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The 'new adjectives' of Tswana*

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In addition to a class of adjectives inherited from Proto-Bantu, characterized by a set of class agreement prefixes identical to the class prefixes of nouns, Tswana has words expressing meanings of the type commonly expressed by adjectives. These occur in the same syntactic positions as the words traditionally identified as adjectives, but differ from them in class agreement morphology, since the agreement prefixes they take in attributive function are different from the class prefixes of nouns, and coincide with the subject markers attached to non-verbal predicates in descriptive predication. Most of these words also have nominal uses with meanings related to the meanings they express as adjectives. The paper concludes that the 'new adjectives' constitute an emerging word class whose development follows from the use of nouns as descriptive predicates in a predicative construction typically used with adjectives in predicate function.

1. Introduction

In Bantu languages, a class of adjectives can generally be delimited on the basis of the following two criteria:

- a. adjectives show class prefixes identical to those of nouns, or differing from them only marginally;
- b. 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.

^{*} 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, O = object marker, PASS = passive, PL = plural, PRF = perfect, PRS = present, PTCP = participle, REL = relativizer, S = subject marker, SG = singular.

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. Synchronically, the 'new adjectives' of Southern Bantu languages do not differ from the adjectives inherited from Proto-Bantu by the absence of agreement, but by agreement marks different from those used with the adjectives inherited from Proto-Bantu. Diachronically, 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.

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. 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

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

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

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 (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.

a. mosadi yo moleele yo montsho yo o opelang yole³
 mò-sádì jó mò-léèlé jó mó-nts^bờ
 cL1-woman CL1.ATTR CL1-tall CL1.ATTR CL1-black
 jó ú-ópélàń jó-lé
 cL1.ATTR s.CL1-SING:PRS:REL DEM.CL1-DIST
 "this tall woman with dark complexion who is singing"

^{3.} In the presentation of the examples, the first line is their transcription in current Tswana orthography, which is unfortunately quite misleading in a linguistic analysis of this language, since it distinguishes only 5 vowels and does not note tones at all, whereas Tswana has 9 vowel phonemes, and tones are crucial for morphological analyses. In addition to that, many morphemes that are unquestionably prefixes (in particular, subject markers and object markers) are written as if they were separate words. The correct word division is given in the phonetic transcription on the second line.

b.	lekau le leleele le lentsho le le opelang lele					
	lì-káù	lé	lì-léèlé	lé	lí-nts ^h ù	
	cl5-boy	cl5.attr	CL5-tall	cl5.attr	CL5-black	
	lé	lí-ópélàń		lé-lé		
	cl5.attr s.cl5-sing:prs:rel dem.cl5-dist					
	"this tall boy with dark complexion who is singing"					

In Tswana NPs, the *head-dependent* order is not absolutely obligatory, but noun dependents preceding their head are extremely rare in texts.⁴ By contrast, the rule according to which noun dependents express agreement with their head suffers no exception. Consequently, noun dependents can be classified according to the particular sets of agreement markers by means of which they express agreement.

Given the question dealt with in this paper, it is sufficient to mention here that several subtypes of noun dependents that differ between themselves in other respects share the obligatory use of the 'attributive linker', a former demonstrative that in some contexts has lost its deictic value and acquired a purely syntactic function. The forms of the attributive linker for the different classes are given in (2):⁵

(2) The attributive linker

cl.1	уо	[jó]
CL.2	ba	[bá]
cl.3	0	[ó]
CL.4	е	[é]
CL.5	le	[lé]
CL.6	а	[á]
CL.7	se	[sé]
cl.8/10	tse	[tsé]
cl.9	е	[é]
CL.11	lo	[ló]
CL.14	јо	[dʒó]
cl.15/17	go, fa, mo, ko	[χό], [fá], [mó], [kó] ⁶

4. The anteposition of noun dependents adds emphasis, but never modifies the denotative meaning. Anteposition is equally possible (and equally rare) with all types of noun dependents.

5. The attributive linker is traditionally analyzed as a prefix, which leads to some confusion in the description of the agreement of noun dependents with their head in the traditional grammars of Southern Bantu languages. However, at least in the Sotho-Tswana languages in which the demarcative downstep and other tonal phenomena provide clear criteria for identifying word boundaries, the attributive linker is unquestionably a word.

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 2011).

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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

Examples in (3a–d) show that, even if a co-referent NP is present, the subject marker is obligatorily present, and 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 (3e–f).

- (3) a. Ngwana o thubile mae.
 ŋ^w-àná ú-t^hùbílé mà-í
 CL1-child s.CL1-break:PRF CL6-egg
 "The child broke the eggs."
 - b. Ngwana o tsile.
 η^w-àná ú-tsílè
 cL1-child s.CL1-come:PRF
 "The child came."
 - c. *Ngwana thubile mae.
 - d. *Ngwana tsile.
 - e. O thubile mae. ú-t^hùbílé mà-í s.cl1-break:PRF CL6-egg "He/She broke the eggs."
 - f. O tsile. ú-tsílè s.CL1-come:PRF "He/she came."

^{7.} On Tswana verb morphology, see Creissels et al. (1997), Creissels (2006).

As illustrated by (3a) and (3e), 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 (3g–h).

(3)	g.	Ngwana o a thubile.				
		ŋ [∞] -àná	ú-à-t ^h úbílè			
		CL1-child	s.cll-0.cl6-break:prf			
		"The child broke them (the eggs)."				
	h.	Ngwana o tlaa a thuba.				
		ŋ [∞] -àná	ú-tłáà-á-t¹úbà			
		CL1-child	s.cll-fut-o.cl6-break			
		"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* N_2 , in which *ID* is semantically an identification operator expressing that N₂ is an adequate designation of the entity to which N₁ refers. Depending on the TAM value of the clause, the identification operator may be, either an irregular and defective copulative verb, as in (4), or a form that has no verbal characteristic.

(4)	a.	(Nna)	a) ke tlaa bo ke le monna.				
		('nná)	kì-tłàà-bò		kí-lí		mù-ńnà
		(1sg)	s.1sg-fut-	AUX	s.1sg-cop.p	ТСР	CL1-man
		"I will	vill be a man."				
	b.	Kitso d	Kitso o ne a le ngwana.				
		kítsó	ú-nè	á-lí		ŋ ^w -:	àná
		Kitso	s.cl1-aux	S.CI	1-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 partici-

^{8.} The 1st and 2nd person subject markers attached to identificational predicates are *ke* [kì-] (1st sG), *o* [\dot{v} -] (2nd sG), *re* [rì-] (1st PL), and *lo* [$l\dot{v}$ -] (2nd PL). They are identical to the subject markers prefixed to verbs in the indicative present positive and some other tenses.

pant, 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* [χ àsí], 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) s.2sG-cL1-child "You are a child."
- c. Lepodisi le ke moaki.
 lì-pòdísì lé kí mú-àkì
 cl5-policeman Cl5.DEM ID Cl1-liar
 "This policeman is a liar."
- e. *Ngaka e ke moaki.* ŋàkà é kí mú-àki [CL9]-doctor CL9.DEM ID CL1-liar "This doctor is a liar."
- g. *Ke moaki.* h. kí mú-àkì ID CL1-liar "He/she is a liar."

- b. (Wena) ga o ngwana.
 (wèná) χà-ú ŋ^w-àná
 (2sG) NEG-s.2sG CL1-child
 "You are not a child."
- d. Lepodisi le ga se moaki.
 lì-pòdísì lé χà-sí mú-àkì
 cL5-policeman CL5.DEMNEG-ID CL1-liar
 "This policeman is not a liar."
- f. Ngaka e ga se moaki. ŋàkà é χà-sí mú-àkì [CL9]-doctor CL9.DEM NEG-ID CL1-liar "This doctor is not 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 (6) and (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.

^{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.

As illustrated by (6), in descriptive predication, the same copula is used as in identificational predication (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 (6b).

(6)	a.	Basadi ba ne ba le fa.				
		bà-sádí	bá-nè	bá-lí	fà	
		CL2-woman	s.cl2-aux	S.CL2-COP.PTCP	here	
		"The women	were here."			
	b.	(Wena) o kae?				
		(wèná) ù-ká	ù			
		(2sg) s.2sg-where				
		"Where are you?"				

Example (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-ńná ú-fà
 CL1-man s.CL1-here
 "The man is here."
 - b. Basadi ba fa.
 bà-sádí bá-fà
 cL2-woman s.cL2-here
 "The women are here."
 - c. Lepodisi ga le fa.
 lì-pòdísí χà-lí fà
 cL5-policeman NEG-S.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).

in the indicative present positive					
CL.1	0	[ú]			
CL.2	ba	[bá]			
CL.3	0	[ú]			
CL.4	е	[í]			
CL.5	le	[lí]			
CL.6	а	[á]			
CL.7	se	[sí]			
CL.8/10	di	[dí]			
CL.9	е	[í]			
CL.11	lo	[lú]			
Cl.14	bo	[bú]			
Cl.15/17	go	[χύ]			

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

Note that, as illustrated by (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.	b.	Mosadi o tsile.	
		mù-sádí ú-fà		mù-sádí ú-tsílè	
		CL1-woman s.CL1here		CL1-woman S.CL1-come:PRF	
		"The woman is here."		"The woman has come."	
	с.	Lepodisi le fa.	d.	Lepodisi le tsile.	
		lì-pòdísí lí-fà		lì-pòdísí lı-tsílè	
		CL5-policeman s.CL5here		CL1-policeman S.CL5-come:PRF	
	"The policeman is here."			"The policeman has come."	

In the negative, the same subject markers combine with the negative marker *ga* [$\chi \dot{a}$ -], with the exception of class 1, in which the subject marker in combination with the negative marker is not *o* [- \dot{o}], but *a* [- \dot{a}]. 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 (10).¹⁰

^{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.

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

The traditional adjectives 3.

The inflection of traditional adjectives 3.1

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	то-	[mù-]		
	CL.2	ba-	[bà-]		
	CL.3	то-	[mù-]		
	CL.4	me-	[mì-]		
	CL.5	le-	[lì-]		
	CL.6	ma-	[mà-]		
	CL.7	se-	[sì-]		
	CL.8/10	di(n)-	[dì('n)-]		
	CL.9	(<i>n</i>)-	[('n)-]		
	CL.11	lo-	[lù-]		
	CL.14	bo-	[bù-]		
	Cl.15/17	g0-	[χὺ-]		

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 (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 mù-sádì mù-léèlé jó 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-ſá CL4-dress CL4.ATTR CL4-new nominalization d. lefika le letona lì-fíkà lé lì-túná 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 (13).

- (13) a. Mosadi (o) moleele.
 mò-sádí (ú-)mò-léèlé.
 cL1-woman (s.cL1-)cL1-tall
 "The woman is tall."
 - c. Mesese (e) meša.
 mì-sísí (í-)mì-ſá.
 CL4-dress (s.CL4-)CL4-new
 "The dresses are new."
 - e. *Lefika (le) letona.* lì-fíká (lí-)lì-túnà. cL5-rock (s.CL5-)CL5-big "The rock is big."
- b. Mosadi ga a moleele.
 mò-sádí χà-á mò-léèlé.
 cl1-woman NEG-S.CL1 Cl1-tall
 "The woman is not tall."
- d. Mesese ga e meša.
 mì-sísí χà-í mì-fá.
 cl4-dress NEG-S.Cl4 Cl4-new
 "The dresses are not new."
- f. Lefika ga le letona.
 lì-fíká χà-lí lì-túnà.
 cL5-rock NEG-S.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 (14).¹¹

- (14) Nouns (left column) and adjectives (right column) in predicate function
 - a. *Ke mosadi.* kí mò-sádì. ID CL1-woman "She is a woman."
 - c. Ga se lepodisi.
 χà-sí lí-pòdísì
 NEG-ID CL5-policeman
 "He is not a policeman."
 - e. *Ke lefika.* kí lì-fíkà. ID CL5-rock "It is a rock."
 - g. Ga se thaba.
 χà-sí t^hábà.
 NEG-ID [CL9]mountain
 "It is not a mountain."

- b. O moleele.
 ú-mù-léèlé.
 s.cl1-cl1-tall
 "She (woman) is tall."
- d. *Ga a moleele* χà-á mò-léèlé. NEG-S.CL1 CL1-tall "He is not tall."
- f. Le letona. lí-lì-túnà. s.cl5-cl5-big "It (rock) is big."
- h. *Ga e tona.* χà-í túnà. NEG-S.CL9 [CL9]tall "It (mountain) is not big."

^{11.} Note however that 1st and 2nd person subjects neutralize this distinction. For example, in *O mosadi* [ùmùsádì] "You are a woman" and *O moleele* [ùmùléèlé] "You are tall", the same 2nd person marker is attached to *mosadi* [mùsádí] "woman" and *moleele* [mùléèlé] "tall (cl.1)".

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* [-fá] "new", with the new adjectives *botlhale* [bòtł^hálí] "clever", *bonolo* [bònóló] "kind" and *leswe* [lìswé] "dirty", in attributive and predicate function ((15) and (16)).¹²

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

- a. *mosadi yo moleele* mò-sádì jó mò-léèlé CL1-woman CL1.ATTR CL1-tall "a tall woman"
- c. *basadi ba babe* bà-sádì bá bà-bí CL2-woman CL2.ATTR CL2-ugly "ugly women"
- e. *mesese e meša* mì-sísì é mì-fá CL4-dress CL4.ATTR CL4-new "new dresses"
- g. *lepodisi le leša* lì-pòdísì lé lì-ſá CL5-policeman CL5.ATTR CL5-new 'a new policeman'

- b. mosadi yo o botlhale mò-sádì jó ú-bùtlhálí CL1-woman CL1.ATTR S.CL1-clever "a clever woman"
 d. basadi ba ba bonolo
 - bà-sádì bá bá-bùnóló CL2-woman CL2.ATTR s.CL2-kind "kind women"
- f. mesese e e leswe mì-sísì é í-lìswé CL4-dress CL4.ATTR s.CL4-dirty "dirty dresses"
- h. *lepodisi le le botlhale* lì-pòdísì lé lí-bòtt^hálí CL5-policeman CL5.ATTR S.CL5-clever 'a clever policeman'

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

a. Mosadi o moleele.
 b. Mosadi o botlhale.
 mò-sádí ú-mò-léèlé.
 cL1-woman s.CL1-CL1-tall
 "The woman is tall."
 b. Mosadi o botlhale.
 mò-sádí ú-bòtl^hálì.
 cL1-woman s.CL1-clever
 "The woman is clever."

^{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.

- c. *Basadi ba babe.* bà-sádí bá-bà-bí CL2-woman s.CL2-CL2-tall "The women are ugly."
- e. *Mesese e meša*. mì-sísí í-mì-ſá cL4-dress s.cL4-CL4-new "The dresses are new."
- g. Lepodisi le leša. lì-pòdísí lí-lì-Já cL5-policeman s.CL5-CL5-new "The policeman is new."
- d. *Basadi ba bonolo.* bà-sádí bá-bùnólò cL2-woman s.CL2-kind "The women are kind."
- f. *Mesese e leswe.* mì-sísí í-lìswé cL4-dress s.cL4-dirty "The dresses are dirty."
- h. Lepodisi le botlhale.
 lì-pòdísí lí-bòtl^hálì
 cL5-policeman s.cL5-clever
 "The policeman is clever."

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 *botlhale* [botthálí] "clever", *bonolo* [bon5l5] "kind" and *leswe* [liswé] "dirty", which otherwise have nothing in common with verbs, are grouped with relative clauses on the basis of the fact that, as illustrated by (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 botlha	le		
		mù-sádì jó	ú-bùtl⁴álí		
		CL1-woman CL1.A	TTR S.CL1-clever		
		"a clever woman"			
	b.	mosadi yo o lo kaelang tsela			
		mù-sádì jó	ú-lù-káélà-ń	tsílà	
		CL1-woman CL1.A	TTR S.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 most new adjectives coincide with forms that can be used as the head of noun phrases fulfilling the syntactic functions typically fulfilled by noun phrases (subject, object, etc.), and in such constructions, as indicated in (18), their initial syllable (or consonant) can be isolated as a noun class prefix.

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

botlhale	[bùtłʰálí]	'clever'	botlhale	[bờ-tłʰálí]	(CL.14)	'cleverness'
bonolo	[bùnślś]	'kind'	bonolo	[bù-nślś]	(cl.14)	'kindness'
leswe	[lìswé]	'dirty'	leswe	[lì-swé]	(cl.5)	'dirt'
mafura	[màfúrá]	'fat'	mafura	[mà-fúrá]	(cl.6)	'fat'
metsi	[mètsí]	'wet, liquid'	metsi	[m-ètsí]	(cl.6)	'water'
molelo	[mùlìlò]	'hoť	molelo	[mù-lìlò]	(cl.3)	'fire'

As is apparent in (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,

^{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* [nɔ̈nánì jámètsí] "aquatic bird", *ya metsi* is the genitive of *metsi* used as a noun, whereas in *molemo o o metsi* [mòlìmò ó úmètsí] "liquid medicine" *o o metsi* is the attributive form of *metsi* used as an adjective.

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) boi [bòí] 'timid' boboi [bò-bòí] (CL.14) 'timidity' thata [t^hátá] 'hard, strong' bothata [bò-t^hátá] (CL.14) 'hardness, strength' tlhaga [tt^háχá] 'wild, lively' botlhaga [bò-tt^háχá] (CL.14) 'wildness, liveliness' tala [tàlá] 'immature' botala [bò-tàlá] (CL.14 'immaturity'

The case of $b \partial i$ 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.

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-òtú mà-k^húts^{hw}àní] "short-legged", see (20a)), a noun and a new adjective (*pelo e thata* [pìlú í-t^hátá] "hard-hearted", see (20b)), or a noun and a numeral (*dikgaolo pedi* [dì-q^háúl5 pèdí] "with two sections", see (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						
		mù-ńnà	jó	ú-má-ùtú	mà-k ^h út	s ^{hw} àní
		CL1-man	CL1.ATTR	s.cl1-cl6-leg	CL6-sho	rt
		"a short-le	gged man"			
	b.	топпа уо	o pelo e tha	ita		
		mù-ńnà	jó	ú-pìlú	í-t ^h áta	á
		CL1-man	CL1.ATTR	s.cl1-[cl9]hea	art s.cl9	-hard
		"a hard-he	arted man'	,		
	с.	kgolegelo e	e dikgaolo	pedi		
		q ^h úléxélờ	é	í-dì-qʰáúĺ́ว		pèdí
		[CL9]prisc	n cl9.att	r s.cl9-cl8/10)-section	[CL8/10]two
		"a prison v	with two se	ctions"		

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

(21) a. Monna o ne a le maoto makhutshwane. mù-ńná ú-nè á-lí má-ùtú mà-khútshwàní CL1-man S.CL1-AUX S.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 ú-nè á-lí í-t^hátà pìlú CL1-man S.CL1-AUX S.CL1-COP:PTCP [CL9]heart S.CL9-hard "The man had a hard heart (lit. the man was hard-heart)" c. Kgolegelo e ne e le dikgaolo pedi. í-lí q^húlέχέlờ í-nè dì-q^háúl5 pèdí [CL9]prison S.CL9-AUX S.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-ờtớ mà-k^húts^{hw}àní], *pelo e thata* [pìló í-t^hátá], or *dikgaolo pedi* [dì-q^háớló 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-ờtớ á mà-k^húts^{hw}àní] "short legs", *pelo e e thata* [pìló é í-t^hátá] "hard heart", and *dikgaolo di le pedi* [dì-q^háóló dí-lí pèdí] "two sections".¹⁴

^{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").

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 (22), in which *bogale* [bò χ álí] "fierce(ness)", in attributive function is modified by a genitive.

 (22) monna yo o bogale jwa tau mòńnà jó ú-bù-χálì dʒ^w-á-tàú CL1-man CL1.ATTR s.CL1-CL14-fierce(ness) CL14-GEN-lion "a mans 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 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 botlhale* [ú-bùtł^hálí] "is clever (CL.1)" → yo o botlhale [jó ú-bùtł^hálí] "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, the use of nouns in the predicative construction normally reserved for adjectives may trigger a semantic shift. When this is the case, a noun used in a predicative construction normally used for adjectives is taken as referring metaphorically to a property typically possessed (or supposed

^{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.

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) (see Lauwers this volume).

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 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.

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