Bantu languages:
Typology and variation

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1. Introduction

With over 400 languages, the Bantu family provides an excellent empirical base for typological and comparative studies, and is particularly well suited to the study of microvariation (cf. Bloom & Petzell (this volume), Marlo (this volume)). This chapter provides an overview of the broad typological profile of Bantu languages, and of the major patterns and parameters of variation within the family.

Inheritance from Proto-Bantu and uninterrupted contact between Bantu languages are certainly responsible for their relative typological homogeneity. It is however remarkable that the departures from the basic phonological and morphosyntactic structure inherited from Proto-Bantu are not equally distributed across the Bantu area. They are typically found in zone A, and to a lesser degree in (part of) zones B to D, resulting in a relatively high degree of typological diversity in this part of the Bantu area (often referred to as 'Forest Bantu'), as opposed to the relative uniformity observed elsewhere ('Savanna Bantu'). Typologically, Forest Bantu can be roughly characterized as intermediate between Savanna Bantu and the languages grouped with Narrow Bantu into the Southern Bantoid branch of Benue-Congo. Kiessling (this volume) provides an introduction to the West Ring languages of the Grassfields Bantu group, the closest relative of Narrow Bantu.

Departures from the predominant typological profile of Bantu language may also result from pidginization/creolization processes (cf. Mesthrie (this volume), Maniacky (this volume), Meeuwis (this volume)).

1. Phonology[1]

1.1. Consonants

Most Bantu languages have typologically unremarkable consonant inventories, typically including two series of plosives (voiceless and voiced), limited sets of fricatives of the cross-

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[1] For a more detailed survey of the phonetic/phonological inventories of Bantu languages, and references on particular questions, see Maddieson (2003), Hyman (2003), Kisseberth & Odden (2003), Mtenje (this volume), Patin (this volume). For a typological account of Bantu phonology in the wider context of an areal characterization of the phonological systems of Sub-Saharan languages, cf. Clements & Rialland (2008).

linguistically common types, nasals at each place of articulation where plosives appear, one liquid or two (**l** and/or **r**), and two vocoid approximants (**y** and **w**).

Aspiration is a contrastive property of voiceless plosives in some languages. Lateral fricatives and affricates are found in southern languages. Consonant gemination has developed in Ganda JE15 and some other languages. As regards places of articulation, contrasts between dental and alveolar places are found in Mijikenda E72-73 and coastal dialects of Swahili G41-43, and between velars and uvulars in Qhalaxarzi S311 and Tswana S31. Double-articulated labial-velar stops (and nasals), common in the Sudanic Belt,[2] occur only in relatively few of the Bantu languages. Shona S11-15 and Kalanga S16 have a cross-linguistically rare type of labialization of alveolar fricatives ('whistling fricatives'). Implosives are found in the north-west, the eastern coastal area, and the south-east. Ejectives occur as variants of the unaspirated voiceless plosives in the languages of the south. As a result of contact with Khoisan languages, clicks are included in the consonant inventories of a number of southern Bantu languages. Voiceless nasals (historically related to prenasalized stops) are found in several areas.

Most Bantu languages have nasal-consonant (NC) complexes, analyzed either as clusters of homorganic nasal + consonant or single prenasalyzed consonants (cf. Choti (this volume)).

Among the processes affecting consonants, 'long-distance' interactions between consonants are particularly interesting (cf. Bennett (this volume), Kula (this volume)).

1.2. Vowels

Most Bantu languages have five (**i**, **e**, **a**, **o**, **u**) or seven (**i**, **e**, **ɛ**, **a**, **ɔ**, **o**, **u**) phonemic vowels, with however an interesting variation in the realization of the vowels commonly transcribed as **e** and **o** (cf. Maddieson (2003)). In some of the five-vowel systems (for example, Xhosa S41), **e** and **o** are genuinely mid in phonetic nature, i.e. equidistant between the high vowels (**i**, **u**) and the low vowel **a**, whereas in others (for example, Kalanga S16), they are relatively close to the high vowels and far from **a**. Similarly, in some of the seven-vowel systems (for example, Nyamwezi F22), the common transcription (**i**, **e**, **ɛ**, **a**, **ɔ**, **o**, **u**) is phonetically appropriate, whereas in others (for example, Vove B305), phonetically, **e** and **o** are rather [**ɪ**] and [**ʊ**], respectively.

Systems including other types of vowels are mainly found in Forest Bantu. Cf. Koni Muluwa (this volume) on the rounded front vowels of Nsambaan B80.

Interestingly, Sotho-Tswana languages have nine phonemic vowels (**i**, **ɪ**, **e**, **ɛ**, **a**, **ɔ**, **o**, **ʊ**, **u**), but do not have the cross-height vowel harmony typically associated with this kind of vowel inventory in the languages of the Sudanic belt (and also found in some Bantu languages, such as Bila D311, cf. Kutsch Lojenga 2003). On the vowel systems of Tswana S31 and Southern Sotho S33, cf. Clements (1993), Creissels (2005a). On vowel harmony in Bantu, cf. Hyman (1999),Clements & Rialland (2008: 53-54), Kula (this volume).

Distinctive nasalized vowels are much less common in Bantu languages than in the languages of the Sudanic belt. They are found in a small number of languages in the west

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[2] The Sudanic belt includes the savanna that extends across Sub-Saharan Africa from Senegal to the Ethiopian Highlands and Lake Albert. It contains all non-Bantu (and some Bantu) languages of the Niger-Congo phylum, the Chadic subgroup of Afroasiatic, and most Nilo-Saharan languages. On the phonological typology of the languages of the Sudanic belt, cf. Clements & Rialland (2008).

Central zone, including Bembe H11, Umbundu R11, Teke B70, and Yeyi R41 in the South (Clements & Rialland 2008: 45)

Vowel length, either distinctive or variously conditioned, is found in many Bantu languages. Lengthening before NC complexes is a common phenomenon.

1.3. Tone[3]

Most Bantu languages have a distinction between High and Low tones, with often significant asymmetries between H and L suggesting an underlying H vs. Ø contrast, L being a default tone assigned to toneless syllables after the limits of H tone domains generated by the underlying H tones have been established.

Systems with three level tones (High, Mid, and Low), possibly due to the influence of Central Sudanic and/or Ubangian languages, are found in Bila D311 and other languages of the north. On the loss of tone in some of the languages of the east, cf. Philippson (1991).

Contour tones (falling and/or rising) can be found in many Bantu languages, depending on the relationship between the syllable and the tone bearing unit, which is variously regulated in the individual languages (cf. Kisseberth & Odden (2003)).

H tone spreading and shifting are fundamental in Bantu tonology, especially among eastern and southern Bantu languages (cf. Kisseberth & Odden (2003)). Spreading/shifting one syllable to the right is particularly common, but some Bantu languages have double rightward spreading/shifting, leftward spreading/shifting, or unbounded spreading/shifting (i.e. spreading/shifting whose scope is not limited to a given number of syllables).

An interesting case of tone-consonant interaction is found in Nguni languages (S40), in which the H tone is realized as a rising modulation if the onset of the syllable is a 'depressor' consonant (cf. Kisseberth & Odden (2003)).

In Bantu languages from all zones, verbal tonology is characterized by a complex interaction between tones underlyingly anchored to the verb root or to other formatives, and 'melodic tone patterns' (or 'tonal melodies'), morphotonemes that contribute to the expression of TAM values but cannot be attributed to particular segmental TAM morphemes, and are realized as H tones in specific positions in the verbal template (cf. Odden & Bickmore (2014), Bickmore (this volume)).

On nominal tonology, cf. Aunio (this volume).

1.4. Prosody

Penultimate prominence, manifested in vowel lengthening and in the conditioning of some tonal phenomena, is common, especially (but not only) in eastern and southern Bantu languages, cf. Hyman (2009). Several languages of the north-west have a typologically less common phenomenon of stem-initial prominence with consonant lengthening as its primary phonetic parameter (Idiatov and Van de Velde 2016).

On intonation in Bantu languages, cf. Rialland (this volume). On prosody and the phonology-syntax interface, cf. Downing (this volume).

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[3] For a more detailed survey of Bantu tone, cf. Hyman (this volume).

1.5. Syllabic structures

Most Bantu languages maintain the open syllable structure reconstructed for Proto-Bantu, but some others have developed additional syllable structures, typically by the loss of vowels, cf. Hyman (2003a). Syllabic nasals, often traceable to the loss of vowels in NV syllables, are common. For example, the locative suffix found as **-nì** in many eastern and southern Bantu languages occurs as **-ŋ̀** in Sotho-Tswana languages (S30). In addition to syllabic nasals, Sotho-Tswana languages also have syllabic **l**'s and/or **r**'s resulting from the same process of vowel loss (as in Tswana S31 **ràrá ~ r̀rá** 'father').

On morphological processes resulting in dispreferred syllabic structures and hiatus resolution, cf. Kadenge (this volume).

2. Morphology[4]

2.1. Nouns

2.1.1. Number, gender, and definiteness/referentiality

Bantu nouns typically consist of a stem and an obligatory prefix expressing (a) the singular vs. plural distinction, and (b) the distinction between semantically related lexemes sharing the same stem but differing in their inflectional morphology and agreement properties. A typologically salient characteristic of Bantu systems of gender-number marking systems is the impossibility to dissociate number markers from gender markers, cf. 3.1. For example, in Tswana S31, the stem **-tlʰàrì** is shared by **lì-tlʰàrì** pl. **mà-tlʰàrì** (gender 5/6) 'leaf' and **sì-tlʰàrì** pl. **dì-tlʰàrì** (gender 7/8) 'tree'.

In many languages, the obligatory gender-number prefix is preceded by a formative (often reduced to a floating H tone) referred to as the augment, or pre-prefix. In the languages in which the augment has not been reanalyzed as a kind of case marker (see 5.1.1), its functions are roughly comparable to those fulfilled in other language families by 'articles'. In many languages (for example, in Nguni languages), it behaves as a default determiner whose presence is obligatory in some syntactic contexts, a situation typical of Greenberg's (1978) 'stage II articles'. For a detailed discussion of the augment, see Halpert (this volume).

2.1.2. Other inflectional possibilities of nouns

On case inflection, see 5.1.1. On genitive marking, see 3.3.2 and Van de Velde (this volume). On locative marking, see 3.2. On construct forms of nouns, see section 3.2.3. On predicative forms of nouns, see 5.9.

2.1.3. Nominal derivation

In Bantu languages, the formation of nouns via compounding is never very productive, and may be extremely marginal. As a rule, as observed by Basciano & al. (2011), the 'N + N > N'

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[4] For a more detailed survey of Bantu morphology, cf. Miti (this volume).

compounding pattern is completely unproductive, and restricted to a few semantic fields, typically kinship terms and phytonyms. As regards the 'N + V > N' compounding pattern, in some Bantu languages (for example, Bemba M42), it is completely unproductive too, whereas in some others (for example, Swahili G41-43), it has some productivity in the formation of agentive or instrumental nouns.

Affixal noun-to-noun derivation is relatively limited, and seems to result from relatively recent grammaticalization processes. For example, Sotho-Tswana and Nguni languages do not form diminutives by gender shift, and have created a diminutive suffix from the noun 'child', cf. Güldemann (1999). Similarly, Orungu B11b has suffixes deriving language names (Ambouroue 2007). The analysis of prefix-like elements such as Tswana S31 **rá-** (from **r̀rá** 'father') in **rá-mótl̀àkásí** 'electrician' < **mòtl̀àkásí** 'electricity' is problematic, since derivational prefixes are expected to attach to stems, whereas **rá-** combines with inflected noun forms (in **mò-tl̀àkásí**, **mò-** is the prefix of class 3).

Noun-to-noun derivation mainly relies on gender alternations that leave the stem unchanged (unless in case of morphophonological modifications automatically triggered by some class prefixes). In some cases (diminutives, augmentatives), the orientation of the alternation is uncontroversial, but this is not always the case. For example, trees and their fruits are often referred to by nouns of the same stem, with trees in gender 3/4, and fruits in gender 5/6 or 9/10, as Tswana S31 **mò-rúlá** pl. **mì-rúlá** (3/4) '*morula* tree (sclerocarya caffra)', **tʰúlá** pl. **dì-tʰúlá** (9/10) 'fruit of the *morula* tree'.

Verb-to-noun derivation is very productive, yielding action nouns, result nouns, agent nouns, instrument nouns, place-of-action nouns, and manner nouns. Verb-to-noun derivation involves the addition of a derivational suffix and the assignment of the derived noun to a particular gender. Interestingly, the derivation of place-of-action nouns and/or instrument nouns may also involve applicative marking (cf. Tswana S31 **tlʰàb-à** 'slaughter' > **mà-tlʰàb-ɛ̀l-ɔ̀** 'abattoir', Cuwabo P34 **o-ddíy-a** 'stop up' > **e-ddíy-êl-o** 'stopper').

Nouns of quality are derived from adjectives (and from nouns referring to kinds of people) by placing the stem in class 14.

2.2. Verbs

2.2.1. Formal aspects of verbal morphology

Bantu languages typically have the kind of complex verb morphology consisting of a stem and a number of affixes, both inflectional and derivational, whose ordering must be stipulated through the use of position class morphology, or a template. Exceptions can be found among the languages of the north-west, which have more or less strong maximality constraints on verbal stems resulting in the loss of derivational affixes of verbs (cf. Van de Velde (2009)), and relatively reduced systems of verb morphology (more similar, typologically, to those found in the Sudanic belt). On this topic, cf. also Hyman (2011)

A Bantu verb form typically consists of a *root* (an irreducible lexical element) together with an obligatory suffix (the *final vowel*, or simply *final*) and a variable number of other affixes whose presence depends on a variety of factors, each affix having its position in the string. The root may be immediately followed by derivational suffixes that modify its meaning without altering its valency. The part of the verb form constituted by the root and such derivational suffixes can be referred to as the *extended root*.

For example, the structure of Tswana S31 verb forms can be accounted for by a template very similar to that reconstructed by Meeussen (1967: 108-111). Taking the extended root as the zero point, the verbal template of Tswana can be described as a sequence of positions numbered from –4 (the leftmost possible position) to +5 (the rightmost possible position):[5]

- Position –4 (Meeussen's (1967) *pre-initial*) can be occupied by a negation marker.
- Position –3 (Meeussen's (1967) *initial*) remains empty in the imperative. In the infinitive, which shows a mixture of nominal and verbal properties, it is filled by the class 15 prefix. In all the other cases, it is obligatorily filled by a subject index.
- Position –2 (Meeussen's (1967) *formative*) can be filled by affixes expressing (or contributing to the expression of) various TAM-polarity values.
- Position –1 (Meeussen's (1967) *infix*) can be occupied by object indexes and by the reflexive marker. Up to three successive affixes can be found in this position.
- Position +1 can be filled by one or more affixes encoding valency operations: causative, applicative, anticausative, reciprocal.
- Position 0 is filled by the extended root
- Position +2 can only be occupied by the perfect positive marker.
- Position +3 can only be filled by the passive marker.
- Position +4 (Meeussen's (1967) *final*) is the only one that cannot be left empty under any circumstances. The 'final (vowel)' filling this position contributes to the identification of the individual tenses, but does not carry any syntactic or semantic information of its own, since with the exception of **e ~ ι** (found in the perfect positive only), each final is shared by a set of forms impossible to define straightforwardly as sharing a particular set of syntactic or semantic features.
- Position +5 (Meeussen's (1967) *post-final*) can be filled by the imperative plural marker, the relative marker, or the clitic form of the interrogative pronoun 'what'.

Hyman (2003b) is an important reference on the templatic behavior of derivational suffixes. On the order and combination of verbal suffixes, see also Katushemererwe (this volume).

2.2.2. The categories expressed in verbal inflection

Bantu languages have rich TAM-marking systems. In addition to cross-linguistically common TAM categories, they illustrate more 'exotic' types of TAM distinctions, in particular the degree of remoteness from the reference point, both in the past (typically hodiernal/hesternal/remote), and in the future.

A general characteristic of Subsaharan languages, also found in Bantu languages, is that, in addition to the TAM values expressed through verb inflection, they have large inventories of more or less grammaticalized auxiliary verbs expressing meanings commonly taken up by adverbial expressions in European languages, i.e. auxiliary verbs with meanings such as 'to do first', 'to do again', 'to do often', 'to have previously done', 'to have done the day before', 'not to have done yet', etc. (cf. Gibson (this volume)).

Nurse (2008) is the main reference on Bantu TAM systems. On TAM, cf. also Botne (this volume).

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[5] For more details on the structure of Tswana verb forms, see Creissels (2017: 201-203, 233-238).

Bantu languages express negation through verbal inflection rather than by means of more or less autonomous particles. Negation markers and TAM markers often fuse together, and the TAM distinctions expressed by negative verb forms may be different from those expressed by positive verb forms. On negation, cf. Devos (this volume).

Verbal inflection also contributes to the expression of inter-clausal dependencies (with forms occurring specifically in clause-chaining, in relative clauses, or in particular types of adverbial subordination). In some Bantu languages at least, verbal inflection also contributes to the expression of information structure (cf. 6.3).

2.2.2. Verbal derivation

Compound verbs are marginal in Bantu languages. Noun-to-verb derivation (as Tswana S31 (**bò-)χálí** 'fierceness' > **χálí-f**(-**á**) 'become angry or fierce') is of limited productivity.[6] By contrast, verb-to-verb derivation is very productive. Bantu languages typically have rich inventories of 'verb 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 widely attested, most often with an iterative/pluractional meaning.

The following verb extensions have been reconstructed for Proto-Bantu, and have more or less productive reflexes in languages from all zones: applicative, causative, impositive, passive, reciprocal, stative/neuter, contactive/tentive, reversive/separative (transitive), reversive/separative (intransitive), stative/positional, and extensive (Schadeberg 2003).

The contactive (or tentive) extension is a non-productive extension found in verbs that have in common the meaning of actively making firm contact (Schadeberg 2003), as Tswana S31 **àp-àr-à** 'put on top garments' (cf. **àp-òl-à** 'undress').

The reversive (or separative) extensions imply movement out of some original position, as in Swahili G41-43 **zib-a** 'block' and **zib-u-a** 'unblock'. Bantu languages typically have two distinct separative extensions for spontaneous movement (intransitive) and caused movement (transitive), as in Tswana S31 **ám-á** 'touch', **ám-ólóχ-à** 'become separated', and **ám-ólól-à** 'separate'.

The stative/positional extension is found in verbs expressing 'be in a position', as in Tswana S31 **bótʰ-á** 'repose' and **bótʰ-ám-á** 'repose comfortably, lie at ease'.

The extensive extension is a non-productive extension with a central element of meaning 'to be in a spread-out position' (cf. Schadeberg 1994).

On the applicative, causative, impositive, passive, reciprocal, and stative/neuter extensions, see Section 4.

2.3. Mixed V/N categories

Bantu infinitives are morphologically similar to action nouns, since their formation involves the addition of class morphology to a verb stem. Infinitival phrases can be found in subject position, in which they govern class agreement like canonical NPs, and in other typically nominal syntactic positions. However, the morphological structure of infinitives may retain elements of verbal inflection (TAM markers, negation markers, object indexes) that are not

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[6] Meeussen (1967: 90-91) discusses the possibility of reconstructing suffixes deriving verbs from nouns in Proto-Bantu.

found in true deverbal nouns. Syntactically, infinitival phrases may include not only typical noun modifiers, but also typical verb dependents (in particular, NPs in object function), and fulfill functions (for example, complement of modal verbs) not accessible to canonical NPs.

Agentive nominalizations (traditionally analyzed as derivational) may also have some characteristics of mixed V/N categories. For example, in Tswana S31, **mò-tʰús-í** 'helper' (< **tʰúsá** 'help') can incorporate an object index: **mò-ǹ-tʰús-í** 'person who helps me'.

On the nouniness vs. verbiness of Bantu infinitives and agentive nominalizations, see Visser (1989) on Xhosa S41, Mugane (2003) on Kikuyu E51, Creissels & Godard (2005b) on Tswana S31.

On the possibility of analyzing the relative verb forms of some Bantu languages as participles, see 7.2.

3. Nouns, noun phrases, pronouns

3.1. Noun classes[7]

The particular type of gender system found in Bantu languages, traditionally described in terms of 'noun classes', is also encountered in most major branches of Niger-Congo. Among Subsaharan languages, typologically similar systems are found in the Kx'a and Tuu languages of Southern Africa (cf. Creissels et al. (2008: 116)). For a detailed critical appraisal of the notion of noun class as it is commonly used in the description of such systems, cf. Güldemann & Fiedler (2017).

In a general typology of nominal classification systems, the Niger-Congo noun class systems are not essentially different from those traditionally designated as gender systems, since they share with them a partition of the set of nominal lexemes into subsets manifested in agreement mechanisms in which nouns act as controllers. However, in addition to their semantic specificity (see below), they have several particularities in their formal structure that call for a specific descriptive strategy, different from that traditionally used in accounts of Indo-European or Afro-Asiatic gender. Most descriptions of Niger-Congo (including Bantu) noun class systems focus on the inventory of the possible agreement patterns for noun *forms* (the singular and plural forms of a given lexeme counting as two distinct items), rather than on the possibility of dividing the set of nominal *lexemes* into subsets analogous to Indo-European or Afro-Asiatic genders. 'Class' as this term is used in descriptions of Niger-Congo gender systems is best understood as referring primarily, not to sets of nouns, but rather to an inflectional category of lexemes that can be used adnominally, pronominally, or predicatively. Among the properties of this inflectional category, the most crucial one is that, when lexemes inflected for class modify an overtly expressed head, resume an overtly expressed antecedent, or predicate on an overtly expressed subject, the value of the feature 'class' they express is determined by their head, antecedent, or subject, and the choice involves both the singular vs. plural distinction and lexical properties of the head, antecedent, or subject. Genders can be defined subsequently as sets of nominal lexemes that, in constructions in which words inflected for class agree with nouns, select the same values of the feature 'class', both in the singular and in the plural.[8]

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[7] For a more detailed survey of Bantu noun classes and class agreement, cf. Rugemalira (this volume).

[8] As in other types of gender-number systems, there are also nouns that lack a number distinction.

In Bantu noun class systems, nominal lexemes divide into several morphological types according to the way they express the singular vs. plural distinction, and the choice of a particular pair of singular/plural prefixes for a given lexeme correlates with its agreement properties.[9] For example, in Tswana S31, nouns with the **lì-** (sg.) / **mà-** (pl.) prefixes belong to the gender designated as 5/6 in the traditional numbering system of noun classes originally designed by Wilhelm Bleek and expanded later by Carl Meinhof. The markers involved in a given class agreement pattern may be more or less similar to the corresponding noun prefixes. Agreement prefixes identical to the corresponding nominal prefixes are typically found with adjectives, whereas with other agreement targets, the agreement marker may be quite different from the nominal prefix.

With inanimate nouns, there is a straightforward correspondence between morphological type and agreement behavior (morphological agreement). By contrast, animate nouns may show agreement properties partially or entirely independent from the morphological type to which they belong (semantic agreement, found for example in Swahili G41-43). This is however not always so, and Tswana S31 illustrates the case of a language in which the exceptions to strict morphological agreement are extremely limited, even for human nouns.

In addition to the relatively high number of genders, the lack of sensitivity to the male vs. female distinction sharply distinguishes Niger-Congo (including Bantu) gender systems from Indo-European or Afro-Asiatic systems:

– All personal names have the same agreement properties (i.e. belong to the same gender), regardless of the sex of their referent.
– Common nouns referring to humans may be found in more than one gender, but their assignment to a particular gender is never motivated by the male vs. female distinction; as a rule, 'man' and 'woman' belong to the same gender, and when they don't, this cannot be viewed as a particular case of a more general semantic property of the genders in question.

By contrast, the human vs. non-human distinction is crucial in Niger-Congo gender systems, which typically include a gender (gender 1/2 in Bantu languages) showing the following characteristics:

– It includes (a) the basic terms referring to humans ('human being', 'man', 'woman'), (b) agent nouns derived from verbs, and (c) personal names (plus possibly some non-human nouns whose presence in this gender may have various kinds of explanation).
– The forms of class-inflected words typically used to express agreement with nouns belonging to this gender are also used pronominally without any reference to an antecedent retrievable from the context, the class marker being then simply interpreted as meaning 'human, singular' or 'human plural'. For example, in Tswana S31, **ó-sùlí**, human singular form of the determiner **-sùlí** 'other', can be used pronominally with the meaning 'someone else', without reference to a particular human singular noun that should be suggested by the context.

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[9] Note that, as already illustrated in Section 2.1.1, the same stem may be shared by semantically related lexemes that differ from each other in their morphological type and agreement properties.

Drastic reduction of the noun class system, relatively common in the remainder of Niger-Congo (with the notable exception of Atlantic and Mel),[10] is exceptional in Bantu, but not totally unknown. Bila D311 is a case in point (Kutsch Lojenga 2003). Cf. also Meeuwis (this volume) on Lingala C30b.

3.2. The Central-Bantu type of locative marking

In central Bantu languages, locative marking (i.e. the morphological characteristics of phrases specifying the location of an event, or the direction or source of movement with movement verbs) is fully integrated into the noun class system, which constitutes a rare typological feature. The languages in question typically have three locative classes with the following particularities (Grégoire 1998):

– a very limited number of nominal stems can combine directly with locative class prefixes (often just one, which in combination with locative class prefixes yields the hypernymic term 'place'), but the locative class prefixes can also be used as 'secondary locative prefixes' added to noun forms including the prefix of another class, as in Luba-Kasai L31a **bu-dimi** (class 14) 'field' > **mu-bu-dimi** 'in the field', where **mu** is the prefix of the locative class 18 (here in secondary locative prefix function), and **bu** the prefix of class 14;

– the forms with secondary locative prefixes express spatial meanings of the type commonly expressed cross-linguistically by means of spatial cases or adpositions;

– syntactically, forms with a stacked prefix of locative class govern locative class agreement rather than agreement of the class to which the noun belongs inherently, although there is some variation, as illustrated by Lega JD42 **mù-mw-ǐnò gú-mòzì̧ mw-ǎbò** 'in one of their villages' (18-3-village 3-one 18-their);

– contrary to the usual behavior of locative expressions, forms with a stacked prefix of locative class can be used, not only as spatial adjuncts or complements of movement verbs, but also as subjects.

However, many Bantu languages have typologically commoner types of locative marking, or mix elements of the Central-Bantu type of locative marking with elements of typologically commoner types of locative marking. In the languages of the south, the productive formation of locative expressions does not involve locative class morphology (which is limited to a very small number of inherently locative nouns), but locative markers (such as Tswana S31 **χʊ́-** and **-ŋ̀**) that behave like spatial adpositions or cases: they do not affect the agreement properties of the nouns to which they attach, and the phrases they mark can only occur in positions typically occupied by adpositional phrases or nouns inflected for non-core cases.

Grégoire (1975) is the main reference on Bantu locatives. On the changes undergone by the locative system in the languages of the south, see Marten (2010), Creissels (2011).

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[10] On Atlantic noun class systems, cf. Creissels & Pozdniakov (2015).

3.3. *Noun + modifier* **constructions**

3.3.1. General properties of Bantu noun + modifier *constructions*

Bantu noun phrases are typically head-initial, and as a rule, modifiers express class agreement with the head noun. For a discussion of the relative order of modifiers, which seems to show relatively important cross-linguistic variation, cf. Rugemalira (2007).

3.3.2. Noun-modifier linkers

The term 'noun-modifier linker' is used here as a general term for 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. They are maintained in elliptical constructions in which the head-noun is omitted.

Linkers are particularly common in the genitival construction, or adnominal possession (Van de Velde, this volume). In most Bantu languages, a proclitic genitival linker consisting of an invariable element **-a-** preceded by a class agreement marker is found at the left edge of NPs in genitive role.

Linkers used specifically to introduce relative clauses are common too, although many descriptive grammars misleadingly designate them as 'relative pronouns' (see 7.2). In Tswana S31 and other southern Bantu languages, the linkers found in the *noun + relative clause* construction also occur in *noun + attributive adjective* constructions (as illustrated by the class 1 linker **jó** in **mò-ńnà jó mò-léèlé** 'tall man', lit. 'man that tall'). Internal evidence and comparison with other Bantu languages show that these linkers are former demonstratives that, in constructions in which they precede another modifier of the same noun, have lost their deictic value and acquired a purely syntactic function.

Tswana S31 also has a special linker, etymologically a dependent form of the verb 'be', in *noun + numeral* constructions, as in **bàsádí ꜝbálí bábèdí** 'two women' lit. 'women they-being two').

3.3.3. Construct forms of nouns

Construct forms of nouns (i.e. special noun forms used in the presence of a given type of modifier) are not common in Bantu languages, but Creissels (2009) argues that, in Tswana S31, 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. Similarly, Van de Velde (2017) argues that, in Eton A71, the augment only subsists as the characteristic marker of a special noun form used specifically in the *noun + relative clause* construction.

3.3.4. Dependency reversal in noun-attributive constructions

Some Bantu languages of the north-west share with non-Bantu languages from the same area the cross-linguistically rare phenomenon of dependency reversal in noun-attributive constructions. In the languages in question, attributive constructions have the form of a

genitival construction with the attributive modifier construed as the head, and the modified noun construed as a noun in adnominal possessor function. For example, in Basaá A43a **lì-kɛ́ŋgɛ́ lí=m-ût** 'a clever person', both the class expressed by the qualifier **lì-kɛ́ŋgɛ́** 'clever' (6) and that expressed by the qualified **m-ût** 'person' (1) are lexically assigned, and the second term of the construction (the qualified) is marked by the linker **lí-** expressing agreement with the first term (the qualifier), exactly like the noun in adnominal possessor function in e.g. **lì-wándá lí=kíŋɛ̂** 'the friend of the chief'. Moreover, it is the qualifier that determines the behavior of the qualifier–qualified construction in class agreement, exactly like the head noun in uncontroversial noun–modifier constructions. Cf. Makasso (this volume) on Basaá A43a, and for a general discussion Van de Velde (2011).

3.4. Pronouns

Bantu languages typically have four pronouns referring to speech act participants (1st sg., 2nd sg., 1 pl., and 2nd pl.), plus a paradigm of 'class pronouns' which, apart from the fact that they express the class of their antecedent, are used in the same conditions and carry the same discursive implications as the pronouns designated as third person pronouns in other languages.

3.5. NP coordination

As regards NP coordination, the situation commonly found not only in Bantu languages, but more generally across Subsaharan Africa, is that the same morpheme serves as a comitative adposition (*with*) and as a noun phrase coordinator with an additive meaning (*and*), but is not used (or is used only in a limited way) for the coordination of other categories.[11]

Creissels (2016) discusses a rare type of inclusory coordination in Tswana S31 involving the prefix commonly designated as Class 2a prefix, also used as an associative plural marker: in Tswana, **bó-kítsɔ́** 'CL2a-Kitso' is interpreted as 'Kitso and his companions', but **bó-kítsɔ́ lí-m̀-pʰɔ́**, lit. 'Kitso-and-others with Mpho' can be interpreted as referring just to two individuals, Kitso and Mpho.

4. Argument structure and transitivity

4.1. Transitivity

Apart from the particular case of Swahili G41-43 (cf. Whiteley 1968, Whiteley & Mganga 1969, Whiteley 1972, Abdulaziz 1996), transitivity is not among the topics that have been widely discussed in Bantu linguistics.

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[11] The language sample analyzed in Stassen's (2000) typological study of noun phrase coordination includes a number of African languages, and provides interesting insights on their status in a typology of coordination.

4.1.1. Transitivity prominence

Languages differ in the extent to which they assign transitive coding to verbs that are not prototypically transitive. On the basis of a questionnaire consisting of 30 verb meanings,[12] Creissels (2017b) analyzes transitive prominence in a genetically and areally diverse sample of 17 Sub-Saharan languages including two Bantu languages (Tswana S31 and Lingala C30b). Of the 17 languages of the sample, Tswana S31 has the highest rate of transitivity prominence: 29.5/0.5 (all the Tswana verbs in the sample are transitive, with the only exception of **tsʰɛ̀χà** 'laugh at', which has two alternative constructions, one transitive and the other intransitive, in free variation). The rate of transitivity prominence of Lingala C30b is also extremely high: 28.5/1.5 (with an intransitive verb for 'trust', and a verb with two alternative constructions for 'climb', all the other verbs in the sample being transitive). By comparison, the rate of transitivity prominence of Koroboro Senni (Songhay) evaluated on the basis of the same questionnaire is 13/17.

4.1.2. The orientation of the noncausal-causal alternation

Another important aspect of the transitivity system of languages is the relationship between intransitive verbs encoding processes that can be conceptualized as occurring more or less spontaneously, or at least without a clearly identified instigator (I), and transitive verbs encoding the same processes triggered by the action of an agent (T) (cf. Haspelmath (1993)), Nichols et al. (2004). Such verb pairs may show no formal relationship (I ≠ T), or be related in various ways:

- the noncausal verb and its causal counterpart may be identical (I = T);
- the causal verb may morphologically derive from its noncausal counterpart (I > T);
- the noncausal verb may morphologically derive from its causal counterpart (T > I);
- the noncausal verb and its causal counterpart may both derive from an abstract root that does not exist as a verb stem (double derivation, symbolized as I ~ T).

The World Atlas of Transitivity Pairs (2014) provides data on noncausal-causal verb pairs in a variety of languages according to the questionnaire initially proposed by Haspelmath (1993).[13] Three Bantu languages (Herero R31, Matengo N13, and Swahili G41-43) are included in this database, and I have added Tswana S31. In the following chart, pairs of completely different or completely identical noncausal-causal verbs are left aside. Russian (a language with an extreme preference for T > I derivation) and Akhvakh (a language with an extreme preference for I > T derivation) are added for the sake of comparison.

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[12] The verb meanings selected in this questionnaire are as follows: attack, be afraid of, betray, bite, call, climb, cross, despise, escape (from), find, follow, forget, hate, hear, help, hit, know, laugh at, like, listen to, look at, need, pity, scold, search for, see, touch, trust, wait for, want.
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[13] The World Atlas of Transitivity Pairs (2014). Tokyo: National Institute for Japanese Language and Linguistics. (Available online at: http://verbpairmap.ninjal.ac.jp).

	Tswana	Herero	Swahili	Matengo	Russian	Akhvakh
I > T	16	15.5	16	4	0	25
T > I	8	2.5	8	4	23	0
I ~ T	5	9	5	17	5	0

Figures are the same for Tswana and Swahili, with a marked (although not extreme) preference for I > T derivation, but a non-negligible proportion of T > I and I ~ T pairs. Herero has virtually the same proportion of I > T pairs, but a higher proportion of I ~ T pairs. The situation of Matengo, analyzed in the World Atlas of Transitivity Pairs as characterized by a very strong preference for double derivation, seems to be different.

4.1.3. Ambitransitivity

Patient-preserving lability (or P-lability), as in English **I broke the stick** / **the stick broke**, and agent-preserving lability (or A-lability), as in English **John is drinking tea** / **John is drinking**, are the two major types of ambitransitivity. Ambitransitivity remains a largely overlooked issue in Bantu linguistics. I my own work on Tswana S31, I observed that P-labile verbs are not totally unknown (cf. **tímá** (tr.) 'extinguish', (intr.) 'get extinguished'), but are extremely rare. By contrast, A-lability is pervasive in Tswana: as a rule, in appropriate contexts, transitive verbs can be used intransitively with an unspecified-patient meaning.

4.2. Morphologically coded valency operations

With the exception of some of the languages of the north-west, Bantu languages have rich systems of verb affixes encoding operations on valency: passive, reciprocal, anticausative, causative, and applicative. Moreover, reflexive object indexes commonly have 'middle' uses that cannot be reduced to the notion of reflexivization.

The typologically salient features of most Bantu systems are the existence of reciprocal forms distinct from both reflexive and anticausative forms, a widespread tendency to develop antipassive uses of reciprocal forms, the productivity of applicative derivation, and the importance of the non-canonical uses of applicatives.

4.2.1. Passive[14]

Most Bantu languages have passive verb forms inherited from Proto-Bantu, but an interesting case of renewal of passive morphology via reanalysis of constructions involving a class 2 (human plural) subject interpreted as non-specific is attested in Lunda L52, Kimbundu H21a, and other languages of the south-west (Givón 2001, vol. 2: 149-151, Kawasha 2007). In the languages in question, in clauses that, initially, were something like 'They (non-specific) killed the lion', it became possible to add an oblique representing a specific agent (something like 'They killed the lion by the hunter', interpreted as 'The lion was killed by the hunter'), which implies reanalysis of the former subject index of Class 2 as a passive marker.

Passive constructions with agent phrases are common in Bantu languages. The agent phrase is often introduced by the comitative preposition, but in some languages (for example,

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[14] For a more detailed survey of passive in Bantu, cf. Guérois (this volume).

Bemba M42), it shows locative marking, in some others (for example, Tswana S31), an identificational copula has grammaticalized as a preposition marking the agent phrase in passive constructions, and passive constructions with morphologically unmarked agent phrases are also attested (for example in Ganda JE15).

Impersonal passives (i.e. constructions involving passive morphology, but in which subject demotion is not accompanied by promotion-to-subject of any other term to subject) are found among others in Sotho-Tswana and Nguni languages.

4.2.2. Causative[15]

As a rule, Bantu languages have two causative markers. In general, one of them is of limited productivity, and its use is restricted to direct causation, whereas the other is productive in a wide range of meanings including assistive and permissive causation.

In addition to its valency-increasing function, a recurrent meaning of the causative extension (either in its simple form, or reduplicated) is the intensive meaning. In this use, the derived verb has the same valency as the simple verb.

The 'impositive' extension is functionally a variety of causative involving direct causation as well as a locative element of meaning ('put something into some position'); it constitutes the transitive counterpart of the 'stative/positional' extension, as in Tswana S31 **sík-ám-á** 'lean against (intr.)' and **sík-ɛ́χ-á** 'lean against (tr.)'.

In some Bantu languages (for example, Bena G63), instruments are encoded as objects of applicative verb forms, but in some others (for example Kinyarwanda JD61), causative verb forms are productively used to encode instruments, in constructions whose literal meaning is 'Agent makes Instrument act on Patient' (Kimenyi 1980, Wald 1997, Jerro 2013).

Bostoen & Mundeke (2011) analyze a case of causative-applicative syncretism found in Mbuun B84b.

4.2.3. Applicative[16]

Bantu applicatives are typically obligatory rather than optional, [17] and semantically unspecified: in typical Bantu systems, several semantic types of complements that cross-linguistically tend to be treated as obliques can only occur as objects of applicative verb forms, and by itself, the applicative marker gives no clue to the semantic role of the applied object. The semantic interpretation of an applicative construction entirely depends on the lexical meaning of the verb and of the applied object, although applied objects representing beneficiaries are particularly common.

Non-canonical applicatives (i.e. applicative forms in constructions in which they cannot be analyzed as encoding the addition of an applied object) are common in Bantu languages. For example, with movement verbs assigning the role of source of movement to their locative complement, applicative derivation may change this role into that of destination of movement, without any discernible change in the construction. Applicative verb forms may

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[15] For a more detailed survey of causative in Bantu, cf. Bastin (1986), Simango (this volume).

[16] For a more detailed survey of applicative in Bantu, cf. Ngonyani (this volume).

[17] Optional applicatives promote obliques to the status of direct object, whereas obligatory applicatives make it possible to mention participants that cannot be mentioned at all in clauses headed by the same verb in its non-applicative form. In the languages of the world, optional applicatives seem to be more common than obligatory applicatives, but this is not the case for Subsaharan languages in general, and Bantu languages in particular.

also encode the focalization of locative adjuncts without any other apparent modification in the construction. See Creissels (2004), Marten (2003), Jerro (2016).

The reduplication of the applicative extension may encode the addition of two applied objects, but is also used to encode an intensive meaning without any change in the construction.

4.2.4. Detransitivizing derivations

Many Bantu languages have been described as having dedicated anticausative verb forms (often labeled 'neuter') and dedicated reciprocal verb forms, whereas reflexivity is expressed by means of reflexive indexes filling the object index slot in the verbal template. However, systems with more or less polyfunctional detransitivizing derivations are probably more widespread than suggested by the labels used in descriptive grammars for derived verb forms.

The reciprocal-antipassive syncretism, widely attested outside Africa (in particular among Austronesian and Turkic languages, cf. Janic 2016) is also widespread in Bantu. The suffix **-an-** traditionally designated as reciprocal often has more or less productive patient-demoting uses. In some languages (Tswana S31), such uses of **-an-** are marginal, but in others (Rundi JD62, Luba L30), they are productive.

Sociative and middle uses of **-an-** are also attested, cf. Fang A75 **fam** 'escape' > **fama** 'escape together',[18] Orungu B11b **-ßùrà** 'bend (tr.)' > **-ßùrànà** 'bend (intr.)' (cf. Bostoen et al. (2015), Dom et al. (2015)).

Kawasha (this volume) describes the antipassive use or **-an-** in Lunda L52, where the reciprocal-associative extension is **-añan-.**

The reciprocal use of the reflexive prefix is common in the languages of the south-west (cf. Bostoen (2010)).

5. Clause structure

5.1. Coding properties of subjects and objects

5.1.1. Bantu languages and alignment typology

Bantu languages are unproblematic 'nominative-accusative' languages, in which all monovalent verbs assign the same coding to their single argument, and this coding coincides with that of the agent of prototypical transitive verbs.

5.1.2. Case marking

If case is defined as a morphological category of nouns involved in the contrast between core arguments (which does not necessarily imply that one of the cases is straightforwardly assigned to subjects, and another one to objects), then the only Bantu languages that have case are found in a compact geographical area from Gabon to Namibia, where a tonal distinction

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[18] **-a** is the regular reflex of Proto-Bantu **-an-** in Fang.

originally expressing a definiteness contrast has been reanalyzed as expressing a case contrast (cf. Blanchon (1999), Schadeberg (1999), Kavari & al. (2012)).

5.1.3. Indexation[19]

As a rule, Bantu languages have obligatory subject indexes prefixed to verbs, and most of them also have object indexes occupying the pre-root position in the verbal template. In some languages (Comorian G44), in addition to the usual slot for object indexes in pre-root position, the theme object in ditransitive constructions is indexed in post-final position (Creissels 2005b: 61).

In some of the languages of the north-west, object indexation does not exist, and objects can only be pronominalized by means of free pronouns occupying the same syntactic slot as canonical NPs. In some other languages, mainly (but not only) from zones H and P, object indexation is restricted to 1st/2nd person and gender 1/2 (cf. Polak (1986)).

In some languages (for example, Tswana S31), the choice between object indexes and free pronouns in object function is purely discourse-driven, without any morphosyntactic conditioning or semantic implication: object indexes are always syntactically optional, and imply back-grounding of their referent, whereas free pronouns in object function imply some degree of focalization. In other languages (for example, Swahili G41-43), the indexation of definite objects is obligatory, and indexation may constitute the only clue to the definiteness of common nouns in object function, if they are not accompanied by a determiner implying definiteness. Some languages (for example, Cuwabo P34) have a sharp contrast between human objects, which are obligatorily indexed, and non-human objects, which cannot be indexed at all.

Some languages (Swahili G41-43, Southern Sotho S33) have a single morphological slot for object indexes, whereas in others, a verb form can include two or three successive object indexes (Tswana S31), sometimes even more (Kinyarwanda JD61).

On the typology of object indexation in Bantu languages, cf. Marten & Kula (2012), Zeller (2014), Ngoboka & Niyomugabo (this volume).

5.2. Constituent order

Almost all Bantu languages have *subject – verb – objects – obliques* as the basic constituent order in independent assertive clauses. The best-known exception is Nen A44, with the object preceding the verb in the basic constituent order. In Nen, postverbal objects do occur, but carry contrastive focus (cf. Mous (1997)). A connection is plausible between this particularity of Nen and the immediately-before-verb focus position found in some other languages of the north-west (cf. 6.2), since one can imagine a markedness reversal by which a position initially reserved for focalized objects is reanalyzed as the unmarked position for objects, and vice-versa.

Moshi (1985: 27) observes that, in Swahili G41-43, non-topicalized objects must immediately follow the verb, and the same constraint is found in Tswana S31, at least in assertive clauses.[20]

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[19] For a more detailed survey of subject and object indexation, cf. Sikuku (this volume). Note that, in the Bantuist tradition (and in the other chapters of this volume), subject/object indexes are commonly referred to as subject/object *concords* or *markers*.

5.3. Obliques

Given the existence of multiple object constructions (cf. 5.4), and the productivity of applicative derivation, many participants that tend to be encoded as obliques cross-linguistically are typically encoded as objects in Bantu languages. As observed by Schadeberg (1995), it is difficult to put forward generalizations about the distinction between objects and obliques in Bantu languages, since the criteria on which this distinction can be based (use of adpositions, indexation possibilities, etc.) vary considerably from one language to another, and often give conflicting indications. In Bantu linguistics, distinguishing noun phrases from adpositional phrases, or arguments from adjuncts, is a tricky question (cf. Riedel & Marten (2012)). Note in particular that, (a) in the languages that have the Central-Bantu type of locative marking, locative adjuncts show no mark of their non-core status, and (b) in some asymmetrical 'double-object' constructions, one of the objects has so few object-like properties that its status as an object is problematic (cf. 5.4).

5.4. Double-object constructions

In so-called 'double-object constructions', both non-agentive arguments of verbs such as 'give' or 'show' are represented by post-verbal NPs showing no obvious indication of an oblique status. Their linear order is typically related to animacy hierarchy, although a relative freedom in their linear order is sometimes observed (cf. Ngoboka & Niyumogabo (this volume) on Kinyarwanda JD61).

Double-object constructions (and even triple-object constructions) are also found with causative or applicative derivatives. In Eton A71 and other languages of the north-west, the loss of applicative derivation has resulted in the possibility of double-object constructions of underived transitive verbs in which the first object represents a beneficiary (cf. Van de Velde (2009: 53)).

There is considerable variation in the extent to which the two 'objects' of double-object constructions share the properties of monotransitive objects other than postverbal position and lack of any overt marking of their function. This subject has been much discussed, cf. among many others Bresnan & Moshi (1990), Jerro (2015).

In double-object constructions, there is no uniformity in the ability of the two objects to be indexed, or converted into the subject of passive constructions. In borderline cases, when one of the two 'objects' can neither be indexed nor converted into a passive subject (as for example in Swahili G41-43), its identification as an object is questionable.

Even in constructions in which two post-verbal NPs unquestionably show at least to some extent some of the properties typical for monotransitive objects, the situation is not uniform. Some languages, for example Tswana S31, have almost perfectly symmetrical double-object constructions, in which each of the objects has access to indexation, and all the objects can be indexed at the same time. In some other languages (for example, Southern Sotho S33, cf. Creissels 2005b: 64), verb forms cannot include more than one object index at the same time, but any of the two objects can be indexed.

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[20] Exceptions to this constraint can be found in interrogative clauses, in which interrogatives such as **lɨ́ŋ** 'when?' or **kàì** 'where?' can be inserted between the verb and the object(s).

An important generalization is however that, with verbs whose argument structure is similar to that of 'give', the recipient NP is always more object-like than the theme NP. Even in a language with symmetrical double-object constructions like Tswana S31, the access of the theme to the function of passive subject is limited by conditions that have no equivalent for the recipient; in Southern Sotho S33, if both objects are pronominalized at the same time, the only available object index slot is obligatorily occupied by an object index referring to the recipient, and the theme can only be represented by a free pronoun following the verb (Creissels 2005b: 65). Consequently, in the ditransitive constructions of Bantu languages, the recipient is either the only real object, or the primary object. In other words, 'secundative' alignment is strongly predominant in Bantu, in contrast to the 'indirective' alignment predominant in European languages (cf. Dryer (1986)).

This generalization is confirmed by the type of indexation system found in Comorian G44. In Comorian, the object index in pre-root position can only index the recipient of ditransitive verbs, but the verbal template includes a post-final slot for indexes referring to the theme (cf. Creissels (2005b: 61)). Note that, among the Bantu languages that have a postfinal slot for indexes (in addition to the slots for subject and object indexes in initial and pre-root position), this slot is more commonly reserved for the indexation of locatives (a situation illustrated for example by Bemba M42).

For a more detailed discussion of object asymmetries, and additional references, cf. Riedel (this volume).

5.5. Light verb constructions

As a rule, light verb constructions are not mentioned as particularly prominent in descriptions of Bantu languages. However, the Swahili verb **-piga** 'hit' is remarkable for its extensive use in light verb compounds such as **-piga picha** 'take a picture', and Sotho-Tswana and Nguni languages have a relatively productive class of light verb compounds consisting of the verb 'say' (Sotho-Tswana **rì**, Nguni **thì**) and an ideophone. In the languages in question, contrary to the situation that prevails elsewhere in Subsaharan Africa, ideophones are typically used, not as modifiers of fully-fledged lexical verbs, but as the non-verbal element of light verb constructions in which nothing subsists of the lexical meaning of 'say' used as a light verb. See Creissels (2001) on Tswana S31, Msimang & Poulos (2001) on Zulu S42. Outside Bantu, this phenomenon is common in the north-east part of Subsaharan Africa, and is also found in Wolof (Atlantic).

5.6. The grammatical coding of spatial relations

In Bantu languages (as in the other branches of Niger-Congo), locative marking (be it by means of locative class prefixes, or of morphemes more similar to the spatial cases or adpositions found in other language families) does not express the distinction between static location, source of movement, and direction of movement, cf. Creissels (2006). In Bantu languages, the assignment of the source or direction roles to locative expressions is basically a lexical property of movement verbs, which may however be manipulated by means of applicative derivation (cf. 4.2.3).

5.7. External possession

As argued by Van de Velde (this volume), Bantu languages provide interesting data for the typology of external possession. For example, in Tswana S31, 'cut off someone's finger' and 'eat someone's food' are equally expressed by double-object constructions with the external possessor encoded as the primary object, but applicative marking is required for 'eat someone's food', whereas no marking on the verb is required for 'to cut off someone's finger'.

5.8. A typological oddity: the 'interposition' of Nande JD42

Nande JD42 has a grammatical word, designated so far as 'linker' in the literature, whose distribution fits the definition of none of the types of grammatical words commonly recognized. It can only be found between two successive terms in the construction of the same verb, hence the term of 'interposition' I propose instead of that of linker. Its main characteristics are as follows (Schneider-Zioga 2014a, 2014b; Schneider-Zioga and Mutaka 2015a, 2015b, 2015c):

(a) In constructions with more than two successive terms in postverbal position, the interposition can occur only once, between the first and the second postverbal phrases.
(b) The relative ordering of postverbal terms is relatively free, but scrambling does not affect the rule formulated in (a), which excludes analyzing the interposition as an adposition marking the function of one of the postverbal phrases.
(c) The interposition invariably agrees in class with the NP it immediately follows, whatever its status in the argument structure.

Nande JD42 is the only Bantu language in which this phenomenon has been signaled. A possible explanation is that, as discussed in Creissels (2018), the interposition of Nande started as a focus marker making explicit the focus function of NP's in IAV position; subsequently, its use generalized in this position when the verb was followed by more than one term, so that it lost its initial function and became a purely syntactic marker.

5.9. Equative, locational, and possessive predications

Predicative constructions consisting of the mere juxtaposition of non-verbal words devoid of any predicative marking are not particularly frequent in Bantu. Equative and locational predications commonly involve a predicative element, copular verb or non-verbal copula.

Some Bantu languages (e.g. Cuwabo P34) have a special 'predicative' form of nouns fulfilling the function of equative predicate without the addition of a copula.

As regards predicative possession, the most striking particularity of the Bantu language family is the very strong predominance of the comitative type of predicative possession ('Possessor is with Possessee'). Not surprisingly, given the relationship between predicative possession and existential predication, existential constructions of the type 'At Ground is with Figure' are also relatively common. For more details, cf. Creissels (forthcoming)

For more details on non-verbal predication in Bantu, cf. Schneider-Zioga (this volume). On locational and existential predication, cf. Zeller (this volume), Devos & al. (forthcoming).

6. Information structure[21]

6.1. Cleft constructions

Cleft constructions expressing contrastive focus are common in Bantu. In some Bantu languages (for example, Tuki A601), verb focalization can be expressed by clefting a nominalized form of the verb (cf. Biloa (2013)).

6.2. Focus positions in Bantu

In Bantu languages, focus-marking strategies other than cleft constructions often involve deviations from the pragmatically-unmarked constituent order, most often combined with some morphological marking (either on the focalized element, the verb, or both). In the languages that have a predicative form of nouns, this form typically occurs in focalizing constructions too.

Many Bantu languages have been analyzed as having a dedicated focus position adjacent to the verb, most of the time post-verbal ('immediately after the verb', IAV), but sometimes also pre-verbal ('immediately before the verb', IBV). Watters (1979) analyzed Aghem (Grassfields Bantu) as having an IAV focus position, and subsequent studies have demonstrated that many eastern Bantu languages have an IAV focus position, whereas an IBV focus position has been described in some western Bantu languages: Mbuun B84b (Bostoen & Mundeke 2012), Nsong B85d (Koni Muluwa & Bostoen 2014), and Kisikongo H16a (De Kind 2014).

6.3. Conjoint and disjoint verb forms[22]

Conjoint/disjoint refers to a morphological distinction found in some eastern and southern Bantu languages, whose role in the expression of information structure is similar to that of the phonological phrasing of verb phrases as described for Chewa N31b by Kanerva (1990). 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.

Although the morphological distinction between conjoint and disjoint forms has long been acknowledged in Bantu grammars, serious discussions of its function began not earlier than 20 years ago. The main reference on this aspect of Bantu syntax is the volume edited by Van der Wal and Hyman (2016).

Creissels (1996) showed that the choice between conjoint and disjoint forms in Tswana S31 is straightforwardly determined by 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):

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[21] For a more detailed survey of information structure in Bantu, cf. Morimoto (this volume).

[22] For a more detailed survey of the conjoint/disjoint alternation in Bantu, cf. Van der Wal (this volume).

– The disjoint form is used whenever the comment/verb phrase includes no other element than the verb itself (which implies that a disjoint verb form can only be followed by extraposed phrases that do not form part of the comment).
– The conjoint form is used whenever the comment/verb phrase includes at least one element other than the verb itself (which implies that a conjoint verb form is followed by at least one phrase forming part of the comment, since the verb phrase is strictly head-initial).

A similar situation has been recognized in other Bantu languages of the south (cf. Buell (2006) on Zulu S42).

A conjoint vs. disjoint distinction has also been identified in languages of zones J, G, M, N, and P. In Makhuwa P31, the conjoint form is used when a focal element occupies the Immediate After Verb (IAV) position; the disjoint form is used when the IAV position is empty (Van der Wal 2009).

The conjoint vs. disjoint distinction of Tswana S31 and Makhuwa P31 have therefore in common the exclusion of the conjoint form from prepausal contexts, and a conditioning involving exclusively information structure, but differ in that the conjoint vs. disjoint distinction of Makhuwa P31 encodes the presence vs. absence of a focal element in an IAV focus position, whereas in Tswana S31, the conjoint form simply encodes that the verb is followed by at least one non-topical word or phrase. Consequently, the conjoint form has a much wider distribution (and the disjoint form a much more restricted distribution) in Tswana than in Makhuwa. For example, in the inversion construction of Makhuwa, the inverted (and de-topicalized) subject can be preceded by a disjoint verb form, which would be ungrammatical in Tswana.

6.4. Inversion constructions

In SVO languages, intransitive verbs often have an alternative construction in which the argument canonically encoded as a preverbal subject occurs in postverbal position (i.e., in the canonical position for the object of transitive verbs). These so-called inverted subjects may maintain the other properties characteristic for subjects (for example, control of verb agreement), or lose (some of) them. Functionally, inversion constructions mark that the subject argument must not be interpreted as topical.

Such constructions, often designated as 'presentational', or 'thetic', are very common in Bantu, and this is probably related to the fact that Bantu languages commonly have relatively strict topicality constraints on pre-verbal subjects.[23]

The so-called subject-object reversal, a particularly 'exotic' kind of inversion construction, is found for example in Kinyarwanda JD61, where the denotative meaning of transitive clauses such as 'The boy is reading the book' can also be expressed as lit. 'The book is reading the boy' with the verb expressing agreement with 'the book' (Kimenyi 1971: 141). In this construction, analyzed among others by Morimoto (2008), the patient of transitive verbs for which there cannot be ambiguity in the assignment of semantic roles is encoded as the subject, without any overt indication of a valency change, whereas the agent occurs in

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[23] Topicality constraints on subjects explain why, in some Bantu languages (e.g., Tswana) interrogative or negative words ('who?', 'nobody') cannot occur as preverbal subjects.

postverbal position without any particular marking. In term of information structure, the meaning is similar to that of passive constructions.

Marten and van der Wal (2014) propose a general typology of Bantu subject inversion. Cf. also Hamlaoui (this volume).

7. Complex sentences[24]

7.1. Complementation

The use of some form of a quotative verb or marker in complementizer function, very common in the world's languages, is also widespread in Bantu (cf. Güldemann (2002, 2008)).

7.2. Relativization

Bantu languages have post-nominal relative clauses. Since Nsuka Nkutsi's (1982) seminal work, relativization in Bantu has been a much investigated topic (cf. among others Henderson (2006), Zeller (2004)). The parameters accounting for the variation observed in the *noun + relative clause* construction can be summarized as follows:

– a relativizer (or relative linker) may be present, either at the junction between the head noun and the relative clause, attached to the right of the verb, or inserted within the verb;
– relativizers may be invariable, or agree in class with the head noun;
– the relativizers that show class agreement may be formally identical to a demonstrative, or to the genitival linker;
– in comparison with independent verb forms, the verb forms in relative clauses may involve modifications in the details of TAM and polarity marking;
– relative clauses may have the same SVO constituent order as independent assertive clauses, or a verb-initial constituent order;
– in some languages, the agreement slot at the beginning of the verb forms found in relative clauses does not express agreement with the subject, but with the head noun, whatever the relativized function.

Systematic agreement with the head noun rather than with the subject is only found among the languages that have verb-initial relative clauses, and at least in some of the languages in question, such relative verb forms can be analyzed as unoriented participles, i.e., non-finite verb forms expressing relativization, but providing no clue as to the relativized function (cf. Van der Wal (2010) on Makhuwa P31, Creissels & Guérois (Forthcoming 2019) on Cuwabo P34, and Van de Velde (2018) for a historical explanation). [25]

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[24] For a more detailed survey of complex sentences in Bantu, cf. Letsholo (this volume).

[25] In the Bantuist tradition, the term 'participle' is rarely used for forms meeting the traditional definition of this term (non-finite verb forms typically used in noun-modifying function), but is commonly found as a label for verb forms that do not meet this definition. In particular, the 'participial forms' of Southern Bantu languages are typically used in adverbial subordination, and express subject agreement and tense exactly like independent verb forms.

7.3. Adverbial subordination

In Bantu languages, adverbial subordination may involve conjunctions introducing clauses whose internal structure shows no evidence of dependent status, dependent verb forms (subjunctive, or others), or a combination of both. As a rule, the dependent verb forms found in adverbial subordination do not show morphological evidence of non-finiteness, and express subject agreement like independent verb forms. There are however exceptions, such as the Chewa N31b simultaneous converb (Güldemann 2003), or the simultaneous and posterior converbs of Orungu B11b (Ambouroue 2007).

Unsurprisingly, in Bantu languages, as in many other language families, adverbial clauses commonly take the form of relative clauses, and purpose clauses are commonly characterized by a subjunctive/infinitive alternation similar to that found in many European languages.

7.4. Clause chaining

Givón (2001) proposed a typology of clause-chaining systems that divides them into two major types: the OV-type chaining, with the chain-final clause as the most finite clause, and the VO-type chaining, with the chain-initial clause as the most finite clause. In the remainder of the literature on clause chaining, the type with the initial clause as the most finite clause is often marginalized (Payne 1997: 321), and sometimes even claimed to be inexistent (Longacre 1985: 264).

Sub-Saharan data in general, and Bantu data in particular, support Givón's proposal, since Bantu languages commonly have special verb forms (variously labeled 'consecutive' or 'sequential', sometimes also 'subjunctive') characterizing non-initial clauses in clause chains reflecting a chronological presentation of events.

8. Conclusion

The primary objective of the present chapter was to highlight the most salient typological characteristics of Bantu, such as the role of tone in verbal morphology, the particular type of interaction between number marking and gender that characterizes Bantu 'noun class' systems, rich systems of 'verb extensions', the particular type of locative marking found in Central Bantu languages, or the particular type of interaction between verb morphology and information structure found in the languages that have a distinction between 'disjoint' and 'conjoint' verb forms. I also have tried to draw attention to the fact that Bantu languages are far from being uniform typologically, and many areas of variation have not been systematically investigated so far. As mentioned in the introduction, Bantu languages are particularly well suited to the study of microvariation, and the dramatic increase in the volume and quality of the available documentation that we are now witnessing gives us hope that crucial progress may be made in this area in a near future.

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