-)mì-šá.
 CL4-dress CL4-CL4-new
 ‘The dresses are new.’

d. *Mesese ga e meša.*

mì-sísí χà-í mì-šá.
 CL4-dress NEG-CL4 CL4-new
 ‘The dresses are not new.’

e. *Lefika (le) letona.*

lì-fíkà (lí-)lì-tónà.
 CL5-rock (CL5-)CL5-big
 ‘The rock is big.’

f. *Lefika ga le letona.*

lì-fíkà χà-lí lì-tónà.
 CL5-rock NEG-CL5 CL5-big
 ‘The rock is not big.’

A crucial observation is that, in spite of the morphological similarity between nouns and adjectives, nouns and adjectives in predicate function occur in predicative constructions that are formally distinct in the indicative present – ex. (14).¹¹

(14) *Nouns (left column) and adjectives (right column) in predicate function*

- | | |
|--|--|
| <p>a. <i>Ke mosadi.</i>
 <i>kí mò-sádì.</i>
 ID CL1-woman
 ‘She is a woman.’</p> | <p>b. <i>O moleele.</i>
 <i>ú-mù-léèlé.</i>
 CL1-CL1-tall
 ‘She (woman) is tall.’</p> |
| <p>c. <i>Ga se lepodisi.</i>
 <i>χà-sí lí-pòdísi</i>
 NEG-ID CL5-policeman
 ‘He is not a policeman.’</p> | <p>d. <i>Ga a moleele</i>
 <i>χà-á mù-léèlé.</i>
 NEG-CL1 CL1-tall
 ‘He is not tall.’</p> |
| <p>e. <i>Ke lefika.</i>
 <i>kí lì-fíkà.</i>
 ID CL5-rock
 ‘It is a rock.’</p> | <p>f. <i>Le letona.</i>
 <i>lí-lì-tónà.</i>
 CL5-CL5-big
 ‘It (rock) is big.’</p> |
| <p>g. <i>Ga se thaba.</i>
 <i>χà-sí t^hábà.</i>
 NEG-ID [CL9]mountain
 ‘It is not a mountain.’</p> | <p>h. <i>Ga e tona.</i>
 <i>χà-í tónà.</i>
 NEG-CL9 [CL9]tall
 ‘It (mountain) is not big.’</p> |

4. The new adjectives

4.1. Traditional adjectives and new adjectives

Anticipating the conclusion of the analysis, I designate as ‘new adjectives’ a set of words occurring in the same syntactic contexts as traditional adjectives with the same functions, but differing from traditional adjectives in their class agreement morphology. Let us for example compare the traditional adjectives *-leele* [-léèlé] ‘tall’, *-be* [-bí] ‘ugly’ and *-ša* [-šá] ‘new’, with the new adjectives *bothale* [bòt^hálí] ‘clever’, *bonolo* [bònóló] ‘kind’ and *leswe* [lìswé] ‘dirty’, in attributive and predicate function – ex. (15) & (16).¹²

¹¹ Note however that 1st and 2nd person subjects neutralize this distinction. For example, in *O mosadi* [ò-mò-sádì] ‘You are a woman’ and *O moleele* [ò-mò-léèlé] ‘You are tall’, the same 2nd person marker is attached to *mosadi* [mò-sádì] ‘woman’ and *moleele* [mò-léèlé] ‘tall (cl. 1)’.

¹² Note that, in their written form, sequences ‘noun + attributive adjective’ and ‘noun + predicative adjective’ are often ambiguous, but in oral speech, the distinction is almost always ensured by tone or vowel quality distinctions that are not apparent in the orthography.

(15) *Traditional adjectives (left column) and new adjectives (right column) in attributive function*

- | | |
|--|---|
| <p>a. <i>mosadi yo moleele</i>
 mù-sádì jò mù-léèlé
 CL1-woman CL1.ATTR CL1-tall
 ‘a tall woman’</p> | <p>b. <i>mosadi yo o botlhale</i>
 mù-sádì jò ú-bùt^hálí
 CL1-woman CL1.ATTR CL1-clever
 ‘a clever woman’</p> |
| <p>c. <i>basadi ba babe</i>
 bà-sádì bá bà-bí
 CL2-woman CL2.ATTR CL2-ugly
 ‘ugly women’</p> | <p>d. <i>basadi ba ba bonolo</i>
 bà-sádì bá bá-bùnóló
 CL2-woman CL2.ATTR CL2-kind
 ‘kind women’</p> |
| <p>e. <i>mesese e meša</i>
 mì-sísì é mì-fá
 CL4-dress CL4.ATTR CL4-new
 ‘new dresses’</p> | <p>f. <i>mesese e e leswe</i>
 mì-sísì é í-lìswé
 CL4-dress CL4.ATTR CL4-dirty
 ‘dirty dresses’</p> |
| <p>g. <i>lepodisi le leša</i>
 lì-pòdísi lé lì-fá
 CL5-policeman CL5.ATTR CL5-new
 ‘a new policeman’</p> | <p>h. <i>lepodisi le le botlhale</i>
 lì-pòdísi lé lí-bùt^hálí
 CL5-policeman CL5.ATTR CL5-clever
 ‘a clever policeman’</p> |

(16) *Traditional adjectives (left column) and new adjectives (right column) in predicate function*

- | | |
|--|---|
| <p>a. <i>Mosadi o moleele.</i>
 mù-sádì ú-mù-léèlé.
 CL1-woman CL1-CL1-tall
 ‘The woman is tall.’</p> | <p>b. <i>Mosadi o botlhale.</i>
 mù-sádì ú-bùt^hálì.
 CL1-woman CL1-clever
 ‘The woman is clever.’</p> |
| <p>c. <i>Basadi ba babe.</i>
 bà-sádì bá-bà-bí
 CL2-woman CL2-CL2-tall
 ‘The women are ugly.’</p> | <p>d. <i>Basadi ba bonolo.</i>
 bà-sádì bá-bùnólò
 CL2-woman CL2-kind
 ‘The women are kind.’</p> |
| <p>e. <i>Mesese e meša.</i>
 mì-sísì í-mì-fá
 CL4-dress CL4-CL4-new
 ‘The dresses are new.’</p> | <p>f. <i>Mesese e leswe.</i>
 mì-sísì í-lìswé
 CL4-dress CL4-dirty
 ‘The dresses are dirty.’</p> |
| <p>g. <i>Lepodisi le leša.</i>
 lì-pòdísi lí-lì-fá
 CL5-policeman CL5-CL5-new
 ‘The policeman is new.’</p> | <p>h. <i>Lepodisi le botlhale.</i>
 lì-pòdísi lí-bùt^hálì
 CL5-policeman CL5-clever
 ‘The policeman is clever.’</p> |

The commonalities and differences between traditional and new adjectives can be summarized as follows:

- In attributive function both traditional and new adjectives, in addition to an obligatory prefix expressing agreement with their head, must be introduced by the attributive linker.
- The agreement prefix of new adjectives in attributive function is different (always tonally, and in most classes in its segmental form too) from the agreement prefix of traditional adjectives; it coincides (both tonally and segmentally) with the proclitic subject marker attached to descriptive predicates in the indicative present affirmative.
- In predicate function in the indicative present positive, the proclitic subject marker expressing agreement of a descriptive predicate with its subject is added to a form already marked for class agreement in the case of traditional adjectives, whereas in the case of new adjectives, agreement is expressed only by the proclitic subject marker.

4.2. *The status of new adjectives*

In the South African Bantuist tradition illustrated by the classic grammars of Zulu (Doke 1947), Southern Sotho (Doke & Mofokeng 1974) and Tswana (Cole 1955), noun dependents are systematically classified according to the sets of agreement markers they select. New adjectives like *bothale* [bùtʰálí] ‘clever’, *bonolo* [bònóló] ‘kind’ and *leswe* [lìswé] ‘dirty’, which otherwise have nothing in common with verbs, are grouped with relative clauses on the basis of the fact that, as illustrated by ex. (17), relative clauses and new adjectives must equally be introduced by the attributive linker, and in subject relativization, the verb shows an agreement prefix identical to the agreement prefix of new adjectives.

(17) a. *mosadi yo o bothale*

mù-sádi jó ú-bùtʰálí
 CL1-woman CL1.ATTR CL1-clever
 ‘a clever woman’

b. *mosadi yo o lo kaelang tsela*

mù-sádi jó ú-lù-káélà-ń tsílà
 CL1-woman CL1.ATTR CL1-2PL-show:APPL:PRS-REL [CL9]road
 ‘the woman who is showing you the way’

On the basis of this coincidence in this particular context, traditional grammars of Southern African languages designate new adjectives as ‘relative stems’ and describe them in the same chapter as relative clauses under the heading ‘relatives’. This classification does not distinguish between word level and phrase level, leaving entirely open the question of the precise status of the ‘relatives’ that are not clauses headed by a relativized verb form.

At first sight, it might be argued that new adjectives are just nouns in a particular function. The point is that, as illustrated in (18), most new adjectives also exist as nouns.

(18) *New adjectives (left column) and cognate nouns (right column)*

<i>botlhale</i> [bòtʰáǀí]	'clever'	<i>botlhale</i> [bù-tʰáǀí]	(cl. 14) 'cleverness'
<i>bonolo</i> [bònóló]	'kind'	<i>bonolo</i> [bù-nóló]	(cl. 14) 'kindness'
<i>leswe</i> [lìswé]	'dirty'	<i>leswe</i> [lì-swé]	(cl. 5) 'dirt'
<i>mafura</i> [màfúrá]	'fat'	<i>mafura</i> [mà-fúrá]	(cl. 6) 'fat'
<i>metsi</i> [mètsí]	'wet, liquid'	<i>metsi</i> [m-ètsí]	(cl. 6) 'water'
<i>molelo</i> [mùlìlò]	'hot'	<i>molelo</i> [mù-lìlò]	(cl. 3) 'fire'

As is apparent from (18), in such cases, the cognate noun is either an abstract noun expressing the same quality as the adjective, or a concrete noun referring to a substance typically possessing the quality expressed by the adjective.¹³

There are however two observations that contradict the idea that the introduction of a particular word class of 'new adjectives' could be dispensed with, and the forms in question could be simply analyzed as nouns in a particular function. First, nouns cannot be freely converted into new adjectives. For example, the nouns meaning 'stone' or 'rock' cannot be used as adjectives meaning 'hard'. Second, some new adjectives are not homonymous with a noun. As illustrated in (19), in such cases, an abstract noun can be derived via the addition of the class 14 prefix:

(19) *'Primary' new adjectives (left column) and derived nouns (right column)*

<i>boi</i> [bòí]	'timid'	<i>boboi</i> [bù-bòí]	(cl. 14) 'timidity'
<i>thata</i> [tʰátá]	'hard, strong'	<i>bothata</i> [bù-tʰátá]	(cl. 14) 'hardness, strength'
<i>tlhaga</i> [tʰáχá]	'wild, lively'	<i>botlhaga</i> [bù-tʰáχá]	(cl. 14) 'wildness, liveliness'
<i>tala</i> [tàlá]	'immature'	<i>botala</i> [bù-tàlá]	(cl. 14) 'immaturity'

The case of *bòí* is particularly interesting, since Tswana morphophonology rules out the hypothesis that this new adjective might result from the mere reanalysis of a noun form. The point is that not all Tswana nouns have overt class prefixes, but apart from kinship terms and very recent loan-words, nouns without an overt class prefix are class 9 nouns showing a limited range of possible initial consonants, due to the phonological interaction between the noun stem and the Proto-Bantu class 9 prefix **n-*, and *b* is precisely among the consonants that cannot be the initial consonant of such nouns.

¹³ When such forms used as nouns have a concrete meaning, the semantic nature of the modification they express in their adjectival use is particularly apparent in comparison with their use as genitival dependents. For example, in *nonyane ya metsi* [nòǀjáǀnì jáǀmètsí] 'aquatic bird', *ya metsi* is the genitive of *metsi* used as a noun, whereas in *molemo o o metsi* [mùlìmò ó úǀmètsí] 'liquid medicine' *o o metsi* is the attributive form of *metsi* used as an adjective.

Consequently, a synchronic account of Tswana grammar must acknowledge the existence of a class of 'new adjectives' which can be related to nouns in two possible ways:

- in some cases, the new adjective is homonymous with a noun and can be described as deriving from the cognate noun via 'freezing' or 'disactivation' of a noun prefix retained as the first syllable of the adjective but losing its functionality;
- in other cases, the new adjective is not homonymous with a noun, and an abstract noun is derived from the new adjective via the addition of the class 14 prefix.

4.3. *New adjectives and adjectival compounds*

The ability to be the target of word formation processes is commonly considered a typical property of major word classes. In this respect, the traditional adjectives of Tswana do not constitute a typical major word class, since there is no productive word formation process by which traditional adjectives could be derived. By contrast, Tswana has a productive pattern of adjectival compounds whose class agreement morphology is identical to that of the new adjectives described above. These compounds consist of a noun and a traditional adjective (*maoto makhutshwane* [mà-ùtú mà-k^húts^{hw}àní] 'short-legged' – ex. (20a)), a noun and a new adjective (*pelo e thata* [pìlú í-t^hátá] 'hard-hearted' – ex. (20b)), or a noun and a numeral (*dikgaolo pedi* [dì-q^háúló pèdí] 'with two sections' – ex. (20c)); semantically, they express a characteristic feature of the entity represented by the noun they modify (in their use as noun dependents) or by a subject NP (in their predicative use).

(20) a. *monna yo o maoto makhutshwane*

mò-ńnà jò ú-má-ùtú mà-k^húts^{hw}àní
 CL1-man CL1.ATTR CL1-CL6-leg CL6-short
 'a short-legged man'

b. *monna yo o pelo e thata*

mò-ńnà jò ú-pìlú í-t^hátá
 CL1-man CL1.ATTR CL1-[CL9]heart CL9-hard
 'a hard-hearted man'

c. *kgolegelo e e dikgaolo pedi*

q^húléχélò é í-dì-q^háúló pèdí
 [CL9]prison CL9.ATTR CL9-CL8/10-section [CL8/10]two
 'a prison with two sections'

Ex. (21) illustrates the predicative use of the same adjectival compounds.

(21) a. *Monna o ne a le maoto makhutshwane.*

mù-ńná ó-nè á-lí má-ùtó mà-k^húts^{hw}àní
 CL1-man CL1-AUX CL1-COP:PTCP CL6-leg CL6-short
 'The man had short legs.' lit. 'The man was short-leg.'

b. *Monna o ne a le pelo e thata*

mù-ńná ó-nè á-lí pìlú í-t^hátà
 CL1-man CL1-AUX CL1-COP:PTCP [CL9]heart CL9-hard
 'The man had a hard heart.' lit. 'The man was hard-heart.'

c. *Kgolegelo e ne e le dikgaolo pedi.*

q^hóléχélò í-nè í-lí dì-q^háúló pèdí
 [CL9]prison CL9-AUX CL9-COP:PTCP CL8/10-section [CL8/10]two
 'The prison had two sections.' lit. 'The prison was two-sections.'

The crucial piece of evidence for analyzing such formations in terms of compounding results from the development of linkers. Adjectival compounds such as *maoto makhutshwane* [mà-ùtó mà-k^húts^{hw}àní], *pelo e thata* [pìlú í-t^hátà], or *dikgaolo pedi* [dì-q^háúló pèdí], quite obviously originate from NPs in which a head noun was modified by an adjective or a numeral, but in present-day Tswana, the absence of the linker distinguishes them from the corresponding NPs *maoto a makhutshwane* [mà-ùtó á mà-k^húts^{hw}àní] 'short legs', *pelo e e thata* [pìlú é í-t^hátà] 'hard heart', and *dikgaolo di le pedi* [dì-q^háúló dí-lí pèdí] 'two sections'.¹⁴

5. New adjectives as an emerging word class

From a diachronic point of view, it is important to observe that new adjectives resulting from the reanalysis of noun forms are much more common in Tswana than primary new adjectives, and are sporadically found combined with modifiers that have the shape of noun dependents, which implies the 're-activation' of the frozen noun class prefix they include, as in ex. (22), in which *bogale* [bùχáílí] 'fierce(ness)', in attributive function is modified by a genitive.

(22) *monna yo o bogale jwa tau*

mònnà jó ó-bù-χáílì dʒ^w-á-tàú
 CL1-man CL1.ATTR CL1-CL14-fierce(ness) CL14-GEN-lion
 'a man as fierce as a lion', lit. 'a man who is fierceness of a lion'

Another crucial observation is that, contrary to the agreement morphology of traditional adjectives, which puts into play a set of prefixes identical to the class prefixes of nouns, the agreement morphology of new adjectives in attributive function is clearly of predicative origin, since in the attributive use of new

¹⁴ In *dikgaolo di le pedi*, the linker *di le* is not the attributive linker, but a special linker used with numerals, originating from the participial form of the copula ('being').

adjectives, a form that by itself can be used predicatively is converted into a noun dependent by the adjunction of the attributive linker:

yo [jó] ATTR (cl. 1) + *o bothale* [ú-bùtʰálí] 'is clever (cl. 1)'
→ *yo o bothale* [jó ú-bùtʰálí] 'clever (cl. 1)'

A plausible scenario is therefore that, in the history of Tswana and other Southern Bantu languages that have a similar class of new adjectives, the use of nouns in a predicative construction implying a semantic shift is largely responsible for the importance of this class.¹⁵

In languages in which the predicative construction involving nouns in identificational predicate function is formally distinct from the construction in which adjectives fulfill the predicate function, it is not uncommon that the use of nouns in the predicative construction normally reserved for adjectives triggers a semantic shift by which a noun is taken as referring metaphorically to a property typically possessed (or supposed to be typically possessed) by entities commonly designated by the noun in question. Compare for example French *C'est un rasoir* 'It is a razor' vs. *C'est rasoir* 'It's boring' (lit. 'It is razor').

Generally speaking, this mechanism results in a relative permeability of the limit between nominal and adjectival lexemes, but depending on the morphosyntactic organization of the language, it may have more important consequences for the word class system. In the Bantu languages that have developed a class of 'new adjectives' of the type discussed in this paper, in the indicative present positive, adjectival predication does not put into play a copula, but the function fulfilled by a copula in other tenses is fulfilled by a proclitic attached to the adjective in predicate function and expressing agreement with the subject. This proclitic, which coincides with the subject marker prefixed to verbs in some tenses, was retained when nouns used as adjectival predicates were transposed into noun dependents by means of the addition of the attributive linker, and this resulted in the emergence of a class of words with exactly the same syntactic distribution and the same semantic relationship to nouns as the traditional adjectives, but with an entirely different agreement morphology.

6. Conclusion

In this paper, I have analyzed the status of a set of Tswana words that have the same distribution and the same semantic properties as the words traditionally recognized as adjective, with, however, different morphological characteristics. Taking into consideration the fact that most of these forms also exist as nouns with a related

¹⁵ As pointed out by Leston Buell (p.c.), this explanation is problematic for 'primary' new adjectives. They however constitute a tiny minority, and whatever their individual history may have been, it is clear that most new adjectives are historically derived from nouns, since the first syllable of their stem is historically a frozen nominal prefix. The scenario proposed here is valid for the vast majority of new adjectives, and consequently accounts for the numerical importance of this class in the lexicon of Tswana, even if it remains unclear how some of its members acquired their present status.

meaning, I have concluded that a crucial factor in the emergence of this class of 'new adjectives' was the use of nouns as descriptive predicates in a construction formally distinct from the identificational predication in which nouns are typically used as predicates.

Abbreviations

APPL: applicative
ATTR: attributive linker
AUX: auxiliary
CAUS: causative
CL: noun class
COP: copula
DEM: demonstrative
DIST: distal
FUT: future
ID: identification marker
LOC: locative
NEG: negation marker
PASS: passive
PL: plural
PRF: perfect
PRS: present
PTCP: participle
REL: relativizer
SG: singular

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