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## 21 The polyfunctional applicative \*-id in Bantu languages

**Abstract:** This chapter is about a verbal derivational suffix reconstructed as \*-id to Proto-Bantu and labeled applicative. Reflexes of this suffix are found in a great number of present-day Bantu languages. I show that the Bantu applicative suffix is highly polyfunctional. Applicative morphology is often the only means to introduce any semantic role other than Agent, Patient, Instrument and Possessor into a main clause. Obligatoriness vs. optionality of applicativization to express any given semantic role depends on the language, the lexical meaning of the verb root and the communicative context. Syntactically, the applied phrase can be, among others, a direct object or an oblique. This means that increased syntactic valence is not a defining feature of Bantu applicative constructions. This chapter also highlights that suffixes formally identical to \*-id and behaving morphophonologically as reflexes of \*-id display several non-syntactic functions across the Bantu domain, such as adding aspectual nuances to the meaning of the verb root (e.g., repetitiveness, thoroughness, excess, persistence, intensity), placing an applied phrase with a Location(-related) semantic role under narrow constituent focus, and widening/shifting the scope of a Location(-related) applied phrase with respect to subject and object arguments.

### 1 Introduction

The Bantu languages branch off from one of the lowest nodes of the Benue-Congo branch of the Niger-Congo phylum (Greenberg 1963; Mukarovsky 1976–1977; Williamson and Blench 2000). The fact that they are a relatively recent Niger-Congo offshoot contrasts sharply with their remarkable geographic spread throughout Sub-Saharan Africa (Bostoen 2018). Bantu languages span from southwest Cameroon in the northwest all the way to southern Somalia in the northeast and until the southernmost tip of the continent (Bostoen and Van de Velde 2019: 3–4). As such, they are the largest language family in Africa by number of speakers and geographic extension. Estimates about their exact number vary anywhere between more than four hundred to almost seven hundred, one reason being the arbitrary demarcation between dialects and languages. Due to their considerable number, there are several geographically-based referential (i.e. non-genetic) classifications of Bantu languages. The most widely used is the one by Guthrie (1971), which divides Bantu languages into fifteen zones each labelled with a letter from A to S, where A is used for the languages currently located around the homeland area in the borderland between Nigeria and Cameroon and S for the southernmost languages of southern Africa. Within each zone, sets of ten after a letter refer to a group

of languages, e.g., B70, B80 etc., whereas a number following a decimal point refers to specific varieties within a group, e.g., the Bantu language Ding is assigned the alphanumeric code B86 within the B80 referential group, see Hammarström (2019), Maho (2009). The Bantu languages of Guthrie's referential classification are known as Narrow Bantu languages. This term is used in contrast to Wide Bantu, which includes both Bantu and Bantoid languages, that is, about 150 varieties around the Bantu homeland area which are genetically related to Bantu but are conventionally not considered to be part of "Narrow Bantu" (Bostoen and Van de Velde 2019; Williamson and Blench 2000: 8–9).<sup>1</sup>

To date, there is no internal subclassification of Bantu languages based on the Comparative Method (see however the tentative historical classification of Nurse and Philippson 2003 based on shared innovations of non-lexical features). Bantu scholars often make a non-genetic and approximate division between the northwestern Bantu languages spoken in Cameroon, Gabon, Congo and parts of the Democratic Republic of the Congo, from the rest of Bantu languages spoken to the east, southeast and southwest (see, e.g., Schadeberg 2003b). Geographically speaking, northwestern Bantu is ill-defined. Most authors include languages of zones A, B and C under the geographic label "northwestern", while others also add small adjacent pockets of zones D and H. This latter grouping is known as "Forest Bantu" (Grégoire 2003; Nurse and Philippson 2003: 177) and is often used interchangeably with northwestern Bantu. The geographically less widespread northwestern languages display a much higher linguistic diversity compared to those spoken further east and south (Bostoen 2018). Most lexicostatistical and phylogenetic classifications (e.g., Bastin, Coupez, and Mann 1999; Coupez, Evrard, and Vansina 1975; Grollemund et al. 2015; Heine, Hoff, and Voßen 1977; Vansina 1995) point to an initial split between some of the northwestern languages (especially zone A and parts of zone B) and the rest, while there is variability in the internal subgroupings of the rest. Given the number of languages, the general(izing) claims made in this chapter should not be taken at face value, but rather understood as tendencies for which exceptions can always be found.

In the remainder of this section, I discuss morphosyntactic features which are of immediate relevance to the discussion of applicative constructions (ACs). Bantu nouns are not marked for case, though tonal case marking has been claimed to exist in some languages, see, e.g., Schadeberg (1986), Blanchon (1999). As is typical of Niger-Congo (Hyman 2014), Bantu languages feature a system of nominal classification where nouns belong to different, partially semantically motivated classes. Nouns tend to take a distinct noun class prefix in the singular and the plural and trigger agreement on other constituents of the NP as well as the verb, as shown in (1) and (2). In both cases, the head noun *ò-mpûy* 'pangolin' (singular CL3 *ò-*) in (1) and *è-mpûy* 'pangolins' (plural CL4 *è-*) in (2) triggers class agreement on all modifiers of the NP as well as on the verb through

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<sup>1</sup> The term *Bantoid* is also used to name the node within the Benue-Congo branch of Niger-Congo to which both Narrow Bantu and Bantoid languages belong.

a class-determined subject index. In Bantu, a third person referent can belong to any of the noun classes existing in a particular language. Nouns denoting humans usually belong to class pairing 1/2.

- (1) Ngwi B861 (Pacchiarotti and Bostoen 2021: 28)

*òmpúy òmɔɣ ònɛn òídzá:m*

*ò-mpúy      ò-mɔɣ      ò-nɛn      ó-tí-dzám<sup>H</sup>*

CL3-pangolin AP3-one AP3-big 3.SUBJ-PRF-disappear

‘One big pangolin has disappeared.’

- (2) Ngwi B861 (Pacchiarotti and Bostoen 2021: 28)

*èmpúy ènɛn èní èídzá:m*

*è-mpúy      è-nɛn      è-ní      é-tí-dzám<sup>H</sup>*

CL4-pangolin AP4-big AP4-that 4.SUBJ-PRF-disappear

‘Those big pangolins have disappeared.’

The noun class system reconstructed for Proto-Bantu (PB) featured at least three locative noun classes whose semantic content varies depending on the author of the reconstruction. These are PB CL16 \*pà- ‘at, on’, CL17 \*kù- ‘outside’ and CL18 \*mù- ‘in’ (Meinhof and van Warmelo 1932: 40). In many modern Bantu languages, nouns already carrying a noun class prefix may additionally be prefixed with one of the historically locative noun class prefixes. Some Bantu languages developed a locative suffix reconstructable to some node as \*-inɪ (Grégoire 1975: 187). These two strategies can be combined as shown in (3), where the CL10 noun ‘gardens’ takes a historical CL16 locative prefix *va-* (< PB CL16 \*pà-) and a locative suffix *-ni* (< \*-inɪ).

- (3) Lomwe P32 (Güldemann 1999b: 52)

*va-i-macha-ni*

CL16-CL10-garden-LOC

‘in the vegetable/fruit gardens’

In this chapter, I use the term *LOCATIVE PHRASE* as a general cover term for a phrase with locative semantics which displays morphological material Bantu nouns must take when they function as semantic adjuncts specifying the location of an event, as in (3), without specifying the syntactic category (NP, PP, or something in between) to which the locative phrase belongs (see discussion below in this section).

In terms of morphological verb profile, Bantu languages spoken to the (south)east and southwest of the northwestern area uniformly have morphologically complex verb forms hosting numerous bound morphemes with a wide range of grammatical functions such as participant cross-reference, Tense Aspect Mood and Polarity (TAMP) marking, voice and derivation (causative, applicative, passive, reflexive, reciprocal, middle, positional, separative, stative, etc.). The languages in the northwestern area tend to have

a much lower ratio of morphemes per word. These different morphological profiles sometimes coexist in one and the same phylogenetic branch. This is illustrated in (4) and (5) with two languages belonging to the West-Coastal Bantu branch, both spoken in the Democratic Republic of the Congo (DRC).

- (4) Ntandu H16b (Daeleman 1966: 253)

*kabatátúsádísáánga ko*  
*ka-ba-tá-tú-sál-ís-áng-a* *ko*  
 NEG-2.SUBJ-PRS.PROG-1PL.OBJ-work-CAUS-IPFV-FV NEG  
 ‘They are not helping us.’

- (5) Nzadi B865 (Crane et al. 2011: 170)

*mĩ ke pá fũfũ kó yá bɔ*  
 1SG NEG.PST give fufu to 2SG NEG  
 ‘I didn’t give fufu to you.’

The verbal morphological template reconstructed for PB by Meeussen (1967: 108–111) undoubtedly reflects the structure found in present-day languages such as Ntandu in (4). A version of the PB verbal template adapted by Güldemann (1999a: 546) is given in Figure 1, where the row immediately after the numbered verb slots indicates how these are traditionally labelled in Bantu studies.<sup>2</sup> The reconstruction of the template in Figure 1 to PB stage has been subject to a heated debate in recent years. One side of the debate argues that Figure 1 actually represents the proto verbal form of a much later node in the Bantu family tree (see, e.g., Güldemann 2011, 2022), and that PB would have looked much more like Nzadi in (5) than Ntandu in (4).

–4	–3	–2	–1	0	+1	+2	+3
preinitial	initial	postinitial	preradical	radical	prefinal	final	postfinal
TAMP	SUBJ	TAMP	OBJ	root	derivation/TAM	final vowel	clause type/OBJ/P

**Figure 1:** Proto-Bantu verbal template adapted from Güldemann (1999a: 546).

While subject indexes (SUBJ) are usually present on the verb form in all TAMP finite constructions except the imperative, the presence of an object index (OBJ) and its co-occurrence with the lexical object NP it coreferences is subject to considerable variation (for a typology see Beaudoin-Lietz, Nurse, and Rose 2004; on the reconstruction of object

<sup>2</sup> In his original PB verbal template Meeussen (1967: 108–111) distinguishes two slots between the radical and the final, i.e., a suffixal slot for verbal derivation (where the applicative belongs) and a prefinal slot for a specific inflectional suffix. Güldemann (1999a) conflates these two suffixal slots under the label “prefinal” as he does with several distinct prefixal slots under the label “preinitial”.

indexation in PB see Wald 2022). The applicative as well as numerous other PB derivational suffixes (Schadeberg and Bostoen 2019; Schadeberg 2003a) appear in position +1. As we will see in Section 2, northwestern languages often display verbal phonotactic maximality constraints which affect the segmental realization of the suffixal portion of the template in Figure 1.

In terms of main clause syntax, the vast majority of Bantu languages displays an SVOX word order (where X stands for a syntactic oblique) when clause constituents are lexical NPs (Creissels 2000: 250). The immediately postverbal position is often a new information focus position for object NPs (Buell, Riedel, and Van der Wal 2011), but in some branches it is rather immediately preverbal (Bostoen and Mundeke 2012; Koni Muluwa and Bostoen 2014). Changes to these word orders, often in combination with morphological and suprasegmental strategies, correlate with changes in information structure (Bearth 2003: 130; Downing and Hyman 2016). All known Bantu languages display a robust nominative-accusative alignment system. Three overt properties providing evidence for this claim are: (i) the existence of two (supra)segmentally distinct sets of bound pronominal forms used for participant cross-referencing, one for the S/A category and one for P;<sup>3</sup> (ii) verbs usually must index the S/A category in most TAMP constructions but not P (see above); and (iii) while the S/A category appears preverbally, P occurs postverbally. Zero-anaphora for anaphorically retrievable object arguments of syntactically transitive verb stems is very common; on the other hand, subject arguments usually do not undergo zero anaphora. While the grammatical relation of subject is easily identifiable as the target of specific morphosyntactic operations, the grammatical relation of object is less so. Typical Bantu objecthood diagnostics include, among others, adjacency to the verb, ability to be cross-referenced on the verb, and subjectivization by means of a passive construction (Hyman and Duranti 1982). In fact, the by now well-known distinction between symmetrical and asymmetrical object-type languages, originating in data from the eastern Bantu languages Chaga and Chewa within the Lexical Functional Grammar framework (e.g., Alsina and Mchombo 1990; Bresnan and Moshi 1990), was established on the basis of the behavior that multiple postverbal object NPs show with respect to the aforementioned diagnostics. Nevertheless, their reliability is often disputed due to the arbitrariness of their choice, their language-specific partial applicability (Rugemalira 1991), the high degree of morpho-syntactic variation they display (especially object indexation on the verb), and the intraspeaker variation in answers obtained in elicitation contexts (Pacchiarotti 2020: 59–66 for an overview).

An idiosyncrasy of Bantu languages immediately relevant for the discussion of ACs is that the boundaries between syntactic object arguments and adjuncts with locative semantics are far from discrete (Creissels 1998; Kuperus and Mpunga wa Ilunga 1990

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3 I use S, A, P following Dixon (1994), among others. A stands for the subject of a transitive verb, P for the object of a transitive verb and S for the subject of an intransitive verb.

and references therein; Schadeberg 1995). Bantu locative phrases can be either NPs, PPs, or entities in between these two syntactic categories. This is because present-day Bantu languages either preserved or restructured the original system where locatives were part of the noun class system (see discussion above). Eastern Bantu languages such as Chewa N31 by and large retained the original system. In these languages locative phrases tend to behave morphosyntactically as nouns and are thus likely to be syntactic arguments, e.g., they trigger agreement within the NP just like non-locative nouns, and they can bear the grammatical relations of subject and object to their verb, as shown for instance by subject agreement and preverbal position of the locative phrase *ku San José* in (6).

- (6) Chewa N31 (Bresnan 1994: 111)  
*ku San José kú-ma-ndi-sangalâts-a*  
 CL17 S.J. 17.SUBJ-PRS.HAB-1SG.OBJ-please-FV  
 ‘It pleases me in San José / (Being in) San José pleases me.’

Some northwestern and southern Bantu languages have developed locative prepositions either from PB locative noun classes or other sources such as locative demonstratives (Grégoire 1975: 106–134). Unlike locative-marked NPs, prepositions trigger neither agreement on other constituents of the noun phrase, nor can they bear the grammatical relation of subject and/or object to their verb. This is illustrated with the Londo data in (7) where *ò* derives historically from PB locative class 17 \**kò* but is now a phonologically independent element which does not trigger agreement in the following connective construction: the morpheme *wá* linking the CL14 noun ‘face’ with the CL7 noun ‘hole’ agrees with the inherent class of the first linear noun (CL14).

- (7) Londo A11 (Kuperus 1985: 182, glosses uniformized)  
*ì-sérì í-mòkòmé ò bò-só (w-á) è-yùkù*  
 CL19-antelope 19.SUBJ-stopped PREP CL14-face CL14-CONN CL7-hole  
 ‘The small antelope stopped in front of the hole.’

Yet other languages show a fluctuating situation where, depending on the construction, locative phrases display morphosyntactic behavior which makes them less like an NP and more like a PP, see Kuperus and Mpunga wa Ilunga (1990) for a detailed discussion of this situation in Luba-Kasai L31a (see also Section 3). Because NPs are more likely to be syntactic arguments than PPs, the morphosyntactic nature of Bantu locative phrases has direct implications for claims related to valence, especially because, as we will see in Section 3, applicative morphology can/must be used to introduce object NPs but also locative phrases on a language-specific, root-by-root basis.

Because eastern Bantu data have dominated applicative studies in different theoretical syntactic frameworks (cf. *supra*) and because this handbook features a case

study on the eastern Bantu language Tswana (see Creissels, this volume), this chapter tries to include as many northwestern Bantu data as possible.

## 2 Morphology

The only verbal derivational suffix reconstructed in PB with the label applicative is \*-id (Meeussen 1967: 110).<sup>4</sup> Its reflexes in present-day Bantu languages are quite uniform, minor variations being conditioned by language-specific morphophonology and phonotactics. For instance, in Lengola D12, \*-id has three allomorphs according to Stappers (1971: 265): -i when the preceding morpheme ends in /l/ (8a), -li when it ends in a vowel (8b), and -il in all other contexts (8c).

- (8) Lengola D12 (Stappers 1971: 265)
- a. *i-yoβul-a* ‘to play drum’    *i-yoβul-i-a* ‘to play drum-APPL’
  - b. *i-tú-a* ‘to sprout’            *i-tú-li-a* ‘to sprout-APPL’
  - c. *i-φam-a* ‘to shout’           *i-φam-il-a* ‘to shout-APPL’

As is common with reflexes of PB derivational suffixes having a near-close vowel (\*ɪ or \*ʊ) and/or ending in \*d, reflexes of PB \*-id often undergo root-conditioned vowel and/or nasal harmony. The Sikongo data in (9) show that the language’s direct reflex of \*-id, i.e. -il, is subject to vowel harmony whenever the root contains /e/ or /o/, compare (9c–d) with (9a–b) and nasal harmony whenever the root contains a nasal segment, see (9f–g). Note that vowel and nasal harmony can also co-occur, see (9e).

- (9) Sikongo H16a (Ndonga Mfuwa 1995: 315, 331)
- a. *kús* ‘smear’    *kús-il* ‘smear-APPL’
  - b. *tál* ‘look’     *tál-il* ‘look-APPL’
  - c. *vóv* ‘talk’     *vóv-èl* ‘talk-APPL’
  - d. *vét* ‘throw’   *vét-èl* ‘throw-APPL’
  - e. *nón* ‘gather’   *nón-èn* ‘gather-APPL’
  - f. *kún* ‘plant’    *kún-in* ‘plant-APPL’
  - g. *símb* ‘touch’   *símb-in* ‘touch-APPL’

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<sup>4</sup> Nevertheless, other PB verbal derivational suffixes might develop applicative functions overtime. For instance, in some zone A languages reflexes of PB \*-an ‘associative/reciprocal’ commonly introduce Instrument and Comitative applied phrases (Schadeberg 1980). Similarly, the Great Lakes Bantu languages of zone J (e.g., Rwanda, Ganda, Haya, etc.) use reflexes of PB \*-ici ‘causative’ to introduce Instrument applied phrases into a main clause (see, e.g., Kimenyi 1988: 367–368 for Rwanda).

In some Bantu languages, applicative derivation with monosyllabic verb roots can trigger suffix doubling and/or vowel lengthening, as in (10), usually to satisfy minimal length constraints (e.g. disyllabic or bimoraic) on verb stems (see Hyman and Mtenje 1999 and references therein).

- (10) Lunda L52 (Kawasha 2003: 35)
- |                     |                                      |
|---------------------|--------------------------------------|
| <i>d-á</i> ‘eat’    | <i>d-íl-a</i> ‘eat at/for/on, enjoy’ |
| <i>nw-á</i> ‘drink’ | <i>nw-ín-a</i> ‘drink for/at’        |

Due to the phenomenon known as “imbrication” in Bantu studies (Bastin 1983), reflexes of applicative \*-*rd* can be phonologically less transparent than those presented so far. Imbrication is a process whereby certain -(V)CV verbal suffixes conflate or a suffix gets infixated into a verb root. This morpheme fusion is usually accompanied by the loss of the consonant of the infixated CV suffix and the insertion of its vowel portion in front of the final root consonant. This process commonly occurs with perfect \*-*ide*, applicative \*-*rd* and causative \*-*ici*. Typical instances of imbrication are in (11).

- (11) Luba-Kasai L31a (Lukusa 1993: 58)
- |  |                                      |
|--|--------------------------------------|
| Underlying form                        | Surface realization                  |
| <i>mòñ-íl</i> ‘see-APPL’               | <i>mwè:n</i>                         |
| <i>tabal-íl</i> ‘open eyes-APPL’       | <i>tabeel</i>                        |
| <i>tabeel-íʃ</i> ‘open eyes.APPL-CAUS’ | <i>tàbeʒ</i> ‘cause too see clearly’ |

More extreme, less typical examples of imbrication occur in the northwestern area (especially zones A, B, and C), mainly due to maximality constraints on verb stems, such as maximum number of syllables and restrictions on the positional distribution of consonants in verb roots according to place/manner of articulation (Ellington 1977; Hyman 2008, 2010).<sup>5</sup> An instance of such complex (morpho)phonological reflexes of \*-*rd*, reminiscent of classical imbrication, is illustrated in (12) with data from Ding B86. Depending on the quality (and length) of the root vowel, the applicative -*il* (as well as any other derivational or inflectional suffix featuring /i/) can trigger umlaut – with or without concomitant diphthongization – and/or lengthening (for a discussion of these phenomena in the area where Ding is spoken see Bostoen and Koni Muluwa 2014; Koni Muluwa and Bostoen 2012). The consonant portion of -*il* is generally realized when the root has a CV or CVV shape, but see *pá* vs. *kú* in (12c).

<sup>5</sup> Besides loss and imbricated reflexes, phonological mergers among historically distinct verbal derivational suffixes in the northwestern area have created a situation where there is no longer a one-to-one relationship between form and meaning, e.g. a suffix with a given phonological shape can express several semantically distinct, unrelated meanings, or one single meaning can be expressed by three or four formally distinct derivational morphemes (Ellington 1975). Although particularly common in the northwest, mergers causing homophony are also attested elsewhere, see, e.g., Guérois and Bostoen (2018).



## (12) Ding B86 (Ebalantshim 1980)

Root shape	Underlying form	Surface realization
a. C(G)V(:)C	<i>túβ-il</i> ‘drill-APPL’	<i>týýβ</i>
	<i>lòm</i> ‘ask-APPL’	<i>lèèòm</i>
	<i>lám</i> ‘prepare-APPL’	<i>léàm</i>
	<i>sààl</i> ‘weed-APPL’	<i>séél ~ syél</i>
	<i>bíl</i> ‘call-APPL’	<i>bíl</i>
b. CV:	<i>kyél</i> ‘cut-APPL’	<i>kyèèl</i>
	<i>píí</i> ‘throw-APPL’	<i>pííl</i>
	<i>lòò</i> ‘bewitch-APPL’	<i>lòòl</i>
c. CV	<i>pá</i> ‘give-APPL’	<i>péà ~ pé</i>
	<i>kú</i> ‘die-APPL’	<i>kwél</i>

An even more extreme case of imbricated-like reflexes of \*-ɪd is found in Tiene B81. In this language C<sub>1</sub>VC<sub>2</sub>VC<sub>3</sub>V is the longest possible verb form on which the following constraints apply: C<sub>2</sub> must be coronal, C<sub>3</sub> must be non-coronal, and C<sub>2</sub> and C<sub>3</sub> must agree in nasality (Hyman 2010: 153 see also Ellington 1977: 111–113 for derivational rules).

## (13) Tiene B81 (Ellington 1977; Hyman 2010)

	Underlying form	Surface realization
a.	<i>yal-el-a</i> ‘spread-APPL’	<i>yaal-a</i>
b.	<i>són-el-ɔ</i> ‘write-APPL’	<i>sóɔn-ɔ</i>
c.	<i>yók-el-a</i> ‘listen-APPL’	<i>yólek-ε</i>
d.	<i>ɔɔb-el-ɔ</i> ‘bathe-APPL’	<i>ɔɔlɔb-ɔ</i>
e.	<i>lɔŋ-el-ɔ</i> ‘load-APPL’	<i>lɔnɔŋ-ɔ</i>
f.	<i>dum-el-a</i> ‘run fast-APPL’	<i>dunem-ε</i>
g.	<i>t-el-a</i> ‘throw-APPL’	<i>téel-ε</i>
h.	<i>dí-el-a</i> ‘wrap-APPL’	<i>díil-ε</i>

In (13a–b), the Tiene applicative suffix *-el* surfaces as vowel lengthening to compensate for the fact that C<sub>3</sub>, i.e. the /l/ of *-el* cannot be realized because it is coronal. In (13c–f), C<sub>2</sub> and C<sub>3</sub> metathesize because C<sub>3</sub> must be a non-coronal consonant. In (13e–f), the /l/ of the applicative becomes /n/ because C<sub>2</sub> and C<sub>3</sub> must agree in nasality. Additionally, in (13d–e), the vowel portion of applicative *-el* harmonizes to the root vowel ɔ. Finally, verb stems without a C<sub>2</sub> such in (13g–h) show a more phonologically transparent manifestation of *-el* (still subject to coalescence with the root vowel).

In Bantu languages without maximality constraints on verb stem length, there are usually no restrictions on the stacking of verbal derivational suffixes, as shown in (14).

- (14) Yao P21 (Hyman 2004: 70)  
*taam-uk-ul-igw-aasy-an-il-a*  
 sit-IMPS-SEP.TR-PASS-CAUS-REC-APPL-FV  
 ‘cause each other to be unseated for/at’

On the other hand, in languages with maximality constraints on verb stem length, an applicativized causative stem (15b) might be formally identical to a causativized stem (15a). Note that while in (15a) the verb optionally cross-references the CL1 object NP *mwàn*, in (15b) the applied 1SG Beneficiary object gets priority over the base Patient object.

- (15) Ding B86 (Kamtsha variety) (Sidonie Mayuma Mangwem and Donatien Musimar Aleben p.c.)<sup>6</sup>
- |    |                                |              |    |                                       |
|----|--------------------------------|--------------|----|---------------------------------------|
| a. | <i>mùýǎ:y mwàn!</i>            |              | b. | <i>ngyǎ:y mwàn!</i>                   |
|    | <i>mù-yǒb-iy</i>               | <i>mù-àn</i> |    | <i>N-yǒb-iy-il</i>                    |
|    | 1SG.OBJ-wash.INTR-CAUS         | CL1-child    |    | 1SG.OBJ-wash.INTR-CAUS-APPL CL1-child |
|    | ‘Make the child wash himself!’ |              |    | ‘Make the child wash himself for me!’ |

Hyman (2003) reconstructs a default PB and Pan-Bantu suffix templatic ordering Causative-Applicative-Reciprocal-Passive (CARP). While in some languages this templatic order is strictly fixed, in others compositionality and/or semantic scope constraints allow for some combinations of suffixes to override the CARP template. For instance, in the Chewa reciprocalized causative in (16a), the causative suffix precedes the reciprocal, while in the causativized reciprocal in (16b), the reciprocal precedes the causative and thus violates the CARP template in favor of semantic scope.

- (16) Chewa N31 (adapted from Hyman and Mchombo 1992: 350)
- |    |   |    |  |
|----|---|----|--|
| a. | <i>mang-its-an</i>  | b. | <i>mang-an-its</i>   |
|    | tie-CAUS-REC  |    | tie-REC-CAUS   |
|    | [X <sub>i</sub> cause [each other <sub>i</sub> to tie Y]] |    | [X cause to [Y <sub>i</sub> tie each other <sub>i</sub> ]] |

On the other hand, as shown in (17b), in the same language the applicative suffix can never precede the causative. The sequence root-CAUS-APPL in (17a) can be interpreted either as an applicativized causative, i.e. [[X cause Y to tie Z] for/with/at], or as a causativized applicative, i.e. [X cause [Y tie Z for/with/at]] (see Good 2005 and Hyman 2003 for further discussion).<sup>7</sup>

<sup>6</sup> The Ding data not taken from Ebalantshim (1980) come from own fieldwork with two native speakers of the eastern variety of Ding B86 (a.k.a. Ding Kamtsha), Mrs. Sidonie Mayuma Mangwem and Mr. Donatien Musimar Aleben.

<sup>7</sup> In his survey of morphological exponency of applicativization and causativization in Bantu, Good (2005: 19, 35–40) reports very few languages which apparently allow applicative-causative (AC) order

(17) Chewa N31 (adapted from Hyman and Mchombo 1992: 352)

- |   |   |
|---|---|
| a. <i>mang-its-ir</i><br>tie-CAUS-APPL<br>[[X cause Y to tie Z] for/with/at]<br>[X cause [Y tie Z for/with/at]] | b. <i>*mang-ir-its</i><br>tie-APPL-CAUS<br>*(intended meaning: [X cause [Y tie Z for/with/at]]) |
|---|---|

The combination of applicative and reflexive, which unlike other verbal derivation occurs in the same slot as object indexes in Bantu, is often reported to develop non-compositional meanings, special semantic nuances or discourse functions. For instance, the combination of the applicative and reflexive in Rwanda (18) conveys the expectations of the speaker with respect to the event they are narrating (Trithart 1983: 184–187).

(18) Rwanda JD61 (Kimenyi 1980: 57-58 cited in Trithart 1983: 186)

- u-mu-gabo*      *a-r-ĩ-ryaam-i-ye*  
AUG-CL1-man    1.SUBJ-PRS-REFL-sleep-APPL-PRF  
‘The man is asleep.’ (when expected to be doing something else)<sup>8</sup>

In general, applicativized verbs show the same inflectional paradigms as those of their corresponding underived roots, as illustrated with North Boma B82 in (19).<sup>9</sup> Note that the imbricated realization of applicative *-il* in North Boma also encompasses the harmonization of a final vowel /a/ to /ɛ/. Hence, whenever a particular TAMP construction features a final *-a* as in the present and past habitual in (19a–d), the final vowel of the applicativized stem is *-ɛ*. However, final vowels such as *-i* in the negative remote past “override” the expected final *-ɛ* of the applicativized stem.

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alongside causative-applicative. However, in these languages, AC order is not always fully productive and/or semantically compositional.

<sup>8</sup> In Rwanda as in many other Bantu languages, the noun class prefix on the head noun may be preceded by another prefix, traditionally known as augment or pre-prefix (De Blois 1970; Meeussen 1969: 96–99), see *u-* in (18). In languages such as Rwanda, nouns carry both the noun class prefix and the augment by “default” (Van de Velde 2019: 249).

<sup>9</sup> As will be shown in Section 5, applicative morphology in Bantu languages can be used to focalize Location phrases. In some (especially) eastern Bantu languages, the so-called conjoint verb form is used, among others, when a given clause constituent is the target of narrow focus, while the so-called disjoint verb form is used when no specific element is focused within the clause (van der Wal and Hyman 2017). The dynamics (and possible co-occurrence restrictions) of the conjoint/disjoint forms in combination with the focalizing function of the applicative are largely unknown, but see Misago et al. (forthcoming) for a first exploration in the Eastern Bantu language Rundi.

## (19) North Boma B82 (Stappers 1986: 52–57 glosses added)

- a. *namula:batómá:*  
*na-mu-la:ba-tóm-á:*  
 1SG.SUBJ-1.OBJ-PRS.HAB-send-PRS.HAB  
 ‘I often send him.’
- b. *namula:batúmíñé:*  
*na-mu-la:ba-túmíñ-á:*  
 1SG.SUBJ-1.OBJ-PRS.HAB-send.APPL-PRS.HAB  
 ‘I often send for him.’
- c. *namututóma*  
*na-mu-tu~tóm-a*  
 1SG.SUBJ-1.OBJ-PST.HAB~send-PST.HAB  
 ‘I used to send him.’
- d. *namututúmíñe*  
*na-mu-tu~túmíñ-a*  
 1SG.SUBJ-1.OBJ-PST.HAB~send.APPL-PST.HAB  
 ‘I used to send for him.’
- e. *abótúmi kó*  
*a-bó-tóm-í* *kó*  
 NEG-2SG.SUBJ-send-REM.PST NEG  
 ‘You did not send.’
- f. *abómutúmíñí kó*  
*a-bó-mu-túmíñ-í* *kó*  
 NEG-2SG.SUBJ-1.OBJ-send.APPL-REM.PST NEG  
 ‘You did not send for him.’

Bantu languages usually do not make use of applicative serial verb or converb constructions. In fact, while other PB verbal derivational suffixes have been regularly innovated since PB (Bostoen and Guérois 2022), the applicative has not. There are even languages such as Eton A71 where the loss of the inherited applicative suffix has not been compensated by the development of any alternative strategy, so that participants such as Beneficiaries, commonly encoded in Bantu as core arguments via applicative constructions, are simply encoded as objects that do not require licensing by any special form of the verb (Van de Velde 2008). Nevertheless, applicative serial verb constructions expressing instrumental (serial verb ‘take’), beneficiary (serial verb ‘give’), and comparative (serial verb ‘(sur)pass’) meanings appear to be extremely common in a Bantoid group known as Grassfields Bantu (Kießling 2021).

### 3 Syntax

Applicative constructions (ACs) in Bantu languages can be optional or obligatory. Languages where the applicative is obligatory on a root-by-root basis to introduce any given set of semantic roles except Agent (and occasionally Instrument) have a very restricted set of prepositions or no prepositions at all, e.g., the Chaga E60 language group (Bresnan and Moshi 1993). Languages with optional applicative constructions usually have a fairly developed system of prepositions, but the applicative might still be obligatory with certain verb roots to introduce certain semantic roles, e.g. Mongo-Nkundo C61 (see Section 4).<sup>10</sup> Usually there are no restrictions related to the syntactic valence of the root: the applicative suffix in Bantu languages can appear on syntactically intransitive, monotransitive and ditransitive roots. Nevertheless, in cases where the applicative introduces a syntactic object, languages might show restrictions on the number of postverbal object NPs and/or object indexes on the verb (see De Kind and Bostoen 2012 on Luba-Kasai L31a). Additionally, there might be language-specific applicativization restrictions linked to the lexical meaning/semantic class of certain verb roots (see, e.g., Machobane 1989 who argues that experiencer verb roots in Sotho S33 cannot be applicativized).

Following Zúñiga and Creissels's introduction to this volume, Bantu languages have P-applicatives (= direct object applicatives), X-applicatives (=oblique applicatives) and P~X applicatives, meaning that the syntactic status of an applied phrase (AppP) with locative semantics can be in between an object and a syntactic adjunct (see Section 1). In languages with optional ACs, the morphosyntactic entity introduced by the applicative can alternatively be expressed as a prepositional phrase in the construction of the underived root, i.e., the base construction (BC), with a concomitant semantic and/or pragmatic difference(s) between the AC and the BC (see Section 4).<sup>11</sup> To my knowledge, there are no redirecting ACs in Bantu languages. The Tswana obligatory AC in (20) is an instance of an X-applicative: the transitive verb root 'kill' requires applicative derivation in order to co-occur with a phrase specifying the exact Location of the killing. Syntactically, *mó lītłápéhj* 'on the stone' is an obligatorily present oblique: it cannot be made the subject of a passive construction, it cannot be indexed on the verb, nor can it appear in immediate postverbal position (see Bantu objecthood diagnostics in Section 1).

<sup>10</sup> Additionally, there are also languages like Tswana S31 where a developing system of (quasi-)prepositions co-exists with obligatory applicative constructions for all peripheral participant roles except Instrument (see Creissels, this volume). However, synchronically, the presence of (quasi-)prepositions has no incidence whatsoever on the syntactic use of the applicative in Tswana. Their development can only be analyzed in terms of reinforcement of locative marking on locative phrases (Denis Creissels, p.c.).

<sup>11</sup> Certain semantic roles might have a bi-clausal structure as an alternative way of expression. For instance, in Bantu and Niger-Congo languages more generally, the Source and the Goal of movement with a verb such as 'move' cannot be expressed simultaneously in the frame of a single-verb construction; rather, a sequence of two verbs is necessary (Creissels 2006: 146–147; Creissels et al. 2008).

The valence of the applicativized stem in (20) is therefore not increased with respect to the corresponding root.

- (20) Tswana S31 (Creissels 1998: 133)

*ke bolaetse noga mo letlapeng*

*kì-bólá-éts-í*                      *nóχà*                      *mó*    *lítlápé-ŋ*

1SG.SUBJ-kill-APPL.PRF-FV   CL9.snake   LOC   CL5.stone-LOC

‘I killed the snake on the stone.’

The obligatory Luba-Kasai AC in (21) is an example of a P~X applicative. The verb root *y* ‘go’ requires the applicative to co-occur with the Path locative phrase *ku cisalu* ‘via the market’. Locative markers such as *ku* (< PB CL17 \*kù-) in this language “straddle the categories of noun [class] prefixes and a type of preposition” (Kuperus and Mpunga wa Ilunga 1990: 9); although they can appear in subject and object position and be indexed on the verb, they display NP-level morphological properties which make them more similar to prepositional phrases (see Kuperus and Mpunga wa Ilunga 1990: 11-26 for a detailed discussion of their formal properties).

- (21) Luba-Kasai L31a (De Kind and Bostoen 2012: 110)

*ng-èndààmùshingà*    *ù-di*                      *ù-y-il-a*                      *ku*                      *ci-salu*

CL1n-merchant        1.SUBJ-be    1.SUBJ-go-APPL-FV    LOC.CL17    CL7-market

‘The businessman is going via the market.’

Note that the Luba-Kasai root *y* ‘go’ can also optionally co-occur with the locative phrase *ku cisalu* in its underived form, but in this case the locative phrase can only be understood as a Spatial Goal (22).

- (22) Luba-Kasai L31a (De Kind and Bostoen 2012: 110)

*ng-èndààmùshingà*    *ù-di*                      *ù-y-a*                      (*ku*                      *ci-salu*)

CL1n-merchant        1.SUBJ-be    1.SUBJ-go-APPL-FV    LOC.CL17    CL7-market

‘The businessman is going (to the market).’

These language-specific, root-by-root idiosyncrasies in the obligatory use of the applicative virtually always revolve around location/spatial semantic roles. To give another example, the Lunda root *hólok* ‘fall down’ does not require applicative derivation to co-occur with a locative phrase expressing the Location of the event of falling, but does require it to co-occur with a Goal/Endpoint locative phrase.<sup>12</sup>

<sup>12</sup> Some authors argue that in these cases, the applicative “changes” the semantic role of the locative phrase. For arguments against this analysis see Pacchiarotti (2020: 126–132).

- (23) Lunda L52 (Kawasha 2003: 261)

*wahóloka mukaloña**wu-a-hólok-a* (mu-ka-loña)

1.SUBJ-PST-fall.down-FV LOC-CL12-river

‘He fell down ([while he was standing] in the river).’

- (24) Lunda L52 (Kawasha 2003: 261)

*wahóloka mukaloña**wu-a-hólok-el-a* mu-ka-loña

1.SUBJ-PST-fall.down-FV LOC-CL12-river

‘He fell down into the river.’

The optional Mbuun AC in (26) is an instance of a P-applicative. The syntactically ditransitive root *p* ‘give’ in (25) can optionally co-occur with the prepositional phrase *óngírá mwan* ‘for the child’. Alternatively, the Beneficiary can also be introduced by applicative derivation.<sup>13</sup> In (26), ‘child’ is “promoted” to objecthood status compared to (25): it appears in immediate postverbal position, can be indexed on the verb and can be omitted from the construction (i.e., zero anaphora) just like objects of syntactically transitive verb roots in Mbuun (Bostoen and Mundeke 2011: 189–191). However, the base objects of the root lose some of their object properties. Hence, the applicativized stem in (26) is arguably tritransitive even though not all postverbal NPs display the same object properties.

- (25) Mbuun B87 (Léon Mundeke, p.c.)

*maam wápa táár mats óngírá mwan*

<i>maam</i>	<i>o-á-p-a</i>	<i>táár</i>	<i>ma-ts</i>	<i>óngírá</i>	<i>mo-an</i>
CL1.mother	1.SUBJ-PRS.PROG-give-FV	CL1.father	CL6-water	PREP	CL1-child

‘Mother is giving father water for the child.’

- (26) Mbuun B87 (Bostoen and Mundeke 2011: 190)

*maam wápyéllé mwan táár mats*

<i>maam</i>	<i>o-á-pyéllé</i>	<i>mo-an</i>	<i>táár</i>	<i>ma-ts</i>
-------------	-------------------	--------------	-------------	--------------

CL1.mother	1.SUBJ-PRS.PROG-give.APPL	CL1-child	CL1.father	CL6-water
------------	---------------------------	-----------	------------	-----------

‘Mother is giving father water for the child.’

Generally P-applicatives formed on a syntactically transitive verb root deriving a ditransitive verb stem are identical to ditransitive/double object constructions featuring

<sup>13</sup> Léon Mundeke (p.c.) informs me that in fact there is a slight semantic difference in the propositional meaning of (25) compared to (26). When the Beneficiary is introduced as a prepositional phrase, the subject is doing the action with special affection. This semantic nuance is absent in (25).

syntactically ditransitive verb roots such as *p* ‘give’ in (25). Depending on whether the original object of a transitive verb root and the object brought about by the applicative behave the same against a set of objecthood diagnostics, the terms symmetrical vs. asymmetrical objects/object-type language are used after the seminal work of Bresnan and Moshi (1990). For instance, (26) would be considered an asymmetrical object construction.

An AppP in Bantu can also be an NP followed by an infinitival form of the verb as in (27), where the syntactically transitive root *lâm* ‘prepare’ co-occurs with a Purpose AppP. More research is needed to determine whether these clause-like AppPs behave syntactically as objects.

- (27) Ding B86 (Kamtsha variety) (Donatien Musimar Aleben p.c.)

*biyáléàm mwàn kùdí*

*bi-ya-léàm*

*mù-àn*

*kù-dí*

1PL.SUBJ-PRS.PROG-prepare.APPL CL1-child CL15-eat

‘We prepare (food) so that the child can eat.’ (lit: we prepare for the child eating)

In languages with optional ACs, applicativization may condition the access of syntactic adjuncts to topicalization and focalization.<sup>14</sup> Consider the Nsong proverb in (28), extracted from a corpus of over two hundred spontaneously recorded proverbs.

- (28) Nsong B85d (Koni Muluwa and Bostoen 2007: 553)

*mokíl a nkím, éwá bawakéndél nkím*

**[mɔ-kíl a N-kím]<sub>TOP</sub> [éwá]<sub>FOC</sub> ba-wa-kánd-íl N-kim**

CL3-tail CONN CL9-monkey CL3.DEM 2.SUBJ-TAM-tie-APPL CL9-monkey

‘It is with its own tail that they tie up the monkey.’ (lit: as for the monkey’s tail, with that they tie up the monkey)<sup>15</sup>

The syntactically transitive verb root *kand* ‘tie up’ undergoes optional applicative derivation to introduce the Instrument AppP *mokíl a nkím* ‘the tail of the monkey’. The AppP appears dislocated in sentence initial position and is then anaphorically referred to by a demonstrative pronoun which agrees in class with the head noun

<sup>14</sup> I am not aware of a Bantu language where the applicative conditions the access of a syntactic adjunct to relativization. There are usually dedicated constructions to relativize core as well as non-core arguments without the need of applicative derivation (Meeussen 1967; Nsuka-Nkutsi 1982).

<sup>15</sup> The free translation of (28) renders the French translation in the original which reads *C’est avec sa propre queue qu’on lie un singe*. In fact, because the CL2 subject index *ba-* on the verb is used in Nsong as a 3PL functional passive, another possible translation would be ‘It is with its own tail that the monkey is tied up’. The meaning of the proverb is as follows: if someone has never paid the bride price for his wife to his in-laws but receives bride price for his own daughter, he should pay to his in-laws what he has received from his son-in-law for his daughter.



(CL3) and appears in immediately preverbal position. In Nsong, clause initial position is the topic position, while narrow-focused subject and object arguments appear immediately before the verb (Koni Muluwa and Bostoen 2014). The Instrument AppP in (28) could alternatively be expressed as a prepositional phrase headed by the preposition *eyí* ‘with’, i.e., *eyí mokíl a nkím*, but this adjunct cannot be topicalized in clause initial position (Joseph Koni Muluwa p.c.). Hence, in (28) the applicative introduces an object AppP which can then be topicalized and focalized. In fact, most AppPs in the corpus of proverbs appear in clause-initial position. For a parallel example of the use of optional ACs to topicalize Instruments in Chewa N31 proverbs see Trithart (1983: 183).

## 4 Semantics

In (mostly eastern) Bantu languages where applicative derivation is the only structural means with a given verb root to express a given non-Actor semantic role into a main clause (including Themes), the applicative suffix is semantically underspecified in that many distinct semantic roles can be mapped onto the AppP. This mapping depends on lexical meaning of the verb root, the meaning of other constituents present in the clause, and the communicative intention of the speaker. For example, in the eastern Bantu language group Chaga (E60), applicative derivation is required to express all semantic roles except Instrument, Agent, Patient and Possessor (see also Tswana in Creissels, this volume). In languages where ACs are optional, applicative morphology can become restricted in the kinds of semantic roles it optionally introduces. For instance, in Mbuun B87 (Bostoen and Mundeke 2011: 187–188), the applicative can only introduce Recipient, Beneficiary, Maleficiary and Reason AppPs. On the other hand, in Mongo-Nkundo C61, a much wider variety of semantic roles (including Instrument, Purpose, and Location) can be optionally expressed by the applicative (Hulstaert 1965: 257–263). In languages with optional ACs such as Mongo, however, the applicative can still be obligatory with certain verb roots to express certain semantic roles. For instance, with a root such as ‘fall’, the only way to express the Endpoint of the event of falling in (29) is with applicative derivation.

- (29) Mongo-Nkundo C61 (Mbandaka variety) (Hulstaert 1965: 262, glosses added)

*mbúla éɔdʒwêla bofaya*

*mbúla éɔ-dʒw-él-a bo-faya*

CL9.rain 9.SUBJ-PRF-fall-APPL-FV CL1-visitor

‘It has rained on the visitor.’ (lit: rain has fallen on the visitor)

None of the prepositions present in Mongo-Nkundo can be used to express the meaning ‘on the visitor’ in the construction of the underived root (Gertrude Ekombe, p.c.),

although other interpretations (such as the Location where the rain falls) are possible as shown in (30).

- (30) Mongo-Kundo C61 (Mbandaka variety) (Gertrude Ekombe, p.c.)

*mbúla*    *ě-ɔ-jw-a*                      *ěle*            *bo-faya*  
 CL9.rain   9.SUBJ-PRF-fall-FV        LOC.PREP   CL1-visitor  
 ‘It rained at the visitor’s place.’  
 \*(intended: It rained on the visitor)

On the other hand, the Mongo root *kaf* ‘share, distribute’ can participate in the optional AC in (31) where the applicative introduces the Recipient AppP *baékoli* ‘to the pupils’.

- (31) Mongo-Nkundo C61 (Mbandaka variety) (Hulstaert 1965: 260, glosses added)

*kafela baékoli mbɔmbɔ*  
*kaf-él-á*                      *ba-ékoli*            *mbɔmbɔ*  
 distribute-APPL-FV   CL2-student   CL9.chikwangué  
 ‘distribute *chikwangué* to the pupils’<sup>16</sup>

This semantic role could also be expressed in the construction of the underived root as a prepositional phrase as in (32) without any semantic differences which could be captured in an elicitation context.

- (32) Mongo-Nkundo C61 (Mbandaka variety) (Gertrude Ekombe p.c.)

*kaf-á*                      *mbɔmbɔ*                      *ěle*            *ba-ékoli*  
 distribute-FV   CL9.chikwangué   LOC.PREP   CL2-student  
 ‘distribute *chikwangué* to the pupils’

In languages with optional applicative constructions, the differences between the BC and the AC can be semantic and/or discourse-oriented, although there is still too little research on this topic to make reliable generalizations. In terms of semantics, optional ACs such as (34) can convey a higher degree of involvement/volitionality of the Agent in the situation with respect to the BC in (33). According to Donatien Musimar Aleben (p.c.), (33) would be uttered if the person who died did not know that there was a snake somewhere: they got bit by the snake by accident and this caused their death. On the other hand, (34) would be uttered if the person who died already knew there was a snake out there and purposefully went to kill it, but the snake bit them to defend itself.

<sup>16</sup> Chikwangué, also known as *kwanga*, is a bitter fermented dough of manioc which is a staple food in the DRC and other Central and West African countries.

- (33) Ding B86 (Kamtsha variety) (Donatien Musimar Aleben p.c.)

*ndé àkáy sámà ntyèl*

*ndé à-káy sámà ntyèl*

3SG 1.SUBJ-die.PST PREP CL9.snake

‘He died because of the snake.’

- (34) Ding B86 (Kamtsha variety) (Donatien Musimar Aleben p.c.)

*ndé àkwéél ntyèl*

*ndé à-kwéél ntyèl*

3SG 1.SUBJ-die.APPL.PST CL9.snake

‘He died because of the snake.’

Other reported semantic differences between ACs and corresponding BCs have to do with the idea of “achieved goal”. According to Mabugu (2001: 120), optional ACs expressing an Animate Goal in Shona (e.g., *Mother sent child toward grandmother*) differ semantically from their corresponding BCs in that they entail that the event described by the root culminates at the endpoint (i.e. the child reaches grandmother), while the BCs do not necessarily imply an achieved goal.

In terms of information structure, optional ACs in Bantu are used when the AppP is a discourse topic, see (28). For instance, Rapold (1997: 43–44) finds that in a corpus of spontaneous discourse optional ACs expressing animate Beneficiaries in Lingala C30B are used whenever the Beneficiary is pronominal, i.e., given in discourse. Similarly, Kisseberth and Abasheikh (1977) and Trithart (1983: 181–183) show that optional ACs introducing Instrument AppPs in Mwiini G412 and Chewa N31 respectively are used only when Instruments are asserted or presupposed in previous discourse.

## 5 Lookalikes

Suffixes formally identical to and behaving morphophonologically the same as reflexes of PB applicative \*-id can have several valence-neutral semantic and discourse functions. Crucially, they are available on a language-specific, root-specific basis whenever the applicative is not required to introduce a non-Actor semantic role. Compared to the classic valence-increasing function, they are much less researched and understood. Some of these valence neutral functions are conceptually (and possibly diachronically) closely related to the syntactic functions of PB \*-id and point to the polyfunctionality of the suffix. Others are rather at odds with those, which leaves one wondering whether there were not originally two or more formally and functionally distinct suffixes in PB (or earlier on) which merged into or became homophonous with \*-id (Hyman 2007; Pacchiarotti 2020: 279–286; 2022).

Semantically, reflexes of PB \*-id are used virtually everywhere in present-day Bantu languages to indicate that the action/state described by the root is performed to completion, or that the action is performed continuously, with intensity, persistence, excess, or repetition, among other aspectual nuances.<sup>17</sup> Depending on the language-specific phonotactics and minimality/maximality constraints (see Section 2), one, two, or even three applicative suffixes might be required to express this *Aktionsart* function, which is usually not fully productive, but rather restricted to a certain number of roots in the lexicon. In (35), the transitive Mongo root *ɔtsw* ‘penetrate’ undergoes applicative derivation and the meaning of the derived stem is penetrate the forest deeply, far away.

- (35) Mongo-Nkundo C61 (Hulstaert 1965: 263)  
*ǎɔɔtsw(ɛl)a ngonda*  
*ǎ-ɔ-ɔtsw(ɛl)-a* *ngonda*  
 1.SUBJ-PRF-penetrate-(APPL)-FV CL9.forest  
 ‘He has penetrated (deeply, far away) the forest.’

The two functions related to information structure always involve a Location AppP. A first widespread function of the applicative is placing an AppP with a Location-related semantic role (usually the Location where the event takes place) under some kind of narrow or constituent focus. This function is usually available only for those roots which do not require applicative derivation to co-occur with the Location-related AppP which is being narrow-focused, such as the Kongo ya Leta root *lám̐b* ‘prepare food’ in (36). While (36) is athetic statement which could be a felicitous answer to a question like *What’s happening?*, the construction in (37), structurally identical to (36) except for the presence of the applicative on the verb stem, places the prepositional phrase *nà nzúngù yà néné* ‘in the big pot’ under selective (choosing one item from among a pre-supposed set of possible values) or replacing focus (removing an item in the pragmatic information of the addressee and replacing it with the correct one), following the terminology of Dik et al. (1981). Different speakers consistently report that (37) would be used to correct the expectation of a hearer who believes that the women are cooking in another pot or to inform the hearer that among other possible cooking vessels, the women are preparing the food in the big pot. As such, (37) would be a felicitous answer to *In which pot are they preparing?* or *Are they preparing in the small pot?*<sup>18</sup>

<sup>17</sup> Some authors report meanings such as that the action described by the verb root is performed in vain or little by little (Hulstaert 1966; Sharman 1963).

<sup>18</sup> In the Kongo ya Leta spoken in Kikwit, applicative morphology can also be used on *where* questions with a similar meaning nuance to the one described by the contrast between (36) and (37). For example, *mwána kédílà wápi?* | *mù-ána kè-díl-à wápi* | CL1-child PRS.PROG-cry-FV where | ‘Where is the child crying?’ would be used by someone who does not know where the crying child is located. However, *mwána kédídílà wápi?* | *mù-ána kè-díl-il-à wápi* | CL1-child PRS.PROG-cry-APPL-FV where | ‘Where is the child crying?’ would be used when the speaker expects the child to be somewhere (e.g., in the house), but because

- (36) Kongo ya Leta spoken in Kikwit (Joseph Koni Muluwa p.c.)

*bànkéntò kèlámà nà nzúngù yà néné**bà-nkéntò kè-lámà-à nà n-zúngù yà néné*

CL2-woman PRS.PROG-prepare-FV PREP CL9-pot CONN big

‘The women are preparing (food) in the big pot.’

- (37) Kongo ya Leta spoken in Kikwit (Joseph Koni Muluwa p.c.)

*bànkéntò kèlámà nà nzúngù yà néné**bà-nkéntò kè-lámà-ìl-à nà n-zúngù yà néné*

CL2-woman PRS.PROG-prepare-APPL-FV PREP CL9-pot CONN big

‘The women are preparing (food) IN THE BIG POT.’

As far as available sources allow to say, new information focus, or “completive” in the terminology of Dik et al. (1981), can also be signaled by applicative derivation (on an Event Location AppP), see Pacchiarotti (2020: 144–157) for an overview.

A second discourse function, attested so far only in eastern Bantu languages, is what has been called “implicit contrast” (Trithart 1983: 170), “widening the scope of the locative phrase” (Grégoire 1998; Hyman, Duranti, and Morolong 1980; Trithart 1977), or “argument orientation” (Pacchiarotti 2020: 141). To see this, consider the contrast between (38) and (39). In (38), the root *uumv* is followed by an object NP ‘snake’ and an adjunct-like locative phrase ‘in the forest’ which has scope over the object NP ‘snake’ but leaves the position of the subject vague: the man could or not be in the forest. When the same root co-occurs with the applicative in (39), the scope of the locative phrase is now on the subject NP ‘the man’ while the position of the object is vague. In this case too, the only structural difference between (38) and (39) is that in (39) the Location AppP can no longer be omitted.

- (38) Rundi JD62 (Misago et al., forthcoming)

*Umugabo yuúmvye inzóka (mw’iishaamba)**u-mu-gabo a-á-uúmv-ye i-N-zóka (mu i-Ø-shaamba)*

AUG-CL1-man 1.SUBJ-REM.PST-hear-PFV AUG-CL9-snake CL18 AUG-CL5-forest

‘The man heard the snake in the forest.’

Implication: The snake is in the forest, the man could be or not in the forest.

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of where the crying comes from he/she realizes that the child is elsewhere (e.g., outside). Elsewhere in Bantu, applicative morphology commonly occurs on *where*, *why* and *how* questions (Trithart 1983: 148).

(39) Rundi JD62 (Misago et al., forthcoming)

*Umugabo yuúmvíye inzóka mw'iishaamba*

*u-mu-gabo a-á-uúmv-i-ye i-N-zóka mu i-Ø-shaamba*

AUG-CL1-man 1.SUBJ-REM.PST-hear-APPL-PFV AUG-CL9-snake CL18 AUG-CL5-forest

'The man heard the snake in the forest.'

Implication: The man is in the forest, the snake could be or not in the forest.

The few data available for other languages indicate that there are cases where the scope of the locative phrase is not shifted from the object to the subject NP, but is widened to include both subject and object NPs (see Pacchiarotti 2020: 141–144).<sup>19</sup>

While lexical aspectual meanings can be conveyed by other verbal derivational suffixes in Bantu (see, e.g., Bostoen, Dom, and Segerer 2015) and even Bantoid (Kießling 2004), the discourse functions of narrow focus and argument orientation are exclusive to the applicative. What is more, the applicative is the only verbal derivational suffix which can serve opposite discourse functions, namely topicalization (see Section 3) and focalization, depending on the construction, the verb root and the language.

## 6 Conclusions

According to the analytical levels set out in the questionnaire underlying the contributions to this handbook, applicative constructions in Bantu languages can be summarized as follows:

### Morphology

- Bantu languages usually have only one dedicated applicative verbal suffix reconstructed as \*-id in Proto-Bantu. Nevertheless, verbal derivational suffixes with other primary functions (e.g., PB \*-an 'reciprocal', PB \*-ici 'causative') can take on applicative functions over time.
- Bantu languages usually do not make use of applicative serial verb or converb constructions.
- Reflexes of PB \*-id in present-day Bantu languages range from phonologically transparent to phonologically complex, involving phenomena such as metathesis, assimilation, and vowel lengthening, umlaut and diphthongization among other processes. These phonologically complex reflexes are usually due to phonotactic

<sup>19</sup> There is actually a third semantico-pragmatic function of applicative morphology in relation to Location AppPs, namely, indicating that the action described by the verb root habitually occurs at a certain location. This has been reported in a handful of eastern Bantu languages (see, e.g., Creissels 2004) and might be an effect of the interaction between the applicative and tense/aspect morphemes (Mabugu 2001).

maximality constraints (number of syllables allowed per verb stem, restrictions in the place of articulation of consonants in specific positions within the stem, etc.) especially common in northwestern languages. As it happens with other reconstructed PB derivational suffixes, reflexes of PB \*-id very often undergo nasal and/or vowel height harmony. Especially in eastern Bantu languages, the applicative in combination with monosyllabic verb roots can be doubled or undergo vowel lengthening to satisfy minimality length constraints on the verb stem.

- In general, applicativized verb stems take the same TAMP morphology as their underived counterparts, although future research should investigate the relationship between the information-structure sensitive conjoint-disjoint morphology and the applicative in its focalizing function.

### Syntax

- An AppP can be an oblique, a direct object, an embedded clause featuring a non-finite form of the verb, or a morphosyntactic entity in between an oblique and a core object argument. The latter are usually phrases with locative semantics which were presumably part of the noun class system in PB (and thus being NPs were more likely to be core syntactic arguments) and have been preserved or restructured in different ways in present-day languages. Perhaps the only generalization that can be made about the syntactic status of AppPs in different ACs is that those which introduce a Beneficiary, Recipient or Human Goal often have the syntactic status of (direct) object. This implies that ACs are not always valence-increasing in Bantu languages. Valence-rearranging ACs are not attested in Bantu languages.
- In languages with optional ACs the semantic role introduced by the applicative can be alternatively expressed in the BC as a prepositional phrase (with concomitant semantic and/or discourse differences between the BC and the optional AC). In the optional ACs, this erstwhile oblique constituent is syntactically promoted to objecthood.
- In eastern Bantu languages where minimality constraints predominate, there are no restrictions on the stacking of voice operations on the verb stem. The templatic order in which voice operations occur is Causative Applicative Reciprocal Passive, but compositionality or semantic scope constraints allow for variations of this templatic ordering in some languages. In the northwestern languages, the same maximality constraints affecting the phonological realization of reflexes of PB applicative \*-id also affect the realization of a sequence of verbal derivational suffixes.
- When applicative derivation occurs on a syntactically transitive verb root and the AppP is syntactically a direct object, the resulting applicativized construction is identical (except for the presence vs. absence of the applicative) to a construction where a syntactically ditransitive verb root occurs with two postverbal object NPs. Traditionally, depending on whether these two objects behave the same or not according to a given set of objecthood diagnostics, they are called symmetrical or asymmetrical.

- In languages with optional ACs, applicativization can condition the access of non-core syntactic arguments to operations such as topicalization and focalization. These operations are typically available to subjects and objects in Bantu but not to syntactic adjuncts. These need to become objects through applicativization in order to be topicalized (and sometimes focalized).

### Semantics

- Bantu languages typically have only one applicative verbal suffix. Usually, there are no restrictions on applicativization depending on the syntactic valence of the verb root, but occasional restrictions dictated by the lexical meaning of the verb root have been reported.
- ACs in Bantu languages can be optional or obligatory depending on the language, the verb root and the non-Actor semantic role which needs to co-occur with that root in a given communicative context. In languages with obligatory ACs, reflexes of PB applicative \*-id are semantically underspecified in the sense that they can introduce any non-Actor (sometimes excluding Instruments) semantic role depending on the lexical meaning of the verb root and the communicative context. In languages with optional ACs, the applicative might become restricted in the types of semantic roles it can introduce and/or there might be semantic roles which can only be introduced by the applicative. In general, there is remarkable language-specific, root-specific variation and idiosyncrasy as to whether a verb root requires the applicative to co-occur with a phrase expressing Spatial Goal and other types of Location-related semantic roles such as Event Location, Location of a specific participant of the event, Path, Source, etc.
- The semantic differences between a BC with a semantic role expressed as a prepositional phrase and the corresponding optional AC where that semantic role usually becomes an object argument are still poorly understood. Nevertheless, optional ACs involve notions such as greater involvement/agentivity of the S/A argument and “achieved” goal/endpoint.
- Pragmatically, optional ACs are often used to topicalize an AppP.
- Although studies based on discourse corpora are limited, available evidence suggests that optional ACs are typically used when the AppP is discourse-given.

### Lookalikes

- Suffixal forms identical to and displaying the same morphophonological behavior as the applicative suffix have developed at least three valence-neutral functions.
- Semantically, morphology identical to reflexes of \*-id can add aspectual nuances to the meaning of the verb root, including repetitiveness, completeness, thoroughness, excess, persistence, intensity, intentionality, among many others.
- The two valence-neutral discourse functions involve only Location(-related) AppPs and are usually available only when in a given language and with a given root



applicative morphology is *not* required to introduce the Location(-related) AppPs targeted by the discourse functions. These functions are: placing a Location(-related) AppP under narrow constituent focus, and widening/shifting the scope of a Location(-related) AppP with respect to subject and object arguments.

## Abbreviations

In the following, *x* stands for a number and parentheses indicate optionally present elements.

1	first person
2	second person
3	third person
APX	agreement prefix of class <i>x</i>
APPL	applicative
AUG	augment
CAUS	causative
CLX	noun class prefix of class <i>x</i>
CONN	connective
COP	copula
DEM	demonstrative
DJ	disjoint verb form
FV	final vowel
<sup>H</sup>	melodic H tone
HAB	habitual
IMPS	impositive
INTR	intransitive
IPFV	imperfective
LOC	locative
NEG	negation
X.OBJ	object (of class <i>x</i> )
PASS	passive
PFV	perfective
PL	plural
PREP	preposition
PRF	perfect
PROG	progressive
PRS	present
PST	past
REC	reciprocal
REFL	reflexive
REM	remote
SEP	separative
SG	singular
X.SUBJ	subject (of class <i>x</i> )
TAM(P)	tense-aspect-mood(-polarity)
TR	transitive

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