Denis Creissels

18. Grammaticalization in Tswana

1. Introduction

1.1. The aim of the present paper

In the present paper, I review grammaticalization processes that can be reconstructed in the history of Tswana on the basis of internal reconstruction and/or comparative data (including regular relationships between Tswana forms and Proto-Bantu reconstructions), and also phenomena observable in present-day Tswana that can be analyzed as grammaticalization in progress.

1.2. Tswana: location, and genetic affiliation

Tswana (aka Setswana), S31 in Guthrie's nomenclature of Bantu languages, is a Southern Bantu language with approximately 6 million speakers. In Botswana, ethnic Batswana constitute 80% of the population, estimated at 2.3 million in 2019. In South Africa, Tswana is dominant in the Northwest Province and in some districts of the Free State Province, and the number of its speakers is estimated at 4 million.

The closest relatives of Tswana are Pedi and Southern Sotho. These three languages, with a total number of at least 16 million speakers, are so close to each other that, from a strictly linguistic point of view, they should be considered as three varieties of a single language. Pedi is commonly designated as Northern Sotho, but this term is ambiguous, since it is also used with reference to lects (Lobedu, Tswapong, etc.) that, linguistically, are better considered languages distinct from Sotho-Tswana proper.

1.3. The basics of Tswana morphosyntax.

Typologically, Tswana is in almost every respect a typical Bantu language.[1] Its locative system, very different from that found in Central Bantu languages, is the main exception to this generalization, but this is an areal feature, shared by the other Southern Bantu languages.[2]

Nouns are characterized by a gender system in which gender markers and number markers are completely fused and show no evidence of ever having been dissociated. This system is manifested in noun prefixes, obligatory head-dependent agreement in the noun phrase, and obligatory agreement of free pronouns and bound pronominal morphemes (subject indexes, object indexes) with the noun they represent. Noun *forms* divide into 12 agreement classes, and genders can be defined as sets of nominal *lexemes* that have the same agreement behavior both in the singular and the plural. For example, the singular form *mosadi* [mòsádí] 'woman' belongs to the agreement class traditionally labeled class 1, the corresponding plural *basadi*

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[1] On the typological profile of Bantu languages, see Creissels (Forthcoming).
[2] For an overall presentation of Tswana, see Cole (1955), Creissels (2003). On Southern Sotho, see Doke and Mofokeng (1957). On the changes in the organization of the locative system that affected Southern Bantu languages, see Marten (2010), Creissels (2011).

[bàsádí] 'women' belongs to class 2, and consequently *mosadi* [mòsádí] *as a lexeme* belongs to gender 1–2.[3] Similarly, the singular form *motse* [mò-tsì] 'village' belongs to class 3 (in which nouns have the same prefix as in class 1, but distinct agreement properties), the corresponding plural form *metse* [mì-tsì] belongs to class 4, and consequently *motse* [mò-tsì] *as a lexeme* belongs to gender 3–4.

The major genders in Tswana are 1–2 (*mosadi* [mòsádí] 'woman' pl. *basadi* [bàsádí]), 3–4 (*motse* [mò-tsì] 'village' pl. *metse* [mì-tsì]), 5–6 (*lee* [lì-í] 'egg' pl. *mae* [mà-í]), 7–8/10 (*selepe* [sì-lɛ́pɛ́] 'axe' pl. *dilepe* [dì-lɛ́pɛ́]),[4] 9–8/10 (*podi* [pʊ́dí] 'goat' pl. *dipodi* [dì-pʊ́dí]), 11–6 (*losea* [lò-síá] 'baby' pl. *masea* [mà-síá]), 11–8/10 (*loso* [lò-sɔ̀] 'spoon' pl. *dintsho* [dì-ǹtsʰɔ̀]), and 14–6 (*bothata* [bò-tʰátá] 'problem' pl. *mathata* [mà-tʰátá]).

Noun phrases are head-initial.

Verbs show a rich system of morphological variations, including TAM markers, negation markers, obligatory subject indexes, optional object indexes, valency operators (reflexive, reciprocal, decausative, causative, passive, and applicative), and conjoint/disjoint markers[5] – see Creissels (2006). The tonal morphology of the verb is particularly complex, even by Bantu standards – see Creissels (1999), Creissels, Chebanne, and Nkhwa (1997), Creissels (2017a).

Basic verbal clauses have a rigid constituent order *subject – verb – objects – obliques*. Alignment is consistently nominative/accusative: there is no exception to the rule according to which the coding frames through which verbs express their argument structure must include a term whose coding properties are identical to those of the agent of prototypical transitive verbs. There is no case contrast, but the distinction between subjects, objects, and obliques, is manifested in indexation: with only the exception of the infinitive and the imperative, verb forms include an obligatory subject index, even in the presence of a subject noun phrase; objects can be indexed too, but object indexes occupy a distinct position in the verbal template, and occur only if the clause includes no noun phrase representing the same argument.

As illustrated in (1), if a co-referent NP is present, the subject index expresses class agreement with it. In the absence of a co-referent NP, subject indexes that do not belong to 1st or 2nd person are interpreted anaphorically, triggering the identification of the argument they represent with a contextually salient referent compatible with the class expressed by the subject index.

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[3] In this article Tswana forms are systematically quoted both according to current Tswana orthography (in italics), and in broad phonetic transcription (within brackets). The reason is that current orthography may be quite misleading in a linguistic analysis, since it distinguishes only 5 vowels and does not indicate tones at all, whereas Tswana has 9 vowel phonemes, and tones are crucial for morphological analyses. Moreover, many morphemes that are unquestionably prefixes (in particular, subject indexes and object indexes) are written as if they were separate words. The correct word division is given in the phonetic transcription.

[4] Tswana has conflated the reflexes of the Proto-Bantu classes 8 and 10.

[5] In the context of Bantu studies, a conjoint verb form is a verb form that cannot be found in sentence-final position and cannot be separated from the following phrase by a pause. A disjoint verb form does not have this limitation, but is not excluded from non-final contexts either, and when in non-final sentence position, is not necessarily followed by a perceptible pause. There is some cross-linguistic variation in the function of the conjoint/disjoint contrast – Van der Wal and Hyman (2017). In Tswana, it marks the distinction between phrases in post-verbal position that form part of the verb phrase and contribute to the comment expressed by the verb, and phrases in post-verbal position that fulfill the discourse function of afterthought (alias antitopic) – Creissels (2017a).

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

ŋʷ-àná   ó-tʰùbílé   mà:-í.

CL1-child   S.CL1-break:PRF:CJ   CL6-egg

'The child broke the eggs.'

    b.   *Ngwana o tsile.*

ŋʷ-àná   ꜜó-tsî:lè.

CL1-child   S.CL1-come:PRF:DJ

'The child came.'

  c.   *O thubile mae.*

ó-tʰùbílé   mà:-í.

S.CL1-break:PRF:CJ   CL6-egg

'He/She broke the eggs.'

  d.   *O tsile.*

ó-tsî:lè.

S.CL1-come:PRF:DJ

'He/she came.'

  e.   **Ngwana thubile mae.*

  f.   **Ngwana tsile.*

As illustrated by examples (1a) and (1c), 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 indexes prefixed to verbs. Object indexes immediately precede the verb stem and may be separated from subject indexes by TAM or negation markers as in Ex. (2a–b).

(2) a.   *Ngwana o a thubile.*

Ŋʷ-àná   ó-à-tʰúbî:lè.

CL1-child   S.CL1-O.CL6-break:PRF:DJ

'The child broke them (the eggs).'

  b.   *Ngwana o tlaa a thuba.*

ŋʷ-àná   ꜜó-tɬáà-á-tʰû:bà.

CL1-child   S.CL1-FUT-O.CL6-break:DJ

'The child will break them (the eggs).'

Tswana has very productive multiple-object constructions: non-derived verbs may have two non-coordinated objects, and valency-increasing derivations (causative and applicative) may result in constructions with three objects – Ex. (3). In multiple-object constructions, the syntactic differences between the objects are minimal: each object can be converted into the subject of a passive construction, or represented by an object index. The linear order of the objects is rigid, and depends crucially on Animacy Hierarchy. Distinctions in the semantic role of the objects (for example: beneficiaries precede recipients) are taken into account only in the case of objects that do not differ in animacy.[6]

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[6] This may lead to ambiguities. For example, *bolaisa motho ntša* [bóláísà mòtʰò ɲtʃá] (kill.CAUS CL1.man CL9.dog) has two possible readings: 'make the man kill the dog' or 'make the dog kill the man'; since 'man' has

(3) a. *Ngwana o nole maši.*

    ŋʷ-àná   ꜜó-nólé   mâ:-ʃì.

    CL1-child   S.CL1-drink:PRF:CJ   CL6-milk

    'The child drank milk.'

  b. *Ke nositse ngwana maši.*

    kì-nósítsé   ŋʷ-àná   mâ:-ʃì.

    S.1SG-drink:CAUS:PRF:CJ   CL1-child   CL6-milk

    'I made the child drink milk.'

  c. *Ke noseditse Dimpho ngwana maši.*

    kì-nósédítsé   dím̀pʰó   ŋʷ-àná   mâ:-ʃì.

    S.1SG-drink:CAUS:APPL:PRF:CJ   (CL1)Dimpho   CL1-child   CL6-milk

    'I made the child drink milk in Dimpho's place.'

As in other Southern Bantu languages (and in contrast to the situation observed in Central Bantu languages), locative phrases do not have access to the subject function. They have the internal structure of noun phrases, from which they differ only in that (a) they are headed by a locative, i.e., a nominal form to which the locative prefix *go* [χó-] or the locative suffix *-ng* [-ŋ̀] has been added, and (b) they optionally combine with one of the three locative prepositions *ko* [kó] (relative remoteness), *fa* [fá] (relative proximity), or *mo* [mó] (interiority, contact). The choice between the locative prefix *go* [χó-] and the locative suffix *-ng* [-ŋ̀] is entirely determined by the grammatical nature of the head of the locative-marked noun phrase. Toponyms and a handful of common nouns are used as locatives without locative marking. Neither locative affixes nor locative prepositions specify the distinction between static location, source of movement, or direction of movement.

Tswana has a limited inventory of simple non-locative prepositions or prepositional clitics: *le* [lí-] (comitative, also used for additive coordination of NPs, and as an additive particle corresponding to English 'also', 'too', or even'), *ka* [ká] (instrumental, also used for manner and time adjuncts), and *ke* [kí] (used almost exclusively for the agent phrase in passive constructions).

2. Grammaticalization of nominal categories

2.1. Class/gender

Bantu 'noun class' systems are reflexes of a gender system that grammaticalized very early in the history of Niger-Congo, and nothing concrete can be said about their ultimate origin. Apart from the modifications that affected the relationship between noun classes and locative marking (see Creissels 2011), the Tswana system of noun classes differs from that of Proto-Bantu in minor details only: some classes (12 and 13) have been lost, others (8 and 10) have merged, but the only change that can be analyzed in terms of grammaticalization is the

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a higher degree of animacy than 'dog', in a multiple-object construction, 'man' must precede 'dog', irrespective of their semantic role.

creation of a plural prefix for the nouns of gender 1/2 (human gender) that have a zero prefix in the singular – see 2.2.

An interesting detail is however that, in Tswana, the Proto-Bantu class 12 (singular of diminutives) has disappeared as such, but the nominal prefix of this class (*ga-* [χà-] < Proto-Bantu **kà-*) has subsisted as a derivational prefix expressing the number of times an action is carried out, as in *gabedi* [χà-bèdí] 'twice' < *-bedi* [-bèdí] 'two'.

2.2. Number

As usual in Bantu languages, the class prefixes of nouns that express plural are obvious reflexes of reconstructed Proto-Bantu class prefixes, with the only exception being the so-called class 2a prefix, i.e., the plural prefix for those of the nouns belonging to gender 1/2 (human gender) that have a zero prefix in the singular. It is widely acknowledged that it is not possible to reconstruct a class 2a marker in Proto-Bantu, and the question of the possible origins of the class 2a markers found across Bantu languages remains an open question. Van de Velde (2006) tackles this question with reference to Eton (A71). The analysis proposed in Creissels (2016) for Tswana is different, but does not contradict Van de Velde's analysis, since there are very important differences between the Eton and Tswana data. More generally, it seems reasonable to posit that the class 2a prefixes found across the Bantu family do not result from a grammaticalization path shared by all Bantu languages, but rather from different grammaticalization paths whose only common point is that their input included some marker or pronoun belonging to class 2 (human plural).

The grammaticalization path proposed for the class 2a prefix of Tswana (*bo-* [bó-]) is based on the observation that this prefix can combine with proper names as an associative plural marker (as in *boKitso* [bó-kítsɔ́] 'Kitso and associates'). With kinship terms, *bo* [bó-] is ambiguous between an associative plural and a plain plural reading (as in *bomalome* [bó-màlómɛ́] 'my uncles', or 'my uncle and associates'), whereas it is unambiguously a plain plural marker with the other semantic types of nouns found in gender 1/2 that have a zero prefix in the singular. This supports the hypothesis that *bo-* [bó-] was originally an associative plural marker whose use as a plain plural marker was extended to other nouns having no overt prefix in the singular. Moreover, Creissels (2016) discusses evidence that the ultimate origin of this associative plural marker is a combination of two genitival prefixes, *ba* [bá-] (genitival prefix of the human plural class: 'the people of ...') plus *ga* [χá-] (genitival prefix of locative class: 'the place of ...'). According to this hypothesis, the plural marker *bo-* [bó-] results from the contraction of *ba ga* [bá-χà-] 'the people at X's place', reanalyzed as 'X and associates'. Note that this phenomenon is related to that evoked in Section 2.7 below.

2.3. Definiteness

In many Bantu languages, the gender-number prefix of nouns is preceded by a formative (often reduced to a floating H tone) referred to as the augment, or pre-prefix. It is commonly assumed that definiteness or referentiality marking was the original function of the augment, which however has been reanalyzed as a case marker in the Bantu languages spoken in a compact geographical area from Gabon to Angola – see Blanchon (1999), Schadeberg (1986). In Tswana, the augment has simply been lost, and no grammaticalized expression of referentiality / definiteness has been created. In Tswana, exactly as in Latin or Russian, bare

nouns are freely used in contexts in which other languages would require definiteness marking.

2.4. Case/adpositions

Tswana does not have case in the sense of a morphological category of nouns whose functions include the marking of distinctions between core arguments.

2.4.1. Locative marking

As usual among Southern Bantu languages, Tswana has lost the system of locative marking by adding locative class prefixes to noun forms already including their inherent prefixes. This loss has been compensated by the creation of two locative affixes in complementary distribution that, synchronically, are not related to the noun class system. One of them, found in Tswana as *-ng* [-ŋ̀], suffixes to the first word of locative expressions. It is commonly admitted that it is etymologically related to Proto-Bantu **-įni* 'liver' – see Samsom and Schadeberg (1994), Güldemann (1999). The other one, found in Tswana as *go* [χʊ́-], prefixes to the first word of locative expressions. It is analyzed by Grégoire (1975) as originating from a non-finite form of the copular verb including an index of locative class (something like 'there-being').

Tswana also uses the genitival linker of locative class *ga* [χá-] '(place) of' as a locative marker introducing locative arguments or adjuncts with the meaning 'at/to/from X's place' (X a human noun) – Ex. (4).

(4)   *Ke tlaa ya ga Mpho kamoso.*
        kì-tɫàà-jà   χá-m̀pʰɔ́   kámʊ̀:sɔ́.
        S.1SG-FUT-go:CJ   CL17:GEN-(CL1)Mpho   tomorrow
        'I will go to Mpho's place tomorrow.'

In addition to these locative affixes, in Tswana (but not in the other Southern Bantu languages, not even in the other Sotho-Tswana varieties), the demonstratives of locative classes, still used in Tswana as deictic locative adverbs (*fa* [fá] 'here', *ko* [kó] 'there', and *mo* [mó] 'therein'), also have grammaticalized as locative prepositions – see Creissels (1997, 2011). As indicated in Ex. (5), the grammaticalization of these prepositions is not complete in the sense that, in their locative uses, they can always be dispensed with. However, they are rarely omitted in spontaneous texts.

(5) a. *Ke isitse ngwana ko ngakeng.*
         kì-ìsítsé   ŋw-àná   (ˈkó)   ŋákè̀:-ŋ̀
         S.1SG-go:CAUS:PRF:CJ   CL1-child   LOC   (CL9.)doctor-LOC
         'I have sent the child to the doctor's.'
     b. *Ke tswa ko go malome.*
         kì-tswà   (kó)   χʊ́-màlɔ̂:mɛ̀.
         S.1SG-come_from:PRS:CJ   LOC   LOC-(CL1.)uncle:1SG
         'I am coming from my uncle's.'

Moreover, as illustrated by Ex. (6), one of these three recently created locative prepositions (*mo* [mó] 'in'), has already acquired non-locative uses – see Creissels (2013). In its non-locative uses, *mo* [mó] cannot be omitted.

(6) a. *Ga ke reke dikgomo mo legodung.*
      χà-kí-rékí   dí-qʰòmʊ́   ˈmó   lí-χòdù̀ː-ŋ̀
      NEG-S.1SG-buy:CJ   CL8/10-cow   LOC   CL5-thief-LOC
      'I don't buy cows from a thief.'
   b. *Re aga maraka go sireletsa dikgomo mo dibataneng.*
      rì-áχá   má-ràká   χò-sírélétsà   dì-qʰòmʊ́   ˈmó
      S.1PL-build:PRS:CJ   CL6-kraal   INF-protect   CL8/10-cow   LOC
      dí-bàtànèː-ŋ̀.
      CL8/10-beast_of_prey-LOC
      'We build kraals to protect the cows from the beasts of prey.'

Tswana also has several words that were originally nouns belonging to one of the three Proto-Bantu locative classes 16-17-18 (such as *morago* [mòráχʊ́] 'behind', originally a class 18 noun, or *godimo* [χòdímʊ́] 'above', originally a class 17 noun) that have completely lost the ability to be used as nouns, but are still used as adverbs or prepositions. Their first syllable was originally a class prefix, but it does not act as such anymore. In the prepositional use of these former locative class nouns, their complement is marked by *ga* [χá-], etymologically the genitival linker of class 17, even for those that originally belonged to another locative class: *morago ga* [mòráχò χá-] 'behind, after', *godimo ga* [χò-dímò χá-] 'on top of'. In Tswana, the corresponding nouns have been re-created by adding prefixes of non-locative classes to a stem which, by itself, is of adverbial nature: *bo-morago* [bò-mòráχʊ́] (cl. 14) 'back', *legodimo* [lì-χòdímʊ́] (cl. 5) 'top'. Among former locative class nouns used as prepositions, the development of non-locative uses is attested with *ntle* [ǹtɬɛ́] 'exterior' > *ntle ga / le* [ǹtɬɛ́ χá- / lí-] 'without' – Ex. (7).

(7) *Ke tlaa dira jang ntle le wena?*
    kì-tɬàà-dìrà   jáŋ   ǹtɬɛ́   lí-wèːná?
    S.1SG-FUT-do:CJ   how   outside   with-2SG.PRO
    'How will I do without you?'

2.4.2. Non-locative prepositions

Tswana has only vestiges of the Bantu comitative preposition *na*, and productively uses a comitative proclitic *le* [lí-]. I am aware of no evidence of a possible etymological analysis of this comitative marker.

    Tswana also has an instrumental preposition *ka* [ká], which however also has more or less marginal uses that can hardly be explained as extensions of its instrumental meaning. Its use to introduce the complement of *kana* [kàná] 'of the same size (as)', illustrated by Ex. (8), suggests a similative meaning ('like') which is not productive anymore, but can be viewed as evidence of derivation from the Proto-Bantu verb root *-ngà* 'be like', since in Tswana, *k* is

the regular reflex of Proto-Bantu *ng*. The details of a hypothetical grammaticalization path SIMILATIVE > INSTRUMENTAL are, however, unclear.

(8) *Tshephe e kana ka podi e tona.*

tsʰɛ́pʰɛ́   í-kàná   ꜜká púdì   é   ꜜtô:nà.
(CL9.)springbok   S.CL9-of_the_same_size   as   (CL9.)goat:CSTR   CL9:LK   (CL9.)big
'The springbok is of the same size as a big goat.'

The third simple non-locative preposition, *ke* [kí] (used almost exclusively with agent phrases in passive constructions, as in (9)) is etymologically transparent, since *ke* [kí] is also an identificational copula (i.e., the translation equivalent of English 'this is'), and the grammaticalization of identificational copulas into prepositions marking agent phrases in passive constructions is well-attested across Bantu.[7] Negative passive clauses, in which the *ke*-phrase falls under the scope of negation morphologically expressed within the passive verb form, provide decisive evidence that the originally bi-clausal construction has been reanalyzed as a monoclausal construction in which the former identificational clause acts as an adjunct modifying the passive verb form – Ex. (9b). The reanalysis is confirmed by the fact that passive verb forms immediately followed by a *ke*-phrase must be in the conjoint form, since the disjoint form would be required if there were still a clause boundary between the verb form and *ke* [kí].

(9) a. *Lekau le beditswe ke mapodisi.*
         lì-káú   lí-bìdítswè   kí   má-pòdî:sì.
         CL5-boy   S.CL5-hit:PASS:PRF:CJ   by   CL6-policeman
         'The boy was hit by the policemen.' lit. 'The boy was hit, it is the policemen.'

     b. *Lekau ga le a bediwa ke mapodisi.*
         lì-káú   χà-lí-á-bìdíwá   ꜜkí   má-pòdî:sì.
         CL5-boy   NEG-S.CL5-PRF:NEG-hit:PASS:CJ by   CL6-policeman
         'The boy was not hit by the policemen.'

Ex. (10) shows that *ke* [kí] 'it is' reanalyzed as a preposition marking the agent phrase in passive constructions can be found with a similar meaning in non-passive constructions.

(10) *Ba sule ke letsapa.*
      bá-sùlé   ꜜkí   lí-tsà:pà.
      S.CL2-die:PRF:CJ   from   CL5-tiredness
      'They are exhausted.' lit. 'They died, it is tiredness.'

2.4.3. Preposition-like uses of words belonging to other categories

(fa) e sa le [(fá) í-sà-lí] 'since' is etymogically the persistive form of *le* [lì] 'be' with an expletive subject of class 9, optionally preceded by *fa* [fá] 'if' ('(if) it is still').

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[7] Across Bantu, agent phrases in passive constructions may also show comitative marking, instrumental marking, locative marking, or no marking at all. The grammaticalization of an identificational copula as a preposition marking agent phrases is typically found among Southern Bantu languages (Fleisch 2005).

(11)   *Fa e sa le phuthego ele ga a robala sentle.*
      fá   í-sà-lí   pʰútʰɛ̀χɔ̀   é-lé   χà-á-rɔ̀bálí   sí-ǹːtɬɛ̀.
      if   S.CL9-PERS-be   (CL9.)meeting   CL9:DEM-DIST   NEG-S.CL1-sleep:PRS:CJ   CL7-good
      'Since that meeting he does not sleep properly.'

fa e le [fá ꜜí-lí] 'regarding', lit. 'if it is', is another preposition-like expression involving a regular form of the copular verb *le* [lì] 'be' preceded by *fa* [fá] 'if'.

(12)   *Fa e le nna, ga ke itse sepe.*
      'Personally (lit. if it's me), I don't know anything.'
      fá   ꜜí-lí   ǹná,   χà-kí-ítsí   ꜜsîː-pὲ.
      if   S.CL9-be   1SG:PRO   NEG-S.1SG-know:PRS:CJ   CL7-nothing

Similarly, *fa e se* [fá ꜜí-sí] 'except', lit. 'if it is not', derives etymologically from the negative copula *se* [sì] 'not to be'.

(13)   *Basimane botlhe ba na le baesekele, fa e se nna.*
      bà-símàní   ꜜb-ótɬʰé   bá-nà   lí-báìsíkìːlí,   fá   ꜜí-sí   ǹːná.
      CL2-boy   CL2-all   S.CL2-be   with-(CL9.)bicycle   if   S.CL9-not_to_be   PRO:1SG
      'All the boys have a bicycle, except me (lit. if it's not me).'

e seng [í-sì-ŋ́] is etymologically very similar, since it can be identified as a form of the negative copula with an expletive subject index of class 9 and the relative suffix ('which is not'). It is also used to introduce NPs, but with a meaning of contrast, as in (14).

(14)   *Bitsa Mpho, e seng Kitso!*
      bítsá   m̀pʰɔ́,   í-sì-ŋ́   ꜜkîːtsɔ̀!
      call.IMP   (CL1.)Mpho   S.CL9-not_to_be-REL   (CL1.)Kitso
      'Call Mpho, not Kitso!'

Several infinitive forms are also used as prepositions:

- *go bapa le* [χò-bàpà lí-] 'be side by side with' > 'near'
- *go feta* [χò-fìtà] 'pass' > 'more than' – Ex. (15)
- *go fitlhela* [χò-fìtɬʰὲlà] 'arrive' > 'until' – Ex. (16)
- *go lebagana le* [χò-líbáχánà lí-] 'be face to face with' > 'in front of'
- *go na le* [χò-nà lí-] 'be with', 'have' > 'rather than' – Ex. (17)
- *go simolola* [χò-símʊ́lʊ́là] 'begin' > 'from'
- *go tloga* [χò-tɬò̀χà] 'leave' > 'from'
- *go tswa* [χò-tswà] 'come out', 'come from' > 'from' – Ex. (16)
- *go ya ka* [χò-jà ká] 'go with' > 'according to' – Ex. (18)

(15)   *Neo o montle go feta Dimpho.*
      nέɔ́   ꜜʊ́-mʊ́-ǹtɬὲ   χò-fìtà   dìm̀ːpʰɔ́.
      (CL1.)Neo   S.CL1-CL1-beautiful   INF-pass   (CL1.)Dimpho
      'Neo is more beautiful than Dimpho.'

(16) *go tswa letsatsi leo go fitlhela gompieno*
χ̀ò-tswà lì-tsàtsí ˈlé-ɔ́ χʊ́-fìtɬʰɛ̀là χʊ́m̀píènʊ́
INF-come_from CL5-day CL5.DEM-DIST INF-arrive today
'since that day until today'

(17) *O rata madi go na le batho.*
ò-rátá mà-dí χʊ́-nà lí-bâ:-tʰʊ̀.
S.2SG-love:PRS:CJ CL6-money INF-be with-CL2-person
'You love money rather than people.'

(18) *go ya ka ngwao ya rona*
χ̀ò-jà ká ŋwáɔ̀ já-ròná
INF-go with (CL9.)tradition CL9:GEN-PRO.1PL
'according to our tradition'

Several words morphologically identifiable as locatives have non-locative prepositional uses in which their complement is introduced by *le* [lí-] 'with':

 – *kgatlhanong le* [qʰàtɬʰànò-ŋ̀ lí-] with the locative form of *kgatlhano* [qʰàtɬʰànɔ̀] 'meeting' > 'against'
 – *malebang le* [mà-líbà-ŋ́ lí-] or *tebang le* [tíbà-ŋ́ lí-] with the locative form of a nominalization of *leba* [líbá] 'look' > 'about', 'with reference to'[8]

In *mabapi le* [mà-bàpí lí-] 'about', 'with reference to', *mabapi* [mà-bàpí], nominalized form of *bapa* [bàpà] 'be side by side', is devoid of locative marking.

In *ka ntata ya* [ká ǹtàtá já-] 'because of', *ka* [ká] is the instrumental preposition, *ya* [já-] is the genitival linker of class 9, and *ntata* [ǹtàtá] is a nominal form that has no independent existence but is cognate with *lata* [làtà] 'go and fetch' and *latela* [làtɛ̀là] 'follow'.

ka ntlha ya [ká ǹtɬʰá já-] 'on account of', 'because of', 'due to' has the same structure, but *ntlha* [ǹtɬʰá] is attested as a noun with the meaning 'point' – Ex. (19).

(19) *Ga ba a tla ka ntlha ya pula.*
χ̀à-bá-à-tɬá ká ǹtɬʰá já-pû:là.
NEG-S.CL2-PRF:NEG-come:CJ with (CL9.)point CL9:GEN-(CL9.)rain
'They didn't come due to the rain.'

In comparative constructions, the standard of comparison can be introduced by *go feta* [χ̀ò-fìtà], as in (15) above, but it can also be expressed as a locative, either alone or preceded by *bogolo* [bʊ̀χʊ́lʊ́] 'especially'. *Bogolo* [bʊ̀χʊ́lʊ́], etymologically the class 14 form of the adjective *-golo* [-χʊ́lʊ́] 'big', is used nominally with the meaning 'bigness', but has also developed an adverbial use in which it can be glossed 'especially'. The literal meaning of (20) is something like 'A horse is fast (especially) beside a donkey'.

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[8] Note, however, that there is a problem with this etymology, since the locative suffix normally has a low tone, and nothing can explain its replacement by a H tone in *malebang le* [mà-líbà-ŋ́ lí-] or *tebang le* [tíbà-ŋ́ lí-].

(20) *Pitse e lobelo (bogolo) mo tonking.*
  pìtsí   ˈí-lóbílɔ̀ (bòχól)ó) ˈmó ˈtóŋkî̀:-ŋ̀.
  (CL9.)horse S.CL9-fast especially LOC donkey-LOC
  'A horse is faster than a donkey.'

2.5. Construct form of nouns

Construct forms of nouns (i.e., special noun forms used in combination with given types of modifiers) are not common at all in Bantu languages, but in Tswana, the ...HL tone pattern shown by ...HH nouns when immediately followed by certain modifiers is not phonologically conditioned, and consequently must be analyzed as a construct form marker, since in phonologically similar but syntactically different contexts, the nouns in question show their inherent ...HH pattern – see Creissels (2009).

For example, in (21a), *Setswana* [sìtswáná] 'Tswana culture, language, etc.' is the head of the NP *Setswana se ba se buang* [sìtswánà sé básìbúàŋ] 'the Tswana they speak > the way they speak Tswana', and consequently, the contact with the linker *se* [sé] introducing the relative clause triggers the use of the construct form [sìtswánà]. In (21b), *Setswana* [sìtswáná] is in contact with the same linker, but the linker introduces a dependent of *setilo* [sìtílɔ] 'chair',[9] not of *Setswana* [sìtswáná]; in (21b), *Setswana* [sìtswáná] has no dependent, and consequently the construct form would not be correct.

(21) a. *Ga ke rate Setswana se ba se buang.*
    χà-kí-rátí   sì-tswánà   sé   bá-sì-búà:-ŋ́.
    NEG-S.1SG-like:PRS:CJ CL7-Tswana:CSTR CL7:LK S.CL2-O.CL7-speak:PRS-REL
    'I don't like the Tswana they speak.' > the way they speak Tswana
  b. *Ga ke rate setilo sa Setswana se Mpho a se rekileng.*
    χà-kí-rátí   sì-tílɔ̀   sá-sì-tswáná
    NEG-S.1SG-like:PRS:CJ CL7-chair CL7:GEN-CL7-Tswana
    sé   m̀pʰɔ́   á-sì-rékílè:-ŋ́.
    CL7:LK (CL1)Mpho S.CL1-O.CL7-buy:PRF-REL
    'I don't like the Tswana chair that Mpho bought.'

A plausible explanation of this tonally marked construct form of nouns is that it resulted from the morphologicization of tonal alternations originally attributable to tonal sandhi.

2.6. Noun-modifier linkers

Noun-modifier linkers are grammatical words or clitics whose role is to enable a word/phrase to act as a noun modifier. The noun-modifier linkers found in Bantu languages also express agreement with the head noun, and are maintained in elliptical constructions in which the head-noun is omitted.

Linkers are particularly common in the genitival construction: most Bantu languages (including Tswana) have a proclitic genitival linker inherited from Proto-Bantu, consisting of an invariable and etymologically opaque element *-a-* preceded by a class agreement marker,

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[9] The construct form *setilo* [sìtílɔ̀] is licensed by the genitival dependent *sa Setswana* [sásìtswáná].

attached to the left of NPs in genitive role. Linkers used specifically to introduce relative clauses are common too.

In Tswana and other southern Bantu languages, the linkers found in the *noun + relative clause* construction also occur in *noun + attributive adjective* constructions. Internal evidence and comparison with other Bantu languages show that these linkers are former demonstratives that, when inserted between a head noun and some types of modifiers, have lost their deictic value and acquired a purely syntactic function. For example, *yo* [jó] is both the linker of class 1 and the basic form of the demonstrative of class 1 (to which deictic particles can be added: *yono* [jó-nɔ́] (proximal), *yole* [jó-lé] (distal)). In *mosadi yo moleele* [mʊ̀-sádì jó mʊ̀-léèlé] 'tall woman', *yo* [jó] is a linker, semantically void but obligatorily inserted between the construct form of *mosadi* [mʊ̀-sádí] 'woman' and the class 1 form of the adjective [-léèlé] 'tall'; *yo* [jó] as a demonstrative can be added after either the head noun, or the adjective: *mosadi yo(no/le) yo moleele* [mʊ̀-sádì jó(nɔ́/lé) jó mʊ̀-léèlé] or *monna yo moleele yo(no/le)* [mʊ̀-sádì jó mʊ̀-léèlé jó(nɔ́/lé)] 'this/that tall woman'. In Ex. (22a), the same linker is repeated before the second adjective 'black', and the relative clause. Ex. (22b) illustrates the same construction with a head noun belonging to another class.

(22) a. *mosadi yo moleele yo montsho yo o opelang yole*

mʊ̀-sádì	jó	mʊ̀-léèlé	ˈjó	mʊ́-ǹtsʰʊ̀
CL1-woman:CSTR	CL1:LK	CL1-tall	CL1:LK	CL1-black

jó	ˈʊ́-ɔ́pɛ́là-ŋ́	ˈjó-lé
CL1:LK	S.CL1-sing:PRS-REL	CL1:DEM-DIST

'that tall woman with dark complexion who is singing'

b. *lekau le leleele le lentsho le le opelang lele*

lì-káù	lé	lì-léèlé	ˈlé	lí-ǹtsʰʊ̀
CL5-boy:CSTR	CL5:LK	CL5-tall	CL5:LK	CL5-black

lé	ˈlí-ɔ́pɛ́là-ŋ́	ˈlé-lé
CL5:LK	S.CL5-sing:PRS-REL	CL5:DEM-DIST

'that tall boy with dark complexion who is singing'

Tswana also has a special linker, etymologically the circumstantial form of the verb 'be', in *noun + numeral* constructions – Ex. (23).

(23) *basadi bale babedi*

bà-sádí	ˈbá-lí	bá-bèdí
CL2-woman	S.CL2-be:CIRC	CL2-two

'two women', lit. 'women they-being two'

2.7. Genitive and possessives

In the genitival construction of Tswana, a genitival linker expressing agreement with the head noun is prefixed to the genitival modifier, as *ba* [b-á-] in *bana ba motsomi* [b-àná b-á-mʊ̀-tsɔ́mí] (CL2-child CL2-GEN-CL1-hunter) 'the children of the hunter'. However, when the genitival modifier is a personal name or a kinship term, a variant *-a ga* [-áχá-] of the genitival linker must be used (as in *bana ba ga Kitso* [b-àná b-áχà-kítsɔ́] 'Kitso's children'). Synchronically, this is just a variant of the genitival linker, in complementary distribution

with the plain variant *-a* [-á], but historically, it results from the grammaticalization of a sequence of two genitival linkers: *ba* [b-á-] (genitival linker of the human plural class: 'the people of ...') plus *ga* [χ-á-] (genitival linker of locative class: 'the place of ...'). In other words, the etymological meaning of *bana ba ga Kitso* [b-àná b-áχà-kítsɔ́] 'Kitso's children' is 'the children at Kitso's place'.

2.8. Nominal derivation

In Bantu languages, verb-to-noun derivation is very productive, yielding action nouns, result nouns, agent nouns, instrument nouns, place-of-action nouns, and manner nouns, but the affixes involved in verb-to-noun derivation are etymologically opaque. Noun-to-noun derivation mainly relies on gender alternations that leave the stem unchanged. As a rule, affixal noun-to-noun derivation is relatively limited, and results from relatively recent (and still transparent) grammaticalization processes. This is in particular the case in Tswana.

Tswana, like the other Southern Bantu languages, does not form diminutives by gender shift, and has a diminutive suffix cognate with the noun 'child' (in present-day Tswana, *ngwana* [ŋw-àná] pl. *bana* [b-àná]), as in *tawana* [tàw-áná] 'lion cub' < *tau* [tàú] 'lion'.[10]

This diminutive suffix also combines with adjectives, but in combination with color adjectives applied to domestic animals (including cattle, sheep, goats, horses, dogs, and fowls), it has further grammaticalized into a feminine suffix. In this context, the basic form of the adjective signifies the masculine gender, whereas the diminutive form with suffix *-ana* [-áná] signifies the feminine.

(24) a. *namane e ntsho*
      nàmánì   é   ńtsʰʊ̀
      (CL9.)calf   CL9:LK   (CL9.)black
      'a black male calf'
    b. *namane e ntshwana*
       nàmánì   é   ǹtsʰw-áná
      (CL9)calf   CL9:LK   (CL9)black-DIM
      'a black female calf'

A little productive feminine / augmentative suffix *-gadi* [-χádí] < Proto-Bantu **kádí* 'woman' is also found in Tswana, as in *kgosi* [qʰósí] 'king, chief' > *kgosigadi* > [qʰósíχádì] 'queen', 'chief's wife', or *tau* [tàú] 'lion' > *taugadi* [tàú-χádí] 'lioness' or 'big lion'. Note that the augmentative use of this suffix is productive in some other Southern Bantu languages (Zulu, Southern Sotho), but very marginal in Tswana.

Tswana also has a prefix *ra-* [rá-] (from *rra* [r̀rá] 'father') 'owner of', 'responsible for', 'expert on', as in *ramotse* [rá-mótsí] 'mayor' < *motse* [mòtsì] 'town', *ramotlakase* [rá-mótɬàkásí] 'electrician' < *motlakase* [mòtɬàkásí] 'electricity'. The status of this element as a derivational prefix is however problematic, since derivational prefixes are expected to attach to stems, whereas *ra-* [rá-] combines with inflected noun forms (in *motse* [mòtsì] and

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[10] Interestingly, in other Bantu languages, the same noun grammaticalized as a diminutive prefix, which is more consistent with the typological profile of Bantu languages. On possible explanations of the creation of suffixes in Eastern and Southern Bantu, see Güldemann (1999).

motlakase [mʊ̀tɫàkásí], *mo-* [mʊ̀-] is the prefix of class 3; in *rameno* [rá-mὲnɔ́] 'dentist, *ra-* [rá-] combines with *meno* [mὲnɔ́] 'teeth', plural form of *leino* [lìínɔ́] 'tooth).

The same problem arises with the similative prefix *seka* [sì-ká-] (where *se-* [sì-] is the prefix of class 7, typically associated with the meaning 'thing'), equivalent of the English suffixes *-oid* or *-like*: in *seka motho* [sì-ká-mʊ́-tʰʊ́] 'something resembling a human being', *seka* [sì-ká-] does not combine with the stem *-tho* [-tʰʊ̀] 'human being', but with the singular form *motho* [mʊ̀-tʰʊ̀]. What is however uncontroversial is that *-ka* [-ká-] can be analyzed as a reflex of the reconstructed Proto-Bantu verb root **ngà* 'be like', since Tswana *k* is the regular reflex of Proto-Bantu **ng*.

3. Grammaticalization of verbal categories

3.1. Verbal derivation and valency

Compound verbs are marginal in Tswana, and noun-to-verb derivation (as *bogale* [bʊ̀-χálí] 'fierceness' > *galefa* [χálí-f-á] 'become angry or fierce') is of limited productivity, whereas verb-to-verb derivation is very productive. Tswana, like most Bantu languages, has a rich inventory of 'verbal extensions', suffixes used to derive verbs from verbs with a variety of functions: they may increase the valency, decrease the valency, (re-)orient the action, or introduce aspectual specifications. Reduplication is also attested with an iterative meaning.

The verbal extensions found in Tswana are reflexes of suffixes reconstructed at the Proto-Bantu level (with more or less obvious cognates in other branches of Niger-Congo), and their etymology is opaque, with the only exception being the associative-reciprocal suffix *-an-* [-an-], which has been claimed to be cognate with the comitative preposition reconstructed as **na* 'with' (Schladt 1998).

Among the evolutions that may have affected the reflexes of Proto-Bantu suffixes encoding operations on valency, the development of antipassive uses of the associative-reciprocal suffix is well-attested among Bantu languages (Bostoen, Dom, and Segerer 2015; Dom, Segerer, and Bostoen 2015), but is only marginally found in Tswana. The same can be said about the use of causative derivation to license object NPs referring to instruments: in some other Bantu languages (for example, Kinyarwanda – see Kimenyi 1980), this use of causative derivation is fully productive, whereas in Tswana, it is only marginally attested (Creissels 2002). Some other Bantu languages attest evolutions such as reflexive > reciprocal (Bostoen 2010), reciprocal > middle, or renewal of passive morphology via reanalysis of impersonal constructions as passive (Kawasha 2007), but nothing similar can be found in Tswana.

An interesting but so far unsolved question is that of the developments responsible for the variety observed in the functions of applicative derivation across Bantu. Creissels (2004) describes uses of applicative derivation in Tswana that do not fit the standard definition of applicative as encoding the addition of an object phrase representing a participant that could not be encoded as the object of the non-derived form of the same verb, and similar observations have been made on many other Bantu languages. Synchronically, the benefactive use of the Bantu applicative is particularly prominent, but a plausible hypothesis is that the original function of applicative derivation was rather the licensing of locative complements – see Jerro (2016).

3.2. The grammaticalization of TAM

Bantu languages are famous for the complexity of their TAM-marking systems. It is widely acknowledged that a major source of the markers placed immediately after the subject index in the verbal template (which is the place where most TAM markers are found) is the univerbation of constructions 'auxiliary + lexical verb' in which the former auxiliary expressed subject agreement, and the lexical verb was in some dependent form.

In Tswana, this scenario can be reconstructed for the future marker *tlaa* [-tɬàà-] and the potential marker *ka* [-ká-]. The Tswana future results from the univerbation of a construction in which the future auxiliary was followed by the auxiliated verb in the infinitive, and the future marker *tlaa* [-tɬàà-] is the reflex of a former sequence *tla go* [-tɬà χʋ̀-], where *tla* [-tɬà-] is the verb 'come' in future auxiliary function, and *go* [χʋ̀-] is the infinitive prefix.

As regards the potential marker *ka* [-ká-], Nurse (2008) observes that modality markers that could be reflexes of a root reconstructable as **nga*, variously labeled 'potential', 'conditional', or 'concessive', are widely attested among Bantu languages. Since *k* is the regular Tswana reflex of Proto-Bantu **ng*, Tswana *ka* [-ká-] belongs to this family of modality markers, which according to Creissels (2017b) results from the grammaticalization of the Proto-Bantu reconstructed root **ngà* 'be like' (or its reflexes at some stage between Proto-Bantu and the present-day Bantu languages).

Tswana also has fully grammaticalized TAM auxiliaries, i.e., words with a morphological structure similar to that of finite verb forms, which however can only be used in combination with other verbs, and whose only possible function is to add TAM specifications to the verbs with which they combine. Some of them have no obvious etymology. Those that are etymologically transparent are cognate with *tla* [tɬà] 'come', *ba* [bà] 'be' (not attested in Tswana, but productively used in the other Sotho-Tswana varieties), or *nna* [ńná] 'be', or are reflexes of the Proto-Bantu reconstructed root **ngà* 'be like' (and are consequently cognate with the potential marker *ka* [-ká-]).

In addition to the fully grammaticalized TAM markers and TAM auxiliaries, Tswana also has a number of lesser-grammaticalized auxiliary verbs expressing meanings commonly taken up by adverbial expressions in European languages. The following verbs, in addition to the lexical meaning they express in combination with NPs only, are also used as TAM auxiliaries in some of their regularly inflected forms:

– *aga* [áχá] 'build' > 'do something continually'

(25) *Mhero o aga o tlhoga.*
     m̀-hɛ̀rɔ̀   ʋ́-áχà   ʋ́-tɬʰɔ̂:χà.
    CL3-weed   S.CL3-build:PRS:CJ   S.CL3-grow:CIRC:PRS
    'Weed doesn't stop growing.'

– *atisa* [àtìsà] 'increase' > 'do something often, or in great quantity'

(26) *Re atisa go ya kerekeng.*
    rì-àtìsà   χò-jà   kérèkê:-ɳ̀.
    S.1PL-increase:PRS:CJ   INF-go   (CL9.)church-LOC
    'We often go to church.'

  – *batla* [bàtɬà] 'look for, want' > 'need to do something' or 'seem to be about to do something'

(27) *Setlhare se batla go nosediwa.*
    sì-tɬʰàrì   sí-bátɬá   χò-nʊ́sédî:wà.
    CL7-tree   S.CL7-want:PRS:CJ   INF-water:PASS
    'The tree needs to be watered.'

(28) *Mabadi a batla a fola.*
    mà-bádí   ꞌá-bátɬá   á-fɔ̀:lá.
    CL6-wound   S.CL6-want:PRS:CJ   S.CL6-heal:CIRC:PRS
    'The wounds seem to be about to heal.'

  – *batlile* [bàtɬílé] perfect of [bàtɬà] 'look for, want' > 'have nearly done something'

(29) *Ke batlile go bolawa.*
    kì-bàtɬílé   χò-búlâ:wà.
    S.1SG-want:PRF:CJ   INF-kill:PASS
    'I was almost killed.'

  – *boa* [búá] 'return' > 'do something again'

(30) *Tshimo e boile ya lengwa.*
    tsʰímʊ́   ꞌí-búílé   já-lì:ŋwà.
    (CL9.)field   S.CL9-return:PRF:CJ   S.CL9:SEQ-cultivate:PASS
    'The field was cultivated again.'

  – *dikile* [díkílé] perfect of *dika* [díká] 'surround', 'revolve' > 'have done something in the past year'

(31) *Tshimo e dikile e lengwa.*
    tsʰímʊ́   ꞌí-díkílè   í-lî:ŋwà.
    (CL9.)field   S.CL9-surround:PRF:CJ   S.CL9-cultivate:PASS:CIRC:PRS
    'The field was cultivated last year.'

  – *ga...nne* [χà...ɳ́ní] negative form of *nna* [ɳ́ná] 'be' > 'never do something'

(32) *Ga ba nne ba nthusa.*
    χà-bá-ɳ́ní   bá-ǹ-tʰû:sà.
    NEG-S.CL2-be:PRS:CJ   S.CL2-O.1SG-help:CIRC:PRS
    'They never help me.'

– *ga...tlhole* [χá...tɬʰɔ̀lí] negative form of *tlhola* [tɬʰɔ̀là] 'spend the day somewhere' > 'have ceased doing something'

(33) *Ga ke tlhole ke lema tshimo e.*
      χà-kí-tɬʰɔ̀lí   ˈkí-límá   tsʰímò: é.
      NEG-S.1SG-spend_the_day:PRS:CJ   S.1SG-cultivate:CIRC:PRS   (CL9.)field   CL9:DEM
      'I do not cultivate this field anymore.'

– *letse* [létsí] perfect of *lala* [lálá] 'spend the night somewhere' > 'have done something the day before'

(34) *Ke letse ke kwala ditlhatlhobo.*
      kì-létsí   kí-kwàlá   dì-tɬʰátɬʰɔ̂:bɔ̀.
      S.1SG-spend_the_night:PRF:CJ   S.1SG-write:CIRC:PRS   CL8/10-examination
      'I took an examination yesterday.'

– *losetsa* [lòsètsà] 'struggle for something' > 'seem to be about to do something'

(35) *Pula e losetsa go na.*
      púlá   ˈí-lósétsá   χô:-nà.
      (CL9.)rain   S.CL9-struggle_for:PRS:CJ   INF-rain
      'It seems to be about to rain.'

– *na le* [nà lí-] 'be with' > 'do something usually', or 'be obliged to do something'

(36) *Ba na le go ya ngakeng.*
      bá-nà   lí-χó-já   ŋákè:-ŋ̀.
      S.CL2-be   with-INF-go   (CL9.)doctor-LOC
      'They usually go to the doctor.' or 'They must go to the doctor.'

– *nama* [nàmà] 'spread, stretch' > 'continue to do something'

(37) *O name o bereka.*
      ó-námὲ   ó-bὲrê:kà.
      S.2SG-spread:SUBJ   S.2SG-work:CIRC:PRS
      'You should continue to work.'

– *namile* [nàmílé] perfect of *nama* [nàmà] 'spread, stretch' > 'have eventually done something'

(38) *Ke namile ke kgona ditlhatlhobo.*
      kì-nàmílὲ   kí-qʰɔ́ná   dì-tɬʰátɬʰɔ̂:bɔ̀.
      S.1SG-spread:PRF:CJ   S.1SG-overcome:CIRC:PRS   CL8/10-test
      'I eventually passed the test.'

– *nna* [ńná] 'be' > 'be still doing something'

(39) *Pula e nnela e na.*
    púlá   ꜜí-ńnɛ́là   î:-nà.
    (CL9)rain   S.CL9-be:APPL:PRS:CJ   S.CL9-rain:CIRC:PRS
    'It doesn't stop raining.'

– *ntse* [ńtsé] perfect of *nna* [ńná] 'be' > 'do something continually', or 'be still doing something'

(40) *Ke ntse ke a bereka.*
    kì-ńtsí   kí-à-bɛ́rê:kà.
    S.1SG-be:PRF:CJ   S.1SG-DJ-work:PRS
    'I am still working.'

– *ratile* [rátílé] perfect of *rata* [rátá] 'like, want' > 'have nearly done something'

(41) *Ke ratile go wa.*
    kì-rátílé   χô:-wà.
    S.1SG-like:PRF:CJ   INF-fall_down
    'I almost fell down.'

– *sa le* [sà-lí] persistive form of *le* [lí] 'be' > 'have done something long ago, or for the last time'

(42) *Ke sa le ka mmona ka laboraro.*
    kì-sà-lí   ká-m̀-mɔ́nà   ká   lábòrâ:rò.
    S.1SG-PERS-be   S.1SG:SEQ-O.CL1-see   INSTR   wednesday
    'The last time I saw him was Wednesday.'

– *sa tswa* **[**sá-tswá**]** persistive form of *tswa* [tswá] 'go out', 'come from' > 'have just done something'

(43) *Ke sa tswa go ja.*
    kì-sá-tswá   χò:-dʒá.
    S.1SG-PERS-come_from:CJ   INF-eat
    'I have just eaten.'

– *setse* **[**sétsí**]** perfect of *sala* **[**sálá**]** 'remain' > 'be already doing something'

(44) *Ba setse ba bua.*
    bá-sétsì   bá-bù:á.
    S.CL2-remain:PRF:CJ   S.CL2-speak:CIRC:PRS
    'They are already speaking.'

– *senkile* [síŋkílé] perfect of *senka* [síŋká] 'look for' > 'have nearly done something'

(45) *Ke senkile go swa.*
  kì-síŋkílé   χ̀ò:-swá.
  S.1SG-look_for:PRF:CJ   INF-die
  'I almost died.'

  – *tlaa dika* [tɬàà-díká] future of *dika* [díká] 'surround', 'revolve' > 'do something during the next year'

(46) *Tshimo e tlaa dika e lengwa.*
  tsʰímʊ́   ˈí-tɬáà-díkà   í-lî:ŋwà.
  (CL9.)field   S.CL9-FUT-surround:CJ   S.CL9-cultivate:PASS:CIRC:PRS
  'The field will be cultivated next year.'

  – *tlaa lala* [tɬàà-lálá] future of *lala* [lálá] 'spend the night somewhere' > 'do something before the end of the day'

(47) *Pula e tlaa lala e nele.*
  Púlá   ˈí-tɬáà-lálà   í-nì:lé.
  CL9-rain   S.CL9-FUT-spend_the_night:CJ   S.CL9-rain:CIRC:PRF
  'It will rain before the end of the day.'

  – *tlaa tsoga* [tɬàà-tsʊ́χá] future of *tsoga* [tsʊ́χá] 'get up' > 'do something the next day'

(48) *Tshimo e tlaa tsoga e lengwa.*
  tsʰímʊ́   ˈí-tɬáà-tsʊ́χà   í-lî:ŋwà.
  (CL9.)field   S.CL9-FUT-get_up:CJ   S.CL9-plough:PASS:CIRC:PRS
  'The field will be ploughed tomorrow.'

  – *tlhola* [tɬʰɔ̀là] 'spend the day somewhere' > 'do something continually'

(49) *Ngwana yo o tlhola o ntshwenya..*
  ŋw-àná   ˈjó   ˈó-tɬʰɔ́là   á-ǹ-tsʰwê:ɲà.
  CL1-child   CL1:DEM   S.CL1-sprend_the_time:PRS:CJ   S.CL1-O.1SG-bother:CIRC:PRS
  'This child doesn't stop bothering me.'

  – *tloga* [tɬò̀χà] 'leave' > 'be close to doing something'

(50) *Kgomo e tloga go tsala.*
  qʰòmʊ́   ˈí-tɬʊ́χá   χ̀ò-tsâ:là.
  (CL9.)cow   S.CL9-leave:PRS:CJ   INF-calve
  'The cow is close to calving.'

  – *tsamaela* [tsàmàɛ̀là] applicative form of *tsamaya* [tsàmàjà] 'walk' > 'be close to doing something'

(51) *Tshipi e tsamaela go fela.*
 tsʰípí ꜛí-tsámáɛ̀là χʊ̀-fɛ̂:là.
(CL9.)week S.CL9-walk:APPL:PRS:CJ INF-end
'The week is coming close to its end.'

– *tsamaya* [tsàmàjà] 'walk' > 'do something continually'

(52) *Ngwana yo o tsamaya a bua maaka.*
ŋw-àná ꜛjó ꜛʊ́-tsámájà á-bùá má-à:ká.
CL1-child CL1:DEM S.CL1-sprend_the_time:PRS:CJ S.CL1-tell:CIRC:PRS CL6-lie
'This child keeps telling lies.'

– *tshela* [tsʰílá] 'live' > 'do something continually'

(53) *Konopo e e tshela o kgaogile.*
kʊ́nʊ́pɔ̀ é ꜛí-tsʰílà í-qʰáʊ́χî:lè.
(CL9.)knob CL9:DEM S.CL9-live:PRS:CJ S.CL9-break:CIRC:PRF
'This knob is always broken.'

– *tshogana* [tsʰʊ̀χànà] reciprocal form of *tshoga* [tsʰʊ̀χà] 'fear' > 'do something unexpectedly'

(54) *Re tshoganye re utlwa lentswe la gagwe.*
rì-tsʰʊ̀χáɲì rí-ùtɬwá lí-ǹtswí ꜛlá-χâ:χwɛ̀.
S.1PL-fear:PRF:CJ S.1PL-hear:PRS:CJ CL5-voice CL5:GEN-CL1:PRO
'All of a sudden, we heard his voice.'

– *tshwanetse* [tsʰwánétsí] perfect of *tshwanela* [tsʰwánɛ́lá] 'suit', 'fit' > 'be obliged to do something'

(55) *Re tshwanetse go bereka.*
rì-tsʰwánétsí χʊ̀-bɛ́rɛ̂:kà.
S.1PL-suit:PRF:CJ INF-work
'We must work.'

– *tsile* [tsìlé] perfect of *tla* [tɬà] 'come' > 'seem to be close to do something'

(56) *Ntlo e tsile go wa.*
ǹtɬʊ̀ í-tsìlé χʊ̂:-wà.
(CL9.)house S.CL9-come:PRF:CJ INF-fall
'The house seems to be about to collapse.'

– *tsogile* [tsʊ́χílé] perfect of *tsoga* [tsʊ́χá] 'get up' > 'have done something in the morning'

(57) *Re tsogile re ile toropong.*
  rì-tsóχílè   rí-ìlé   tòrópô:-ŋ̀.
  S.1PL-get_up:PRF:CJ   S.1PL-go:CIRC:PRF   (CL9.)town-LOC
  'We went to town this morning.'

  – *ya* [jà] 'go' > 'be close to doing something'

(58) *Ke ya go mo nyala.*
  kì-jà   χò-mò-ɲâ:là.
  S.1SG-go:PRS:CJ   INF-O.CL1-marry
  'I am going to marry her.'

3.3. Negation

Like most Bantu languages, Tswana expresses negation through verb inflection, and negation marking interferes with TAM marking in a complex way. Among the morphemes involved in negation marking, the only one etymologically transparent is *se* [-sì-] (used among others for the negation of the imperative), reflex of the Proto-Bantu negative copula **sì*.

In addition to negation marking through verb inflection, *gana* [χáná] 'refuse' can be used as a negative auxiliary, as evidenced by its compatibility with inanimate subjects, i.e., with subjects that exclude interpreting *gana* [χáná] 'refuse' in its literal meaning.

(59) *Pula e gana go wa.*
  púlá   ꜛí-χáná   χô:-wà.
  CL9-rain   S.CL9-refuse:PRS:CJ   S.CL9-rain:CIRC:PRF
  'It is not raining.', 'It is not going to rain.'

3.4. Argument indexation

The argument indexation system found in Tswana is not different from that reconstructed for Proto-Bantu. In some Bantu languages, the object indexes have become obligatory agreement markers with some categories of objects (human, or definite), but this is not the case in Tswana. The object indexes of Tswana are always syntactically optional, and the choice between object indexes immediately prefixed to the verb stem and free pronouns in the same syntactic slot as objects NPs depends exclusively on information structure.

3.5. Conjoint/disjoint marking

In Tswana, the distinction between conjoint and disjoint verb forms (see section 1.2) is marked tonally, with only the exception of the present positive, in which the disjoint marker *a* [-à-] occurs immediately after the subject index. Nothing concrete can be said about the origin of the tonal marking of the conjoint / disjoint distinction, for lack of clear comparative data, although the morphologicization of tonal alternations due to phonological phrasing and tonal sandhi is a plausible scenario. The disjoint marker *a* [-à-] has cognates in other Bantu languages, and the Proto-Bantu reconstruction **da* 'disjunct' was proposed by Meeussen (1967: 109). The most plausible scenario is that it developed from an auxiliary expressing

verb focalization (as *do* in English). Güldemann (2003: 355) speculates that its ultimate origin was a verb 'take'. In the same article, Güldemann analyzes the relationship between markers of predication focus and present progressive attested in some Bantu languages (but not in Tswana).

3.6. Dependent/non-finite verb forms

Among the morphemes involved in the formation of dependent or non-finite verb forms in Tswana, the suffix *-ng* [-ŋ́] marking relative verb forms is the only one for which an etymological analysis can be considered. In the verbal template, this suffix occupies the 'postfinal' slot, typically occupied across Bantu by pronominal clitics. Since in Tswana, *-ng* [-ŋ́] is also the cliticized form of the interrogative pronoun *eng* [ùŋ́] 'what?', a grammaticalization scenario INTERROGATIVE > RELATIVE can be considered. Note however that this scenario is not confirmed by the relative suffixes found in the other Southern Bantu languages (including the closest relatives of Tswana), since either their etymology is unclear, or they seem to rather have a locative origin.

4. Grammaticalization of complex constructions

4.1. Complement clauses: quotative > complementizer

Tswana uses various inflected forms of the quotative verb *re* [rì] 'say' in complementizer function. The most commonly used is the infinitive *gore* [χʊ̀-rì].

(60) *Ke bona gore o na le tiro e ntsi.*
      kì-bɔ́ná   χʊ́rì ʊ̀-nà   lí-tírɔ̀   é   n̂:tsì.
      S.1SG-see:PRS:CJ that S.2SG-be with-(CL9.)work CL9.LK (CL9.)much
      'I see that you have much work.'

4.2. Relative clauses

In Tswana, relative clauses are introduced by a linker that grammaticalized from a demonstrative (see Section 2.6), and verb forms heading relative clauses are marked by a relative suffix that may be cognate with the interrogative pronoun *eng* [ùŋ́] 'what?' (see Section 3.6).

4.3. Adverbial clauses

Several of the conjunctions used to introduce adverbial clauses have a more or less transparent etymology.

   ka [ká] 'since, as' is probably cognate with the reconstructed Bantu verb root **ngà* 'be like'.

(61) *Ka o itse tsela, ke tlaa go roma.*
    ká ˈó-ítsí   tsî:là,   kì-tɬàà-χò-rô:mà.
    as s.2SG-know:PRS:CJ (CL9.)way s.1SG-FUT-O.2SG-send
    'Since you know the way, I will send you.'

ka gore [ká χórì] 'because', where *gore* [χòrì] is etymologically the infinitive of *re* [rì] 'say' (also used in complementizer function, see 4.1), is the commonest way to express causal subordination.

(62) *Ba tsile kwano ka gore ba batla go go bona.*
    bá-tsìlé   ˈkwánó ˈká χórì bá-bátɬá   χó-χò-bô:nà.
    s.CL2-come:PRF:CJ here   as   that s.CL2-want:PRS:CJ INF-O.2SG-see
    'They came here because they want to see you.'

The same meaning 'because' can be carried by *gobane* [χòbání] or *gobo* [χòbó], optionally preceded by the instrumental preposition *ka* [ká]. These forms cannot be analyzed in a strictly synchronic perspective, but they are probably cognate with the infinitive of *ba* [bà] 'be'. Similarly, (*ka*) *gonne* [(ká) χòńné] 'because' cannot be analyzed as a regular form of *nna* [ńná] 'be', but is certainly cognate with the regular infinitive *go nna* [χò-ńná].

 fa [fá] 'when, if' originates from the demonstrative of locative class 16 *fa* [fá]. Like the other demonstratives of locative classes, *fa* [fá] grammaticalized first as a linker introducing locative relatives ('(at the place) where ...'), and its use was subsequently extended to the marking of temporal and conditional/hypothetical subordination.

(63) *Fa o rata go nyala, nka go senkela mosadi.*
    fá ó-ràtá   χò-ɲâ:là,   ń-ká-χò-síńkέlà   mò-sâ:dì.
    if s.2SG-like:CIRC:PRS INF-marry s.1SG-POT-O.2SG-look_for:APPL:CJ CL1-woman
    'If you want to marry, I can look for a wife for you.'

Temporal subordination is also commonly expressed by means of a construction in which the temporal clause is introduced by an inflected form of *re* [rì] 'say' with an expletive subject index of class 9, for example in the perfect *e rile* [ì-r-ílè] lit. 'it said (that)'. However, formally, in this complex construction, *re* [rì] 'say' unquestionably acts as the main verb, as evidenced among others by its behavior in negation. For example, 'When we went to town, he did not accompany us' is expressed literally as 'It did not say that, we going to town, he accompanied us' – Ex. (64). Consequently, this construction unquestionably involves a grammaticalized use of *re* [rì] 'say', and the reanalysis of the inflected forms of *re* [rì] 'say' it involves as temporal conjunctions would be the normal outcome of this process, but that stage has not yet been reached.

(64) *Ga e a re re ya toropong, ene a re pata.*
    χà-í-à-rí   ˈrí-já   tòrópô:-ŋ̀,
    NEG-s.CL9-PRF:NEG-say:CJ   s.1PL-go:CIRC:PRS (CL9.)town
    ὲnέ   à-rí-pâ:tà.
    CL1.PRO   s.CL1:SEQ-O.1PL-accompany
    'When we went to town, he did not accompany us.'

go fitlhela [χʊ̀-fîtɬhɛ̀là] infinitive of *fitlhela* [fîtɬhɛ̀là] 'come upon' has a conjunction-like use with the meaning 'until'.

(65) *Ke tlaa ema nao go fitlhela ke swa.*
  kì-tɬàà-ɛ́mà   ná-ʊ̀   χʊ̀-fîtɬhɛ̀là   kí-ì:-swá.
  S.1SG-FUT-stand:CJ   with-2SG   INF-come_upon   S.1SG-CIRC:PRS-die
  'I will stay with you until I die.'

e sa le [í-sà-lí] 'since', etymologically the persistive form of *le* [lì] 'be' with an expletive subject of class 9 ('it being still'), already mentioned in Section 2.4.2 as a preposition, is also used as a conjunction.

    Concessive subordination is commonly expressed by means of *e tswa* [í-tswá] 'although', etymologically a form of the verb *tswa* [tswà] 'come out, come from' with an expletive subject of class 9 ('it coming out').

(66) *O lobelo e tswa a le monnye.*
  ʊ́-ló-bílɔ̀   í-tswá   ˈá-lí   mʊ̀-ɲ̂:ɲɛ̀.
  S.CL1-CL11-speed   S.CL9-come_from:CIRC:PRS   S.CL1-be:CIRC   CL1-small
  'He is fast although he is small.'

Purposive subordination is marked by *gore* [χʊ̀rì] (etymologically the infinitive of 'say', see 4.1) followed by the subjunctive.

(67) *Ngwana o lelela gore o mo fe dijo.*
  ŋw-àná   ˈʊ́-lílélà   χʊ̀rì   ʊ́-mʊ̀-fɛ́   dì:-dʒɔ́.
  CL1-child   S.CL1-cry:APPL:PRS:CJ   that   S.2SG-O.CL1-give:SUBJ   CL8/10-food
  'The child is crying so that you give him food.'

Apprehensive subordination is typically expressed by means of *e se re gongwe* [í-sì-rí χʊ́-ŋwì] 'lest', etymologically the subjunctive negative of *re* [rì] 'say' with an expletive subject of class 9 ('let it not be said'), plus *gongwe* [χʊ̀-ŋwì] 'somewhere'.

(68) *Tsaya mofago e se re gongwe wa bolawa ke tlala.*
  tsájá   mʊ̀-fáχɔ́   í-sì-rí   χʊ́ŋwì   wà-búláwà
  take.IMP   CL3-food   S.CL9-NEG-say:SUBJ   somewhere   S.2SG:SEQ-kill:PASS
  kí   tɬâ:là.
  by   (CL9.)hunger
  'Take some food lest you should suffer from hunger.'

4.4. Sequentiality, simultaneity, coordination of clauses

Like the other Bantu languages, Tswana has dedicated 'sequential' verb forms characterizing non-initial clauses in clause chains reflecting a chronological representation of events, and uses the subjunctive in sequential function if the first clause of the chain is in the imperative. An emphatic expression of sequentiality can be obtained by introducing the non-initial clauses

by a sequential or subjunctive form of *tla* [tɬà['come' or *feta* [fìtà] 'pass' acting as conjunctions expressing sequentiality ('and then').

(69) *Ke ile Tlhabane ka tla ka ya Gauteng.*
  kì-ìlé   tɬʰàbání   ká-tɬà   kà-jà   χàútê:ŋ.
  S.1SG-go:PRF:CJ   Rustenburg   S.1SG:SEQ-come   S.1SG:SEQ-go   Johannesburg
  'I went to Rustenburg, and then I went to Johannesburg.' lit. '... I came and I went...'

(70) *Tlhapang diatla lo fite lo je!*
  tɬʰàpá-ŋ   dì-àtɬà   lʊ́-fìtɛ̀   lô:-dʒɛ̀!
  wash:IMP-PL   CL8/10-hand   2PL-pass:SUBJ   2PL-eat:SUBJ
  'Wash your hands, and then eat!' lit. '... pass and eat!'

Simultaneity between the events encoded by two successive clauses can be expressed by simply putting the second verb in the circumstantial form of the present, but the second clause may also be introduced by a circumstantial form of *tla* [tɬà] 'come' or *eta* [ètà] 'travel' (< Proto-Bantu *genda* 'go') acting as a conjunction expressing simultaneity ('and at the same time').

(71) *O apaya a tla a tlhatswa.*
  'She does the cooking, and at the same time she does the washing.'

  ʊ́-ápájà   á-tɬá   ˈá-tɬhâ:tswà.
  S.CL1-cook:PRS:CJ   S.CL1-come:CIRC:PRS   S.CL1-wash:CIRC:PRS

(72) *Go ja o eta o bua ga go a siama.*
  'Eating and speaking at the same time is not good.'

  χʊ̀-dʒá   ˈʊ́-étá   ʊ́-bùá
  INF-eat   S.2SG-travel:CIRC:PRS   S.2SG-speak:CIRC:PRS
  χà-χʊ́-à-síâ:mà.
  NEG-S.CL15-PRF:NEG-be_good:DJ

The additive coordination of clauses can be marked by *e bile* [íbìlé] 'moreover', etymologically a perfect form of *ba* [bà] 'be' with an expletive subject of class 9 ('it having been').

(73) a. *Ke bua Setswana e bile ke a se kwala.*
    kì-búá   sì-tswáná   íbìlé   kí-à-sí-kwâ:là.
    S.1SG-speak:PRS:CJ   CL7-Tswana   it_having_been > and   S.1SG-DJ-O.CL7-write:PRS
    'I speak Tswana and I write it.'
  b. *Ke rekile diaparo e bile ke rekile ditlhako.*
    kì-rékílé   dí-àpàrɔ̀   íbìlé   kì-rékílé
    S.1SG-buy:PRF:CJ   CL8/10-cloth   it_having_been > and   S.1SG-buy:PRF:CJ
    dí-tɬʰà:kʊ́.
    CL8/10-shoe
    'I bought clothes and (I bought) shoes.'

5. Summary

In this paper, I have tried to show that Tswana shows evidence of the grammaticalization/reanalysis paths listed below, either as emerging processes in present-day Tswana or as processes having operated in the history of the Tswana (and sometimes shared by some other Bantu languages). In this enumeration, small capitals highlight relatively little-known and/or semantically non-trivial grammaticalization scenarios for which at the same time the evidence from Tswana is particularly convincing. Questions marks signal unclear cases.

– 'the people at X's place' > associative plural marker > plain plural marker (2.2)
– 'liver' > locative marker (2.4.1)
– 'being there' > locative marker (2.4.1)
– genitival linker of locative class ('place of') > locative marker (2.4.1)
– DEICTIC LOCATIVES ('HERE', 'THERE', 'THEREIN') > LOCATIVE ADPOSITIONS (2.4.1)
– locative adpositions > adpositions also fulfilling non-locative functions (2.4.1)
– locational nouns > adpositions (2.4.1)
– (?) 'be like' > instrumental adposition (2.4.2)
– IDENTIFICATION COPULA ('IT IS') > ADPOSITION MARKING THE AGENT PHRASE IN PASSIVE CONSTRUCTIONS (2.4.2)
– 'if it is still' > temporal adposition 'since' (2.4.2)
– 'if it is' > adposition 'regarding' (2.4.2)
– 'if it is not' > adposition 'except' (2.4.2)
– 'which is not' > adposition marking a contrast between the NP it combines with and another NP present in the same construction (2.4.2)
– 'be side by side with' > adposition 'near'(2.4.2)
– 'pass' > adposition 'more than' (2.4.2)
– 'arrive' > adposition 'until' (2.4.2)
– 'be face to face with' > adposition 'in front of'(2.4.2)
– 'BE WITH', 'HAVE' > ADPOSITION 'RATHER THAN' (2.4.2)
– 'begin' > adposition 'from' (2.4.2)
– 'leave' > adposition 'from' (2.4.2)
– 'come out/from' > adposition 'from' (2.4.2)
– 'go with' > adposition 'according to' (2.4.2)
– nominalized form of 'meet' > adposition 'against' (2.4.2)
– nominalized form of 'look' > adposition 'about', 'with reference to' (2.4.2)
– nominalized form of 'be side by side' > adposition 'about', 'with reference to' (2.4.2)
– nominalized form of 'go and fetch', 'follow' > adposition 'because of' (2.4.2)
– 'point' > adposition 'on account of', 'because of' (2.4.2)
– locative marker > standard of comparison marker (2.4.2)
– DEMONSTRATIVE > NOUN-MODIFIER LINKER (2.6)
– DEPENDENT FORM OF 'BE' > NOUN-MODIFIER LINKER (2.6)
– 'at X's place' > genitive marker (2.7)
– 'child' > diminutive affix (2.8)
– DIMINUTIVE > FEMININE (2.8)

– 'woman' > feminine affix (2.8)
– FEMININE > AUGMENTATIVE (2.8)
– 'FATHER' > DERIVATIONAL AFFIX 'OWNER OF', 'RESPONSIBLE FOR', 'EXPERT ON' (2.8)
– 'be like' > similative affix (2.8)
– 'come' > future' (3.2)
– 'BE LIKE' > POTENTIAL (3.2)
– 'BUILD' > AUXILIARY 'DO SOMETHING CONTINUALLY'(3.2)
– 'INCREASE' > AUXILIARY 'DO SOMETHING OFTEN' (3.2)
– 'look for, want' > auxiliary 'need to do something' or 'seem to be about to do something' (3.2)
– perfect of 'look for, want' > auxiliary 'have nearly done something' (3.2)
– 'return' > auxiliary 'do something again' (3.2)
– PERFECT OF 'SURROUND', 'REVOLVE' > AUXILIARY 'HAVE DONE SOMETHING IN THE PAST YEAR' (3.2)
– 'not to be' > auxiliary 'never do something' (3.2)
– 'not to spend the day somewhere' > auxiliary 'have ceased doing something' (3.2)
– PERFECT OF 'SPEND THE NIGHT SOMEWHERE' > AUXILIARY 'HAVE DONE SOMETHING THE DAY BEFORE' (3.2)
– 'STRUGGLE FOR SOMETHING' > AUXILIARY 'SEEM TO BE ABOUT TO DO SOMETHING' (3.2)
– 'be with' > auxiliary 'do something usually', or 'be obliged to do something' (3.2)
– 'SPREAD, STRETCH' > AUXILIARY 'CONTINUE TO DO SOMETHING' (3.2)
– PERFECT OF 'SPREAD, STRETCH' > AUXILIARY 'HAVE EVENTUALLY DONE SOMETHING' (3.2)
– 'be' > auxiliary 'do something continually', or 'be still doing something' (3.2)
– perfect of 'like, want' > auxiliary 'have nearly done something' (3.2)
– PERSISTIVE FORM OF 'BE' ('STILL BE') > AUXILIARY 'HAVE DONE SOMETHING LONG AGO, OR FOR THE LAST TIME' (3.2)
– 'go out', 'come from' > auxiliary 'have just done something' (3.2)
– perfect of 'remain' > auxiliary 'be already doing something' (3.2)
– perfect of 'look for' > auxiliary 'have nearly done something' (3.2)
– FUTURE OF 'SURROUND', 'REVOLVE' > AUXILIARY 'DO SOMETHING DURING THE NEXT YEAR' (3.2)
– FUTURE OF 'SPEND THE NIGHT SOMEWHERE' > AUXILIARY 'DO SOMETHING BEFORE THE END OF THE DAY' (3.2)
– FUTURE OF 'GET UP' > AUXILIARY 'DO SOMETHING THE NEXT DAY' (3.2)
– 'spend the day somewhere' > auxiliary 'do something continually' (3.2)
– 'LEAVE' > AUXILIARY 'BE CLOSE TO DOING SOMETHING' (3.2)
– applicative form of 'walk' > auxiliary 'be close to doing something' (3.2)
– 'walk' > auxiliary 'do something continually' (3.2)
– 'LIVE' > AUXILIARY 'DO SOMETHING CONTINUALLY' (3.2)
– 'FEAR' > AUXILIARY 'DO SOMETHING UNEXPECTEDLY' (3.2)
– 'SUIT', 'FIT' > AUXILIARY 'BE OBLIGED TO DO SOMETHING' (3.2)
– perfect of 'come' > auxiliary 'seem to be close to do something' (3.2)
– PERFECT OF 'GET UP' > AUXILIARY 'HAVE DONE SOMETHING IN THE MORNING' (3.2)
– 'go' > auxiliary 'be close to doing something' (3.2)
– 'refuse' > negative auxiliary (3.3)

- (?) interrogative pronoun 'what?' > relativizer (3.7)
- quotative verb > complementizer (4.1)
- 'be like' > conjunction 'since, as' (4.3)
- 'at the place where' > 'when', 'if' (4.3)
- 'come upon' > conjunction 'until' (4.3)
- 'be still > conjunction 'since' (4.3)
- 'COME OUT/FROM' > CONJUNCTION 'ALTHOUGH' (4.3)
- 'LET IT NOT BE SAID SOMEWHERE' > CONJUNCTION 'LEST' (4.3)
- sequential form of 'come' > conjunction 'and then' (4.4)
- sequential form of 'pass' > conjunction 'and then' (4.4)
- simultaneous form of 'come' > conjunction 'and at the same time' (4.4)
- simultaneous form of 'go' > conjunction 'and at the same time' (4.4)
- 'it having been' > conjunction expressing the additive coordination of clauses (4.4)

Abbreviations

APPL = applicative, CAUS = causative, CIRC = circumstantial, CJ = conjoint, CL = noun class, CSTR = construct, DEM = demonstrative, DIM = diminutive, DIST = distal, DJ = disjoint, FUT = future, GEN = genitival linker, IMP = imperative, INF = infinitive, LK = linker, LOC = locative, NEG = negative, O = object index, PASS = passive, PERS = persistive, PL = plural, POT = potential, PRF = perfect, PRO = pronoun, PRS = present, REL = relative, S = subject index, SEQ = sequential, SG = singular, SUBJ = subjunctive

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