## On how "middle" plus "associative/reciprocal" became "passive" in the Bantu A70 languages<sup>1</sup>

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#### Abstract

In this paper we show that the Bantu A70 languages did not preserve the passive morpheme inherited from Proto-Bantu (PB), but developed a new suffix. It is a morpheme that is compound in origin, consisting of two verbal derivation suffixes which still function independently in today's languages as a middle marker and an associative/reciprocal marker respectively, though with variable degrees of productivity. The genesis of a passive marker from the stacking of two pre-existing suffixes is a typologically rare evolution path, but it fits in with a wider Bantu phenomenon of double verb extensions which develop noncompositional meanings. Especially double extensions involving the Proto-Bantu associative/reciprocal marker \*-an- tend to develop such idiosyncratic meanings. This suffix is also one of the constituents of the Bantu A70 passive marker. Nevertheless, even within Bantu, the emergence of a productive passive marker from such double extension is unique. In this paper, we argue that the notion of co-participation may account for the rising of this passive meaning out of the stacking of the common Bantu associative/reciprocal suffix to a common Bantu middle suffix. The semantic development of this compound suffix (and its historical constituents) happened within the semantic continuum that links reciprocals, reflexives, middles and passives in many languages of the world, but did not necessarily follow the typologically common reflexive > reciprocal > middle > passive cline.

#### 1. Introduction

The languages studied in this article constitute a cluster of closely related Bantu languages spoken in Cameroon, Gabon and Equatorial Guinea, which Guthrie (1971: 32) called the "Yaunde-Fang" group and which are encoded as A70 in his classification of the Bantu languages.<sup>2</sup> In this article, we consider

data from Eton (A71), Ewondo (A72), Bulu (A74) and Fang (A75). The focus is on the latter language, which is the mother tongue of the second author, more particularly the Atsi dialect spoken along the Estuary of Gabon, hereinafter called "Atsi-Estuary". Other Fang dialects considered in this paper are Ntumu and the Atsi variant spoken in the Moyen Ogooue valley, hereafter called "Atsi-Moyen Ogooue". We refer to the group as "Bantu A70". These languages share a passive construction which is quite atypical both from a crosslinguistic and a Bantu point of view.

If a Bantu language has a passive construction, it is typically morphologically marked. Very often, a reflex is used of the verbal derivation suffix that was reconstructed for Proto-Bantu with two allomorphs: \*-o- after a consonant and \*-ibo- after a vowel (Schadeberg 2003: 78; Stappers 1967). In certain languages, such as Holoholo in (1a), this complementary contextual realization has been maintained. In others, such as Makwe in (1b), it has become opaque. Both allomorphs may occur after consonant-final roots.

```
(1) a.
        Holoholo
                 'to throw'
                                   > -teebwâ
                                                  'to be thrown'
         -ta-
        -toból- 'to marry' (man)
                                       -tobólwâ
                                                  'to be married' (wife)
     b. Makwe (Devos 2008: 45)
                'to sell'
         -uza
                                          -uzwa
         -leka
                'to divorce one's wife'
                                       > -lekewa
         'to be sold'
         'to be divorced (of woman)'
        (Coupez 1955: 73)
```

The Proto-Bantu passive suffix became obsolete in several Bantu languages. In some languages, a periphrastic construction or an active verb with a 3pl subject concord (SC) was introduced (Schadeberg 2003: 79). In others, no passive at all is attested. In still others, the Proto-Bantu suffix was replaced by another morpheme. This new passive suffix is often, in its turn, an inherited morpheme that underwent semantic change to become a passive marker. The Proto-Bantu suffix \*-am-, for instance, is known to have gone through such a shift in certain languages. It typically conveys a specific kind of middle meaning, namely 'assuming a position' or 'being in a position', but also became the passive suffix, amongst others, in a group of neighboring languages of the Democratic Republic of Congo (Schadeberg 2003: 75-76). One of them is Mongo, as shown in (2a) and (2b) (Hulstaert 1965: 248). An agent phrase introduced by the preposition la can follow the passive verb, but is most often absent. The old passive suffix \*-v- is only observed with a limited number of Mongo verbs such as those in (2c) (Hulstaert 1965: 278). The original middle meaning of the \*-amis no longer productive, but still perceivable in the lexicon, sometimes with verbs whose base verb no longer exists in Mongo, as seen in (2d) (Hulstaert 1965: 247).

```
(2) a.
          i-l>mbε
                         i-ńko
                                     i-tóng-am-a
                                                           la
                                                                 masŝ
          NP<sub>10</sub>-house
                        PP<sub>10</sub>-DEM
                                    SC10-build-PASS-FV
                                                          by Ø-bricklayers
          i-kísó
          PP<sub>10</sub>-POSS<sub>1PL</sub>
          'This house is built by our bricklayers.'
                                    ii-ífo-tén-am-a
     b. li-kambo
                         li-ńko
                                                               la
                                                                    Bətəngu
          NP5-palaver PP5-DEM SC5-FUT-settle-PASS-FV
                                                               bv
                                                                    Botongu
          'This palayer will be settled by Botongu.'
                        'to be grasped'
     C.
          -kumb-w-
                                                 -kumb-
                                                             'to grasp'
```

'to be tempted' -léng-w-< -léng-'to tempt' 'to hide oneself' 'to hide' d. -is-am-< -ís--kol-am-'to be seized' < -kol-'to seize' (< \*\*-bét--hét-am-'to lie down' 'to lay down')3

The Bantu A70 languages studied in this paper also renewed the original Bantu passive morphology. However, they did not replace it by another inherited suffix through a semantic restructuring of the verbal derivational system as in Mongo. They adopted a new passive suffix that is compound in origin. It is composed of two distinct suffixes that still exist separately in these languages, namely a middle marker and an associative/reciprocal marker. This kind of suffix stacking is fairly uncommon for the creation of passive morphology, not only in Bantu, but more generally in the world's languages. In spite of this, the Bantu A70 passive marker belongs to a wider complex of Bantu compound verbal derivational suffixes having developed non-compositional meanings. Even though the development of a passive meaning is unique to the Bantu A70 languages, compound suffixes with idiosyncratic meanings which rose through the combination of a middle suffix and an associative/reciprocal suffix occur in number of other Bantu languages. In this paper, we argue that notion of coparticipation conveyed by the associative/reciprocal suffix played a role in the genesis of this innovative passive morphology. We furthermore show that the semantic change to which this passive marker and its historical constituents were subject happened within the semantic continuum that links reciprocals, reflexives, middles and passives in many languages of the world. At the same time, we claim that this did not necessarily happen along a unidirectional reflexive > reciprocal > middle > passive cline, as is often assumed in the typological literature. A polygenetic evolution is more likely.

In Section 2, we show that all Bantu A70 languages have a cognate passive morpheme. In Section 3, we argue that it is compound in origin. We examine the morphemes which could be its historical constituents (Sections 3.1 and 3.2) and discuss to which extent verb extensions can be stacked in Bantu A70

(Section 3.3). The semantic principles underlying the emergence of the Bantu A70 passive suffix are considered in Section 4. We first discuss the semantic and correlating syntactic properties of the passive (Section 4.1) and then how these relate to the semantics of its historical constituents, i.e., the middle suffix -VbV (Sections 4.2) and the associative/reciprocal suffix -an- (Section 4.3). The non-compositional meanings and polysemic nature of the passive suffix are treated in Section 4.5. In Section 5, we show how the Bantu A70 passive suffix is part of a wider Bantu complex of double extensions with non-compositional meanings built on the associative/reciprocal suffix \*-an-. The historical origin of the other constituent of the Bantu A70 suffix is discussed in Section 7. Conclusions are presented in Section 8.

#### 2. The passive morpheme in Bantu A70

The expression of the passive is strictly morphological in Bantu A70. All languages share a clearly identifiable and cognate passive suffix. In Fang, as shown in (3), Ntumu has *-aban*, Atsi-Estuary *-aba* and Atsi-Moyen Ogooue *-ba*. The word-final devoicing which certain consonants undergo is undone when the passive marker or any other morpheme is suffixed.

```
(3) a. Ntumu<sup>4</sup>
\acute{a}-yít 'to beat' > \acute{a}-yír-\acute{a}bán 'to be beaten'
\acute{a}-ló\eta 'to build' > \acute{a}-ló\eta-\acute{a}bán 'to be built'
```

```
b. Atsi-Estuary
-tán 'to write' > -tán-ábá 'to be written'
-lúk 'to marry' > -lúg-ábá 'to be married'
```

```
c. Atsi-Moyen Ogooue (Galley 1964: 580)

-bukh 'to break' > -bugh-ba 'to be broken'

-sap 'to harvest' > -sab-ba 'to be harvested'

(Ondo Mebiame 1992: 575)
```

In Atsi-Moyen Ogooue, the passive morpheme never has an initial schwa vowel. In the other Fang dialects, this initial vowel is only assimilated to the root vowel in case of direct contact, which results in a long vowel, as seen in (4a). When the verb root ends in /m/, the suffix' initial vowel is dropped in normal delivery, but can still be heard in slow speech, as shown in (4b). When the verb root ends in [p], the devoiced realization of /b/ in word-final position, as in (4c), the passive suffix is reduced to -a. Two subsequent syllables having /b/ as an onset are not accepted in Fang. Unlike with CV-roots, no vowel lengthening takes places. This suggests that it is not the root-final /b/ which is dropped. If the basic verb form has the structure -CVbV, the suffix undergoes

the same kind of reduction. As we discuss below, this kind of morphophonological reduction makes it sometimes difficult to tell the passive morpheme apart from other derivational suffixes, such as the associative suffix, of which the meaning may also be partially overlapping.

# (4) Phonological reduction of the passive morpheme after V and /b/ in Atsi-Estuary

```
-dzu
a.
              'to soak'
                                 -dzu-uba
                                               [dzuːba]
                                                           'to be soaked'
    -ha
              'to make'
                                 -h_2-2ha
                                               [bzba]
                                                          'to be made'
    -lí
              'to weed'
                                 -lí-íbá
                                               [líːbá]
                                                           'to be weeded'
b. -tsam
              'to scatter'
                                 -tsam-(ə)ba
                                                           'to be scattered'
    -vám
              'to cook'
                                 -yám-(á)bá
                                                          'to be cooked'
              'to besiege'
                                 -sab-a
                                                          'to be besieged'
c. -sap
    -tsib-ə
              'to trample'
                                 -tsib-a
                                                          'to be trampled'
                                                          'to be beaten'5
    -hzíh-a
              'to beat'
                                 -hzíh-á
```

In Ewondo, the suffix is -aban, like in Ntumu, but the initial vowel can be assimilated to the vowel of the verb root, when the latter is /u/ or /i/, even if there is no direct contact between both vowels as in (5a). Bulu has the same passive morpheme, but the initial vowel is always assimilated to the verb root vowel (5b). The agglutination of the passive suffix to a root ending in a vowel or with /b/ leads to similar morphophonological changes as in Fang, although it is not clear in the latter case whether the root-final /b/ is dropped or the initial part of the passive suffix. In the apparent absence of vowel lengthening, both analyses are possible, as shown in the penultimate example in (5b). The contact with a root final /m/ in Bulu leads to the deletion of the initial vowel of the passive suffix, just like in Fang, cf. (4b).6

#### (5) a. Ewondo

```
lúg
      'to marry'
                       lúg-uban
                                          'to be married'
                                          'to be written'
til
      'to write'
                       til-əban|til-iban
                   >
      'to build'
                       lón-əban
                                          'to be built'
lón
dи
      'to soak'
                   >
                       du-uban
                                          'to be soaked'
      'to know'
                       vəm-əban
                                          'to be known'
vəm
(Essono 2000: 361, 368)
```

#### b. Bulu

```
'to be married'
-tiŋ
        'to knot'
                      >
                           -tiŋ-iban
-tok
        'to boil (tr.)'
                           -tɔʔ-ɔban
                                              'to be boiled'
        'to place'
                      > -t2-ehan
                                              'to be placed'
-tɔe
        'to close'
                                              'to be closed'
-dib
                           -di-ban|-dib-an
                      >
                                              'to be cooked'
       'to cook'
                           -yàm-ban
-vàm
                      >
(Alexandre 1966: 82–83)
```

In Eton, the canonical form of the passive suffix is -ban as in (6a). If it is attached to a root ending in /b/, as in (6b), only one /b/ is maintained and vowel lengthening takes places. Van de Velde (2008: 125) analyzes this synchronically as compensatory lengthening for the loss of the root final consonant. From diachronic point of view, however, this lengthening could be a trace of a vowel at the beginning of the passive suffix. A similar lengthening is observed in the first example in (6d). When the passive suffix is agglutinated to a verb stem having a CVC(C)V structure, as in (6c), its form is reduced to -an, due to maximality constraints on the verb stem. For the same reasons, the passive suffix is reduced to -b in certain longer conjugated verb forms, such as the Hesternal Past Perfective in (6d), where the tense-aspect markers figures after the passive suffix (Van de Velde 2008: 125).

```
(6)
    a.
        tág
                'to arrange'
                               > tág-bân
                                                       'to be arranged'
                'to kill'
                               > wé-bân
                                                       'to be killed'
        wé
     b. bwàb
                'to beat'
                              > bwàà-bàn
                                                       'to be beaten'
                'to conserve'
                              > bàgl-àn
     c. bàglà
                                                       'to be conserved'
     d. dú
                'to baptize'
                              > à-dúù-b-èngàn
                                                       'he was baptized'
        kódô
                'to leave'
                                  àtán ú-kód-b-êngàn 'the village was left'
```

It is obvious from this overview that the Bantu A70 languages share a cognate passive suffix. The original morpheme can be reconstructed as -Vban. This maximal disyllabic structure is still observable in Ewondo, Bulu and the Ntumu dialect of Fang, though its initial vowel is suppressed in certain phonological contexts. In all other Bantu A70 languages, it underwent some kind of permanent reduction. The initial vowel is irreversibly deleted in Eton and the Atsi-Moyen Ogooue dialect of Fang, although the vowel lengthening observed in certain contexts in Eton, as in (6b) and the first example in (6d), could be a residue of this vowel. The deletion of the final nasal is only observed in both Atsi dialects of Fang. Hence, the phonologically most conservative reflexes of this original passive suffix are found in Ewondo, Bulu and the Ntumu dialect of Fang, while the Atsi-Moyen Ogooue dialect of Fang has the most reduced reflex. Eton and the Atsi-Estuary dialect of Fang represent an intermediate situation, having omitted the initial vowel and the final nasal respectively. In each of the languages, the maximal form of the suffix undergoes contextually defined reductions.

#### 3. The compound origin of the Bantu A70 passive suffix

Apart from a small number of suffixes having an exceptional -V- or -VCV- form, simple verb stem extensions most commonly have a -VC- structure in

Bantu. No verbal derivational suffixes with a -VCVC- structure have been reconstructed. It is well-known, however, that different extensions may combine with one root (Schadeberg 2003; Meeussen 1967). Accordingly, the Bantu A70 passive suffix is generally considered as compound in origin. Regarding Ewondo, Essono (2000: 368) claims that "le suffixe passif |-vb-an| est un extensif complexe qui permet d'obtenir des bases verbales bi-étendues" ["The passive suffix |-vb-an| is a complex extension which allows to obtain doubly extended verbal bases."]. Van de Velde (2008: 124) also presumes that the Eton suffix -bàn is most probably the result of a merger of two suffixes. It would be composed of two morphemes which are still independently involved in verbal derivation in Eton: -b(â) used to derive middle verbs and -àn which is part of the reciprocal suffix. The composite origin of the passive morpheme may seem obvious. It is still remarkable for at least two reasons.

Firstly, in contrast to eastern and southern Bantu languages which generally allow several verbal derivation suffixes to combine with one root, the combinability of these suffixes is more strictly constrained in the Bantu A70 and most other north-western Bantu languages. As a consequence if the inherited passive morphology is innovated, the adoption of a compound verbal suffix is not the most expected strategy. One would rather expect a semantic restructuring of the available derivational suffix repertory, as in Mongo (see (2) above), or the emergence of a periphrastic passive construction, comparable to the Fang and Ewondo resultative construction discussed in Section 4.3 and illustrated in (29) and (31) below.

Secondly, from a typological point of view, the emergence of new passive morphology out of a combination of existing derivational morphemes is rare, if not unattested. According to Haspelmath (1990), the most common diachronic sources of passive morphology are independent lexical items, amongst others intransitive auxiliaries and reflexive nouns and pronouns, which are grammaticized into bound morphemes via a number of universal evolution paths. The next most important source is the lexical expansion of existing derivational morphemes through semantic reinterpretation as in Mongo; see (2) above. Neither this nor other typological studies mention the creation of passive morphemes through the merger of existing verbal derivation suffixes (Kazenin 2001a; Keenan and Dryer 2007; Shibatani 2000; Siewierska 1984; 2005). If it is truly compound in origin, the passive Bantu A70 suffix would thus result from a typologically uncommon evolution path.

In this section, we examine whether the extensions considered to be the historical components of the passive suffix in Ewondo and Eton also exist in Fang and Bulu and whether they are plausible components of the passive suffix from a purely morphophonological point of view.

#### 3.1. The suffix -(V)bV

The stative/autocausative suffix  $-b\dot{a}$  which Van de Velde (2008: 124) sees as a historical component of the passive suffix in Eton has a variant  $-ib\dot{a}$  triggering the lengthening of root final vowels, as seen in the last example in (7).<sup>8</sup> This variation is unpredictable and purely lexically conditioned. As shown in (6b) and (6d), the passive suffix causes the same kind of lengthening of certain root final vowels, suggesting the former presence of an initial suffix vowel. This correspondence makes it likely to consider the  $-(i)b\dot{a}$  suffix as the first constituent of the passive suffix.

```
(7)
    Eton
     tèg
            'to weaken, become tired'
                                              tèg-bè
                                                        'to be lazy'
     vém
            'to jam, block'
                                           > vém-bê
                                                        'to be stuck, solid'
     síg-î
            'to put in a leaning position'
                                          > síg-bâ
                                                        'to assume a leaning
                                                        position'
                                                        'to bow, bend'
     lw−î
            'to tilt'
                                             lúú-bâ
     (Van de Velde 2008: 130–132)
```

The other Bantu A70 languages have a phonologically similar suffix, whose semantic content is also quite comparable, as we discuss in more detail in Section 4.2. What is more, just as in Eton, it has a morphophonological behavior analogous to the passive suffix. In Fang, this suffix is -(a)ba. Its maximal form is -VCV in the Ntumu and the Atsi-Estuary dialects and -CV in Atsi-Moyen Ogooue, as shown in (8). The latter dialect also misses an initial vowel in the passive suffix as opposed to the two other dialects. Moreover, this middle suffix undergoes the same morphophonological changes as does the passive suffix. Compare the examples in (8) with those in (3) and (4). For each of the suffixes, the initial schwa vowel never assimilates with the root vowel except when there is direct contact between the two. The examples in (4b) above show that the shape of the passive suffix in Fang is reduced when it follows a root final /b/. Likewise, no middle verbs are found having a root final /b/ and the full form of the middle suffix. One only finds middle verbs as in (8d) which include a /b/ and are semantically related to derived verbs incorporating the full form of the -aba suffix; see Section 4.2 for more details. However, the origin of these middle verbs cannot be established, since their base verb is no longer attested in Fang. The root of this base verb may have ended in /b/ and caused the same kind of reduction of the middle suffix as synchronically observed with the passive suffix in (4b). Nevertheless, the root may also have ended in a vowel, which would produce the same output form. No synchronic alternations were found between an underived /b/ final root and a derived middle verb. Anyhow, the fact one does not find middle verbs ending in |baba| suggests that the middle suffix  $-\partial b\partial$  is reduced in a way similar to the passive suffix if the a root final consonant is /b/.

#### (8) a. Ntumu á-tèk 'to be soft' á-tàg-àbà 'to become soft' > á-fàr-àbà 'to close (tr.)' 'to close (intr.)' á-fàt 'to put (down)' á-dzòg-àbà 'to lie down, to go to á-dzòg-ə > bed' á-twνè 'to place, put' $\dot{a}$ - $t\dot{a}$ - $b\dot{a}$ 'to sit' (Ondo Mebiame 1992: 573-574)

b. Atsi-Estuary

```
-z\partial g-\partial 'to calm (tr.)' > -z\partial g-\partial \partial 'to calm, to cool (intr.)' 
-kur-\partial 'to put on the knees' > -kur-\partial \partial 'to kneel down' 
-f\partial r 'to close (tr.)' > -f\partial r-\partial \partial 'to close (intr.)'
```

c. Atsi-Moyen Ogooue

```
vîr 'to bend down (tr.)' > vîr-be 'to bend down (intr.)' vul 'to roll, wind (tr.)' > vul-be 'to wind, curl up (intr.)' (Galley 1964: 358–361)
```

d. Atsi-Estuary

```
-kɔbə 'to stretch oneself/to stand up' (< **á-kɔb?)
-tabə 'to sit (down), to be, to stay, to remain' (< **á-tab?)
-təbə 'to sit up, to stand up, to set oneself up' (< **á-təb?)
-sɔ́bá 'to bend down (to get under something)' (< **á-sɔ́b?)
```

The same -aba suffix occurs in Ewondo and Bulu. Its morphophonological behavior is different from its cognate in Fang, though comparable to that of the passive suffix in Ewondo and Bulu. Compare the examples in (9a) and (9b) with those in (5a) and (5b). The initial vowel of the middle suffix is assimilated to certain root vowels in the same way as is the initial vowel of the passive suffix. The final vowel of the passive suffix is also assimilated, but not always to the same vowel quality as the initial vowel. The middle suffix also undergoes reductions similar to the passive suffix after vowels and the labial consonants /m/ and /b/ in root final position.

#### (9) a. Ewondo

```
led
        'to be hard'
                            > led-aha
                                          'to harden, become hard'
        'to be weak'
                                          'to weaken, become
təg
                                təg-əbə
                                          weak'
        'to be sour'
                            > sun-ubu
                                          'to turn sour'
sun
                                          'to lean (intr.)'
        'to lean (tr.)'
                            > síg-ibi
síg-i
búd-u 'to be on the belly'
                            > búd-ubu 'to lie down on the belly'
(Essono 2000: 371)
```

```
b. Bulu
    -vúl
              'to wind, wrap'
                                  > -vúl-uhu
                                                         'to wind (intr.)'
    -wź?-2
             'to anoint, rub'
                                  > -w5?-sbo/-wsbo
                                                         'to anoint
                                                         oneself'
    -tɔe
             'to sit (tr.)'
                                  > -tɔ-bo
                                                         'to sit down'
             'to know'
                                                          'to get used to'
    -vem
                                  > -yem-b\varepsilon
    -wob
             'to peel, skin (tr.)'
                                  > -wob-o
                                                          'to peel its skin
                                                         (intr.)'
    (Alexandre 1966: 92–93)
```

In sum, the Bantu A70 languages share a cognate middle suffix. The original form of this morpheme likely took the form -VbV. This maximal disyllabic structure is still observable in Ewondo, Bulu and the Ntumu and Atsi-Estuary dialects of Fang, though it is reduced in certain contexts. In Eton and the Atsi-Moyen Ogooue dialect of Fang, the initial vowel is permanently deleted, although it is still detectable in Eton in those verbs where the root vowel is lengthened in front of this suffix, as in the last example in (7). This suffix is the perfect candidate to be the historical initial component of the passive suffix, not only because its form is phonologically similar, but also because its morphophonological behavior is analogous. The correspondences are summarized in Table 1

Table 1. Correspondences in form and morphophonological behavior between the passive and middle suffix in the Bantu A70 languages

Language/dialect	Passive	Middle	Corresponding morphophonological behavior
Fang: Ntumu Fang: Atsi-Estuary Fang: Atsi-Moyen Ogooue	-əban -əba -ba	-əbə -əbə -bə	Reduction after the same root final consonants     No assimilation to the root vowel except in case of direct contact (except in Atsi-Moyen Ogooue)
Ewondo	-əban	-əbə	<ul> <li>Assimilation of initial vowel to the same root vowels</li> <li>Reduction after the same root final consonants</li> </ul>
Bulu	-əban	-əbə	<ul><li>Assimilation of initial vowel to the root vowel</li><li>Reduction after the same root final consonants</li></ul>
Eton	-(z)ban	-(z)ba	Lexically defined lengthening of certain root vowels

#### 3.2. The suffix -an

According to Van de Velde (2008: 124), the second component of the passive morpheme in Eton is the -àn suffix. This is no doubt a reflex of the associative/

reciprocal extension \*-an- reconstructed to Proto-Bantu (Schadeberg 2003; Meeussen 1967). As we discuss in more detail in Section 4.3, it is still observed with this core function in the other Bantu A70 languages. In Eton, however, as shown in (10a), it became integrated in the new reciprocal suffix -:ni of which it constitutes the in part. The reciprocal suffix is assumed to derive historically from a combination of -ai and -i (Van de Velde 2008: 127–128). It only appears as -ai after CVCCV stems, as in (10b), where it takes the same form as the passive suffix; see (6c).

```
(10) a.
          hó
                    'to destroy'
                                                 'to destroy each other'
                                  > bóònì
                    'to grasp'
                                                 'to grasp each other'
          gbè
                                  > gbèènì
                    'to bite'
                                                 'to bite each other'
      b. kòglò
                                  > kòglàn
                                                 'to tickle each other'9
          nwàmlò
                    'to tickle'
                                      nwàmlàn
```

As shown in (11), all other Bantu A70 have a direct reflex of the reconstructed suffix \*-an-, except the Atsi dialects of Fang which have -a. As seen in (3), the Atsi dialects are also the only two to have a passive suffix without final nasal. This pleads in favor of the associative suffix as the second historical component of the passive suffix.

- (11) a. Ntumu dialect of Fang  $\dot{a}$ -lú $\dot{k}$  'to marry' >  $\dot{a}$ -lúg- $\dot{a}n$  'to marry each other'  $\dot{a}$ - $b\dot{a}n$  'to refuse' >  $\dot{a}$ - $b\dot{a}n$ - $\dot{a}n$  'to refuse each other' (Ondo Mebiame 1992: 571)
  - b. Atsi-Estuary dialect of Fang
    -dziŋ 'to love' > -dziŋ-a 'to love each other'
    -fám 'to snatch' > -fám-á 'to snatch from each other'
  - c. Atsi-Moyen Ogooue dialect of Fang

    ten 'to write' > ten-a 'to write each other'

    tar 'to complain' > tar-a 'to complain about each other'

    (Galley 1964: 338, 340)
  - d. Ewondo

    yid 'to beat' > yid-an 'to beat each other'

    sob 'to wash' > sob-an 'to wash each other'

    (Essono 2000: 370)
  - e. Bulu
    -vini 'to detest' > -vin-an 'to detest each other'
    -lúm 'to hit' > -lúm-an 'to hit each other'
    (Alexandre 1966: 95)

#### 3.3. Combinability of verb extensions in Bantu A70

It is well-known that north-western Bantu languages generally have much stricter maximum size constraints on the verb stem than most other Bantu languages (Hyman 2004: 79). This is also the case in Bantu A70. In Eton, for instance, the maximum size of the verb stem is limited to three syllables, exceptionally four (Van de Velde 2008; 2009). Although it has never been stated as explicitly as for Eton, similar restrictions prevail in the other Bantu A70 languages. Such constraints not only cause morphophonological modifications of derivational suffixes in certain contexts, as several examples above demonstrate, but also restrict the number of verbal extensions that can combine after the root. Very few sequences of extensions are actually observed in the Bantu A70 languages. Complex semantic notions and syntactic relations which are rendered in other Bantu languages by combining several extensions after the verb root are expressed through periphrastic constructions in Bantu A70. One could thus wonder how plausible the hypothesis of a compound origin for the passive suffix is. Nevertheless, sequences of extensions do occur in Bantu A70. What is more, the extension -a(n) is very often their final element. In Fang, for instance, as the Atsi-Estuary examples in (12) show, it commonly occurs after the extensions -əl- and -əg- and also rarely after -əz-. These extensions are "expansions", as they are traditionally called in Bantu studies. They take same form and occupy the same slot in the verbal form as derivational suffixes, but are synchronically totally unproductive and semantically unanalyzable (Meeussen 1967; Schadeberg 2003). In the Fang lexicon, however, they are observed in several verbs, not always in combination with the extension -a(n). The final vowel -a in the examples below should not be confused with the common Bantu inflectional final vowel

```
(12) a.
           Atsi-Estuary verbs ending in -al-a
                        'to jump, to guiver, to wince' (< **-bum)
           -bum-əl-a
           -fim-əl-a
                        'to turn around a corner to hide' (< **-fim)
           -nvig-əl-a
                        'to wind, curl up (intr.)' (< -nyik 'to fold')
           -nzam-əl-a
                        'to be absent-minded, confused' (< **-nzam)
           -sím-ál-á
                        'to think, reflect, remember, imagine' (< **-sim)
           -tsíh-ál-á
                        'to be sticky, press oneself against' (< -tsip 'to press,
                        squeeze, crush')
         Atsi-Estuary verbs ending in -əg-a
                       'to turn around, turn over' (< **-búr)
           -búr-ág-á
           -dur-əg-a
                       'to withdraw; to give, abandon' (< **-dur)
           -fan-əg-a
                       'to squeeze in, slip into/out' (< **-fan)
                       'to get out of place where one is stuck' (< -far 'to
           -far-əg-a
                       come off its hook'?)
```

```
-kar-əg-a 'to come unstitched, come off, come untied' (< **-kar)
-sɔʻr-ə́g-á 'to get away, escape, come off, be ripped off, pulled
out' (< **-sɔʻr)
-val-əg-a 'to jump, start up, spring' (< **-val)

c. Atsi-Estuary verbs ending in -əz-a
```

The Fang lexicon contains several verbs ending in historically double extensions with -*al-a* and -*ag-a*. Unlike the compound passive suffix, however, none of them is synchronically productive. The base verb from which they were once derived no longer exists in most cases, as the \*\* signs in front of most verb roots in (12) indicate. The extensions -*ag-* and -*az-* do not synchronically serve as independent derivational suffixes. The extension -*al-*, on the other hand, is homophonous with one of the causative suffixes in Fang, which also occurs in the rest of Bantu A70 and is possibly historically related to the applicative suffix \*-*Il-* reconstructed to Proto-Bantu (Nzang-Bie 2008). The causative meaning is not manifest in the verbs in (12a). Moreover, the verbs are all intransitive, just like those in (12b) and (12c), while the causative suffix is valency increasing. Significantly, none of these double extensions is compositional in meaning. As far as their semantic value can be defined with any accuracy, it is certainly idiosyncratic vis-à-vis the separate meanings of their pos-

 $-v \partial \eta - \partial z - a$  'to turn over, around' ( $< **-v \partial \eta$ )<sup>10</sup>

Similar lexicalized compound extensions ending in -an and conveying similar middle meanings can be observed in the lexicon of the other Bantu A70 languages, as shown in (13).

sible constituents. As we discuss in more detail in Section 5, the core associative/

reciprocal meaning of -an is generally lost in double extensions.

```
(13) a.
          Eton<sup>12</sup>
          sìl-g-àn
                      'to shiver'
          búl-g-ân 'to lose one's temper'
          kòg-l-àn
                    'to implore'
          pùb-l-àn 'to gesticulate'
          sán-z-ân
                    'to become pale'
          ség-z-ân 'to breathe with difficulty'
          (Van de Velde 2008: 118)
      b. Ewondo
          -vum-əl-an
                        'to rekindle (intr.)'
                                                     (< **-vum)
                        'to jump up, to start'
                                                     (< **-bum)
          -bum-əl-an
                        'to disappear'
          -dím-əz-an
                                                     (< -dim 'to extinguish')
                        'to get ready (for)'
                                                     (< -kom 'to tidy up, put
           -kom-əz-an
                                                     in order')
           (Essono 2000: 367–373)
```

```
c. Bulu

-wól-ək-an 'to coagulate, curdle (intr.)' (< **-wol)

-vul-uk-an 'to crumple, crease (intr.)' (< -vul 'to coil, roll')

-bum-uk-an 'to jump, to suddenly start doing something'

(< **-bum)

(Alexandre 1966: 94–97)
```

These examples show that the passive suffix is not the only compound extension in the Bantu A70 languages. It is part of a larger complex of double extensions ending in -a(n). Accordingly, from a purely morphological point of view, the compound origin of the passive suffix seems definitely plausible. In contrast to the other double extensions discussed above, the passive morpheme is synchronically productive and historically segmentable and its constituents still serve as independent derivational suffixes. So far, we have only considered the formal aspects of the passive suffix. From this angle, the extensions -(V)bV and -a(n) prove to be suitable as constituents of the passive morpheme. In the next section, we examine how these extensions are semantically related to the passive suffix.

#### 4. The semantic reciprocal-middle-passive continuum in Bantu A70

As explained in the preceding section, the extensions considered as the historical components of the passive suffix both still operate as independent derivational suffixes in today's Bantu A70 languages, though with different degrees of productivity, as we explain below. We examine whether the passive meaning of the *-Vban* suffix is derivable from its constituents' meanings, either as a compositional or a non-compositional meaning.

The extension -VbV is a middle suffix. As we discuss below, the extension \*-an, whose principal meanings are associative and reciprocal, can also convey middle meanings. The middle is a rather heterogeneous voice category in Bantu A70. The organization of its semantic domain, as defined by Kemmer (1993: 243), i.e., "a semantic area comprising events in which (a) the Initiator is also an Endpoint, or affected entity and (b) the event is characterized by a low degree of elaboration", has never been systematically studied in the Bantu languages, let alone in Bantu A70, and it is not the aim of this paper. From what we have observed so far, however, it is clear that the morphological mapping of the semantic middle domain involves a complex interplay between several derivational suffixes which refer in partially complementary and partially overlapping ways to different middle situation types. It is possible to identify lists of derived middle verbs in the lexicon, but most of the middle suffixes involved are no longer productive. Unlike the passive suffix, they cannot be

used to derive middle verbs synchronically. Their usage is nearly entirely lexicalized. Derived middle verbs sometimes still correlate with a morphologically simpler verb from which their meaning can be transparently deduced, but most often this base verb is no longer available. The only activity of these middle suffixes lies in the fact that they regularly commute with other derivational suffixes — middle or not — even if the underived verb of origin is no longer attested (cf. Note 5).

In this section, we discuss the current-day uses and semantics of the passive morpheme and its historical constituents. In order to analyze the middle uses of the suffixes concerned, we rely on the middle situation types distinguished by Kemmer (1993). In spite of this, we do not wish to make predictions about the actual organization of the global middle voice system in Bantu A70 languages, which should be the subject of a subsequent study.

#### 4.1. Semantic and syntactic properties of the passive suffix

Most grammars of Bantu A70 languages provide relatively little information on the syntactic and semantic features of the passive and focus mainly on its morphophonological realization. This might be due to the relative uncommonness of passive voice in spontaneous discourse, but this should be checked by means of text corpus analysis. As far as the available data allow to judge, the passive in these languages complies with the following definitional criteria, often cited in typological literature: (i) somehow pragmatically restricted visà-vis another unrestricted construction (the active); (ii) morphologically derived from the form used in the unmarked (active) voice construction; (iii) propositional semantics identical to that of the unmarked (active) voice; (iv) active subject (= actor) corresponds to a non-obligatory oblique phrase or to nothing; (v) the subject of the passive, if there is one, corresponds to the direct object of the active (Haspelmath 1990; Kazenin 2001a; Siewierska 2005). In this section, we mainly focus on Fang. Some minor differences notwithstanding, the passive has the same syntactic and semantic features in the other Bantu A70 languages.

The Bantu A70 passive conveys the idea that the agent is rather irrelevant or simply unknown and gives prominence to the semantic role of the patient by promoting it to the syntactic subject position. Transitive verbs expressing an action and taking agentive subjects and patientive objects are most commonly passivized. The canonical association of the agent with the grammatical subject function and the patient with the object function is transposed in the passive construction. The semantic role of patient is aligned with the syntactic position of subject, while the agent is demoted to an oblique argument or suppressed. In Fang, this oblique agent phrase is introduced by the preposition *ya*, as seen in (14b).<sup>13</sup> The active verb in (14a) has a 3PL subject concord (sc) of

class 2 in agreement with the plural subject of the same class. The passive verb in (14b) takes a 3PL subject concord of class 6 marking agreement with the subject of the same class. This is the promoted object of the corresponding transitive verb.

- (14) The "passive transformation" in Atsi-Estuary
  - a. *b-ɔŋá bá-ngá-kál-á ma-ndák*NP<sub>2</sub>-child SC<sub>2</sub>-PST-pick-EXT NP<sub>6</sub>-mango
    'The children picked the mangos.'
  - b. *mə-ndók má-ngá-kól-ábá (yə b-ɔŋá)*NP<sub>6</sub>-mango sc<sub>6</sub>-PST-pick-PASS (by NP<sub>2</sub>-child)

    'The mangos were picked by the children.'

The demoted agent is most typically human, but not necessarily, as shown in (15).

- (15) Atsi-Estuary
  - a. *m-fuŋa ó-kó-dzu m-bí*NP<sub>3</sub>-wind sc<sub>3</sub>-fUT-close NP<sub>3</sub>-door

    'The wind will close the door.'
  - b. *m-bí ó-ká-dzu-ba (ya m-fuŋa)*NP<sub>3</sub>-door SC<sub>3</sub>-FUT-close-PASS (by NP<sub>3</sub>-wind)

    'The door will be closed (by the wind).'

Although more textual analyses would help to examine more closely the discursive uses of passive constructions, promoting the patient seems to be their essential function in Fang, just like in many other languages of the world. This is evident, for instance, in double object constructions in Fang. If an active double object construction like the one in (16a) is passivized, the patient object is most typically topicalized as in (16b). The foregrounding of a beneficiary object argument as in (16c) is not impossible, but less common. On the other hand, the oblique locative argument *ányu* in the mouth cannot be foregrounded in a passive construction in Fang. An oblique instrumental argument, like *y'anzəm* with a spoon, could not be passivized either.

- (16) Atsi-Estuary
  - a. nyǎ a-səm mə-śn bi-dzí á a-nyu mother sc<sub>1</sub>-put NP<sub>1</sub>-child NP<sub>8</sub>-food Loc NP<sub>5</sub>-mouth 'The mother feeds the child.' (lit. 'The mother puts the child food in the mouth.')
  - b. bi-dzi bi-som-ba m- $\check{o}n$   $\acute{a}$  a-nyu (ya)  $NP_8$ -food  $SC_8$ -put-PASS  $NP_1$ -child LOC  $NP_5$ -mouth (by  $ny\check{a}$ ) mother)

'Food is put in the child's mouth (by the mother).'

C. m-šn a-səm-ba hi-dzí á a-nvu (yə NP8-food NP<sub>1</sub>-child SC<sub>1</sub>-put-PASS LOC NP5-mouth (by nyă) mother) 'The child is fed (by the mother).' (lit. 'The child is put food in the mouth.')

Even if agency is significantly reduced in the passive voice, it is still implied, as the possibility of an oblique agent phase indicates. Moreover, transitive verbs denoting states of being rather than actions, such as *-bələ* 'to have, to possess', *-nyəghə|-dziŋ* 'to love, desire', *-fəm|-vinə* 'to hate, detest', etc., can not be passivized in Fang, neither can intransitive action verbs, such as *-yághá* 'to walk', *-yálá* 'to fly', *-kɔb* 'to stumble' etc. <sup>16</sup>

#### 4.2. Semantic space of the -(V)bV suffix

Since middle suffixes are to a large extent lexicalized and mark verbs whose base form no longer exists, their semantic value is not as neatly definable as are fully productive derivational verb suffixes, such as the passive. Nevertheless, by examining dozens of verbs marked by a given suffix, it is possible to circumscribe to a certain extent the middle's core semantic function. Among the verbs marked by -aba in Fang, the most important semantic class of verbs are what Kemmer (1993: 53) calls "body action middles", verbs referring to "actions carried out on or through one's own body". She distinguishes four subclasses of such verbs: (i) body care or grooming verbs; (ii) nontranslational motion or movements of the body without change in overall position; (iii) changes in body posture: (iv) translational motion or movements of the body from one location to another. Such middles, also known as autocausatives (Creissels 2006; Geniušiene 1987; Voisin-Nouguier 2002), are semantically very close to proper reflexives, especially the grooming verbs. 17 They are sometimes considered as a special kind of reflexive (Geniusiene 1987). However, unlike proper reflexives, autocausatives are inherently co-referential in that they involve actions which humans most typically perform on or through themselves. Such body actions and true reflexive situations are often differently marked in the world's languages. This is also the case in Bantu A70, where the Fang -aba suffix and its cognates are certainly not proper reflexive markers, in contrast to what Essono (2000: 372) suggests for Ewondo. These languages have other strategies to express the proper reflexive. In Fang, the reflexive pronouns -myən (sg.)/-byən (pl.) are most commonly used, as shown in the Atsi-Estuary examples in (17a). The reflexive pronouns attested in Ewondo are cognate: məmen (sg.)/bəben (pl.). In Eton,  $i^{\downarrow}m\acute{\epsilon}n$  can be added to

a personal pronominal to obtain a reflexive reading, as in (17b). Van de Velde (2008: 145) calls it an intensifier. It is possibly cognate to the reflexive pronouns in Fang and Ewondo. It is important to stress that none of the Bantu A70 languages employs a reflexive prefix. The use of such a prefix, which generally occupies the same verbal slot as the object concord, is the most common reflexivization strategy in Bantu. Most languages utilize either a reflex of the \*-i- prefix reconstructed in Proto-Bantu or another reflexive prefix (Meeussen 1967; Polak 1983).

#### (17) a. Atsi-Estuary

ma-yən ma-myən a yəna eti 1sg-see 1sg-rm loc mirror inside 'I see myself in the mirror.' bə-nga-zi bə-byən yə o-kəŋ sc<sub>2</sub>-pst-stab pp<sub>2</sub>-rm with Np<sub>11</sub>-knife 'They stabbed themselves with a knife.'

#### b. Eton

As shown in (18), -aba is not a proper reflexive marker. It marks several Fang verbs referring to the different types of body action distinguished by Kemmer (1993: 53–57), even though our conception of these subclasses differs from hers in some respects: body care or other actions carried out on one's own body (18a), non-translational motion or movements of the body without change in overall position (18b), changes in body posture (18c), and translational motion or movements of the body from one location to another (18d).<sup>19</sup>

### (18) a. Actions carried out on one's own body

-lɔg-əbə 'to anoint oneself with oil; to get wet, get dirty (with mud)' (< \*\*-lɔk, cf. -lɔg-ə 'to anoint, to make dirty, to smear')

#### b. Non-translational motion

-kág-ðbð 'to screw up one's eyes, blink' (< \*\*-kák, cf. -kág-ð 'to make someone screw up his eyes')
-sún-ðbð 'to sulk, purse one's lips, pull faces' (< \*\*-sún)

c. Changes in body posture

-*vir-əbə* 'to bend forward with the head down' (< -*vir* 'to bend, to tip up')
-*ván-əbə* 'to stretch oneself' (< \*\*-*ván*)

```
-ndag-əbə
                  'to spread legs while standing' (< **-ndak, cf. -ndag->
                  'to spread (tr.)')
                  'to kneel down' (< **-kúr, cf. -kúr-ð 'to make
    -kúr-áhá
                  someone kneel down')
                  'to squat (down)' (< **-s\acute{o}n, cf. -s\acute{o}n-\acute{o} 'to make
    -són-ábá
                  someone squat')
    -bur-əbə
                  'to lie down on the belly, prostrate oneself' (< **-bur,
                  cf. -bur-∂ 'to make lie down/cover')
                  'to sit, lie down (animals, sick or old people)/to brood'
    -bóg-ábá
                  (< **-b\acute{o}k, cf. -b\acute{o}g-\partial 'to make lie down')
                  'to sit (down), be, stay, remain' (< **-tab/ta)
    -ta-bə
                  'to sit up, stand up, set oneself up' (< **-təb/tə)
    -tə-bə
                  'to bend down (to get under something)' (< **-s5b/s5)
    -sá-bá
d. Translational motion
    -sə-bə
                'to hide oneself' (< **-sɔ, cf. -sɔlə 'to hide')
```

'to isolate, separate oneself from the others' ( $< **-k \acute{a}r$ )

'to throw oneself into something (even involuntarily)'

Closely related to the verbs in (18) are those in (19), which refer to states of mind. These cognition middles share with true body middles the property that the verb's subject is both the one who initiates and undergoes the expressed event. The affectedness involves a mental rather than a physical entity (Kemmer 1993: 129). In Fang, it mainly concerns emotion verbs. True cognition and perception verbs have not been found with the suffix -aba.

-kár-ábá

-fur-əbə

(< \*\*-fur)

```
(19) -vág-ábá
                      'to worry, be concerned about, be anxious, fear'
                     (< **-vák)
                      'to mistrust, distrust; to be wary of something' (< **-k\(\delta l\),
      -kál-ábá
                     cf. -kál-a 'to prevent someone, make someone wary of
                     something')
      -lon-əbə
                     'to calm down, stop worrying' (< **-lon, cf. -lon-a 'to
                     calm down (tr.)')
                     'to stay calm, be/look sad' (< **-wom)
      -wom-(ə)bə
      -són-ábá
                      'to be ashamed' (< **-s\acute{o}n, cf. -s\acute{o}n-\acute{o} 'to make somebody
                     ashamed')
                      'to hesitate, dither' (< **-sik)
      -sig-əbə
                     'to hesitate while speaking, speak hesitatingly'
      -kug-əbə
                     (< **-kuk)
                     'to be baffled, be perplex' (< **-yəm)
      -yəm-(ə)bə
```

A third semantic category of -aba final verbs, as in (20), refer to processes that happen spontaneously, also called "anticausative" (Haspelmath 1990; Kazenin

2001b) or "decausative" verbs (Creissels 2006). Such verbs share with verbs in (18) and (19) the features of subject affectedness and lower participant distinguishability. They differ from body action middles, however, in that their subject is most often inanimate and cannot be the initiator of the expressed event. The examples in (20b) show that the transition between the body action or emotion middles and anticausatives is rather natural, since certain verbs take both animate and inanimate subjects.

```
(20) a.
           -fər-əbə
                        'to close (intr.), to get locked in' (< -fər 'to close (tr.)')
                        'to open (intr.)' (< **-y\acute{2}\eta)
            -ván-ábá
                        'to come off, to come undone/untied, to peel (intr.)'
            -sóg-ábá
                        (<-s\acute{o}k 'to untie')
            -lur-əbə
                        'to darken, to become gloomy, cloudy' (overlap with
                        emotion middle) (< **-lur, cf. -lur-ə 'to sadden')
                        'to catch fire' (< **-bɔk, cf. -bɔg-ə 'to set fire to')
            -bəg-əbə
       b. -lúŋ-ábá
                        'to bend down, lower one's head/to set (sun)' (< **-lúη)
            -zəg-əbə
                        'to calm down (intr.), subside (pain, desire, hunger)'
                        (< **-z \partial k, \text{ cf. } -z \partial g - \partial \text{ 'to calm down (tr.)'})
            -ság-ábá
                        'to lean on/against, hang on, cling on' (is said of
                        anything, animate or inanimate, whose fall is broken by
                        another element) (< **-sák)
```

A fourth class of verbs is still a step further removed from the semantic core function of -aba, but closely related to the anticausatives in (20). The verbs in (21) are state or quality verbs, also known as "statives" (Mchombo 1993), "neuter" or "neutro-passive" verbs (Schadeberg 2003) or "quasi-/medio-passives" (Creissels 2006; Voisin-Nouguier 2002). As is the case for other middle verbs, their subject is affected by the action expressed by the verb. In contrast to anticausatives, their subject does not undergo a process, but is attributed a certain quality or state. Neutro-passives are semantically close to true passives, but they totally lack — even implicitly — the involvement of an agent, just like anticausatives. This semantic property is mirrored syntactically in that in contrast to true passives, neutro-passives do not allow an agent phrase as oblique argument. Verbs marked by -aba may sometimes convey both neutro-passive and anticausative meanings depending on the context, as the translations of the last two examples in (21) show.

```
(21) Atsi-Estuary:
-kal-əbə 'to be right, be innocent' (< **-kal)
-luŋ-əbə 'to be sick, lethargic, apathetic, flabby, lifeless' (< **-luŋ)
-nzál-əbə 'to be larger, seated higher' (< **-nzál, cf. -nzál-ə 'to put
on high seat')
-súg-əbə 'to be clumsy, stupid, good-for-nothing' (< **-súk)
```

```
    -wóg-ábá 'to be too big (cloths, hat, etc.)' (< **-wók)</li>
    -lúg-ábá 'to protrude (under the skin) (int.)' (< **-lúk)</li>
    -nzag-əbə 'to hang abundantly (mainly said of clusters of fruits)' (< **-nzak)</li>
    -təg-əbə 'to be flat as a surface of water, stagnate, come to a halt' (< **-tək)</li>
    -təg-əbə 'to be weak, become weak' (< -tək 'to weaken, to soften')<sup>20</sup>
```

The semantics of the -aba cognates in the other Bantu A70 languages is reminiscent of the semantics observed in Fang. In Ewondo, Redden (1979: 103) describes it as a medio-passive suffix with the meaning 'put oneself in or make oneself to be in a certain position/condition'. It marks verbs referring to inherently co-referential actions such as 'lay oneself down', 'set oneself down', 'stand oneself up', 'wake up (oneself)', or 'become weak', which are distinct from nonintrinsically co-referential actions, such as 'kill oneself' or 'hit oneself', which are marked by the reflexive proper. This explicit opposition, which Redden makes between body action middles on the one hand and direct reflexives on the other hand, confirms the facts observed in Fang. Moreover, as the examples in (9a) above show, the core meaning of this prototypically autocausative suffix in Ewondo is also extended to include spontaneous events which affect non-human entities. The same semantic classes are observed in Bulu verbs having this suffix, as shown in (9b). Such is also the case in Eton, where verbs marked by -bà include autocausatives, anticausatives and neutro-passives or statives, although the latter are said not to be very common (Van de Velde 2008: 130–132); see also (7).

From this short overview, we can safely conclude that the -VbV suffix in the Bantu A70 languages is polysemous. Its semantic space as attested in Fang is represented in Figure 1. This semantic map has been adopted from Kemmer (1993) with some minor changes.<sup>21</sup> Since we first wish to map the synchronic polysemy of the suffix without any diachronic implications, we prefer this semantic map of the reciprocal-reflexive-middle domain to more linear maps like the one in Haspelmath (1987). Body action middles clearly are at the core of its semantic range. Such verbs refer to actions which are typically performed on or through one's own body and thus involve intrinsic co-reference as opposed to proper reflexives which are not inherently co-referential, but involve actions whose agent and patient are usually distinct. In all languages under study, this semantic core manifests certain extensions which correspond to evolution paths commonly observed in the world's languages. An autocausative marker easily evolves into an anticausative marker through the loss of the notion of agentivity. Events involving self-affectedness then become spontaneously occurring processes still involving affectedness, but no human interference. Such

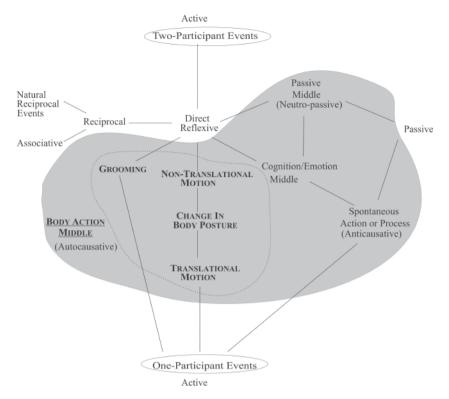


Figure 1. The semantic space of the suffix -VbV in Fang covered in grey with the central meanings in small caps (after Kemmer 1993)

anticausatives easily generate neutro-passives or statives if the restriction to change-of-state events is loosened and reference to an unchanging state or quality of an affected entity becomes allowed (Haspelmath 1990; Heine 2000; Kemmer 1993). Even though the cline underlying the semantic evolution of the *-VbV* suffix corresponds to universally observed tendencies, it is important to underline that its starting point is not the proper reflexive, which is expressed differently in these languages. This is contrary to what is prominently attested in and well described for several European languages.

#### 4.3. Semantic space of the -a(n) suffix

The extension -a(n) most commonly conveys reciprocal meaning in the Bantu A70 languages, except in Eton where it has been integrated into an innovative

reciprocal suffix, as discussed above (see Section 3.2). An Atsi example is given in (22):

- (22) Reciprocal use of the -a suffix in Atsi-Estuary
  - a. *bí-a-súk nyə a-zó é-tá*1PL-PRS-support him NP<sub>5</sub>-affair PP<sub>5</sub>-DEM
    'We support him in this affair.'
  - b. *bí-a-súk-á a-zó é-tá*1PL-PRS-support-RECP NP5-affair PP5-DEM
    'We support each other in this affair.'

Apart from this core reciprocal function, the suffix -a(n) has a number of related meanings. Most of them are not as productive as the reciprocal meaning, but still easily observable in the lexicon. Besides expressing proper reciprocity, this suffix is most productively used for conveying a notion of collectivity. It can refer to actions which are done together, a function which has been observed in other Bantu languages (Dammann 1954; Maslova 2007; Seidl and Dimitriadis 2003). Outside Bantu, this function is often called "collective" or "sociative". We stick here to the label "associative", which is more common within Bantu studies (Schadeberg 2003: 76). While the reciprocal meaning is obtained with transitive action verbs, the associative meaning is regularly generated with intransitive action verbs, such as the Atsi-Estuary verbs in (23).

(23) Associative use of the -a suffix in Atsi-Estuary

```
'to go, leave'
                                        'to go, leave together'
-ka
                          > -kə-a
       'to disappear'
                                        'to disappear together'
-dzáŋ
                          > -dzáŋ-á
                                        'to escape together'
-fam
       'to escape'
                          > -fam-a
        'to die'
                                        'to die together'
-wu
                          > -wu-a
        'to come, arrive' > -s´y-á
                                        'to come, arrive together'
-sź
```

In 1PL hortatives and 2PL imperatives, the use of -a as plurality marker is obligatory, even with transitive verbs, as seen in (24b).

(24) Use of the -a suffix as a plurality marker in Atsi-Estuary

```
a. dzáŋ-ó 'disappear' (2sG)
n-dzáŋ-á 'let's disappear (together)' (1PL)
dzáŋ-á 'disappear (together)' (2PL)
b. zঠŋ-ó mvú 'search the dog'
n-zঠŋ-á mvú 'let's search the dog (together)'
zঠŋ-á mvú 'search the dog (together)'<sup>22</sup>
```

Interestingly, as an associative marker, the suffix -a(n) can also be agglutinated to intransitive derived verb stems, including those ending in -aba. In such an event, one obtains a compound extension whose form is identical to the passive suffix, but whose meaning is still compositional. The semantic content of each

separate suffix is still distinguishable. As the examples in (25) show, the -əbə suffix alone gives an anticausative reading to a basic transitive verb. The processes referred to actually require the intervention of a (human) agent, but this agentivity is defocused in order to underline the regularity with which the affected subject undergoes the process. The agglutination of the -a suffix adds a notion of collectivity to this. This rare instance of productive suffix stacking in Fang thus leads to an output which is formally identical to the passive suffix. If an oblique agent phrase is added to the verbs in (25b) and (25d), they actually get an ordinary passive reading, as shown in (25e) and (25f). The collective-anticausative reading is not possible if such an agent phrase is present. As already stated in Section 4.2, the presence of an oblique agentive argument is also ungrammatical with the simple anticausative reading in the first and third sentence of (25).

- (25) Stacking of the -a suffix to derived middle verbs in Atsi-Estuary
  - a. *bi-óm bi-sð bi-a-dzum-əbə*NP<sub>8</sub>-linen PP<sub>8</sub>-all SC<sub>8</sub>-PRS-soak (tr.)-MID

    'All the linen is soaked (in the water).'
  - b. *bi-óm bi-sð bi-a-dzum-əbə-a* (= |byadzumba|)

    NP<sub>8</sub>-linen PP<sub>8</sub>-all SC<sub>8</sub>-PRS-soak (tr.)-MID-RECP

    'All the linen is soaked (in the water) together.'
  - c. ma-ál ma-a-dzur-əbə Ø-kínə́gə́ NP<sub>6</sub>-canoe SC<sub>6</sub>-PRS-draw-MID NP<sub>9</sub>-bank 'The canoes are drawn to the bank.'

  - e. bi-óm bi-só bi-a-dzum-aba (= |byadzumba|) ya bi-vom  $NP_8$ -linen  $PP_8$ -all  $SC_8$ -PRS-SOAK (tr.)-PASS by  $NP_8$ -girl 'All the linen is soaked (in the water) by the girls.'
  - f.  $ma-\acute{a}l$  ma-a-dzur-ba (= |madzur-ba|)  $\emptyset-k\acute{n}n\acute{o}g\acute{o}$  ya  $NP_6$ -canoe  $SC_6$ -PRS-draw-PASS  $NP_9$ -bank by ba-fam  $NP_2$ -man 'The canoes are drawn to the bank by the men.'

Closely related to the reciprocal and associative meaning of the -a(n) suffix is its function as a marker of naturally reciprocal and/or collective events. As shown in (26), this use is not synchronically derivational, but entirely lexicalized. None of the base verbs is available in the lexicon. From a synchronic point of view, there is actually no need to assume a morpheme boundary between the verb root and the final vowel /a/.

(26) Naturally reciprocal verbs in Atsi-Estuary

```
-wu-a'to kiss, to embrace'(< **-wu)-fớr-á'to compete for something'(< **-fớr)-tób-á'to meet'(< **-tób)-bom-a'to meet'(< **-bom)-sul-a'to gather, to get together, to meet'(< **-sul)-búr-á'to fight, to make war, to get angry' (< **-búr)
```

Both the associative and the naturally reciprocal meaning are very close to the core associative/reciprocal meaning. The suffix -a(n) also developed some more peripheral middle meanings. They always concern unproductive uses which are only occasionally observed in the lexicon. They are most often found in association with different types of body action middles and closely related cognition/emotion middles, as shown in (27). These derived verbs are lexicalized verbs. Hardly any of them correspond to an underived base verb.

(27) a. Middle verbs referring to actions performed on the body in Atsi-Estuary

```
-láb-á 'to dirty oneself, get dirty' (< -láp 'to spatter')
```

b. Changes in body posture

```
-weg-a 'to have a rest, relax' (< **-wek)
```

c. Non-translational motion

```
-wúr-á 'to screw up (eyes), blink, frown (eyebrow), wrinkle (nose)' (< **-wúr)
```

```
-mɔŋ-a 'to twist, sprain (wrist, ankle)' (< **-mɔŋ)
```

d. Translational motion

e. Cognition/emotion middles in Atsi-Estuary

$$-y\dot{a}-\dot{a}$$
 'to get angry' (< \*\*- $y\dot{a}$ )

-zob-a 'to regret; to be embarrassed by unpleasant news, be sad' (< \*\*-zob)

```
-sim-\acute{a} 'to remember, think' (< **-sim)
```

The suffix is also observed with lexicalized verbs referring to spontaneous processes not involving a human agent, as in (28), though this only occurs in a

minority of cases. However, as discussed in Section 3.3, -a(n) also frequently turns up in compound extensions introduced by -al- or -ag-. The verbs in (12) are either body action or cognition/emotion middles. Several of them can have both readings depending on the agentivity of the subject.

(28) Anticausatives in Atsi-Estuary
-vu-a 'to grow in number, to multiply, to increase' (< \*\*-vu)
-kal-a 'to spread (intr.)' (< \*\*-kal

The semantic range of the suffix -a(n) goes even beyond agent-less spontaneous events if one takes into account the periphrastic resultative construction in which it is productively used. It can be called "resultative", because it refers to the visible result of a preceding action which can be implicit. It is a nominal-verbal construction consisting of the copula  $-n\partial$  which takes the subject concord and the main verb which takes a nominal prefix. As shown in (29), this nominal prefix belongs to class 3 if the subject is singular and to class 4 if it is plural, irrespective of the actual noun class of the subject.

- (29) Periphrastic resultative construction in Fang
  - a. *n-dá* é-tà é-nà n-lóŋ-án mbàŋ (Ntumu)

    NP9-house PP9-DEM SC9-be NP3-build-ASSOC well

    'This house has been built well.'
  - b. *m-ŏn é-tà à-nà n̂-yír-án*NP<sub>1</sub>-child PP<sub>1</sub>-DEM SC<sub>1</sub>-be NP<sub>3</sub>-beat-ASSOC

    'This child has been beaten.'
  - c. a-kon  $\acute{e}$ - $n\acute{o}$   $\grave{m}$ - $b\grave{o}m$ - $\acute{a}$   $s\acute{i}$   $t\acute{i}$  (Atsi-NP5-pole SC5-be NP3-push in-ASSOC ground inside Estuary) 'The pole has been pushed into the ground.'
  - d. *bi-tóó bí-ná mi-n-so-á*NP<sub>8</sub>-loincloth sc<sub>8</sub>-be NP<sub>4</sub>-NP<sub>3</sub>-wash-ASSOC

    'The loincloths have been washed.'

This construction can be considered a kind of perfect inflectional form. In contrast to the passives in (30a)–(30b), the resultative in (30c) cannot occur in different tenses and does not allow the expression of an agent as an oblique argument.

- (30) Passive vs. resultative in Atsi-Estuary
  - a. mi- $\acute{a}n\acute{a}$   $m\acute{i}$ - $z\acute{u}$ - $b\acute{a}$  (ya bo- $n\acute{a})$   $NP_4$ -money  $SC_4$ -steal-PASS (by  $NP_2$ -child) 'The money is stolen (by the children).'
  - b. *mi-áŋá mi-ngá-zú-bá (yə bɔ-ŋá)*NP<sub>4</sub>-money SC<sub>4</sub>-PST-steal-PASS (by NP<sub>2</sub>-child)

    'The money had been stolen (by the children).'

```
c. mi-áŋá mí-nɔ́ ǹ-zú-á (**yə bɔ-ŋɔ́)

NP4-money sc4-be NP4-steal-ASSOC (**by NP2-child)

'The money has been stolen.'
```

A similar periphrastic construction exists in Ewondo where it is analyzed as a perfect and/or completed passive meaning that 'someone/something has undergone/received some action and therefore exists in a certain state/condition' (Redden 1979: 109). In contrast to Fang, an oblique agentive argument seems to be allowed, which could be the first step in the evolution towards a periphrastic passive construction.

(31) Periphrastic 'resultative' involving -an in Ewondo
inə nyámán
'It is/has been cooked.'
inə mmanan
'It is/has been finished.'
bidi ndián
'The food is eaten up/all gone.'
mənə nlúgán
'I am/got married.'

wá ónə nnoán ee dóbódə 'The arm is/was extended by the doctor.'

(Redden 1979: 109)

Apart from its common use as plurality and (naturally) reciprocal marker, the Fang middle uses of -an are found in the other Bantu A70 languages. Most derived verbs in (13) taking a lexicalized compound extension ending in -an have an autocausative and/or anticausative meaning. As the Ewondo examples in (32) show, verbs with the simple suffix -an may also refer to certain spontaneous processes and/or to states or qualities. They have been described as "locative-stative verbs" meaning 'to be in a state/condition' (Redden 1979: 108) or as "potential verbs" expressing "la propension, les différentes capacités et vertus naturelles que possède le sujet" ["the propensity, the different abilities and natural virtues which the subject has"] (Essono 2000: 371).

```
(32) -an final verbs with middle meanings in Ewondo
-sum-an 'to be stuck into the ground' (< -sum 'to put into the ground')

-bəm-an 'to be pushed' (< -bəm 'to push')
-lób-an 'to have the habit/tendency of biting' (< -lób 'to bite')
-lúm-an 'to be capable of stinging' (< -lúm 'to sting')
-wúd-an 'to shrink' (< **-wúd)
-laŋ-an 'to remain, stay, tarry, linger' (< **-laŋ)
(Essono 2000; Redden 1979)
```

We can conclude from this overview that the suffix -a(n) is polysemous, just like the middle suffix -VbV. Its semantic space as attested in Fang is represented in Figure 2. This suffix in its primary use is productively used as a reciprocal and associative marker in the Bantu A70 languages, except in Eton

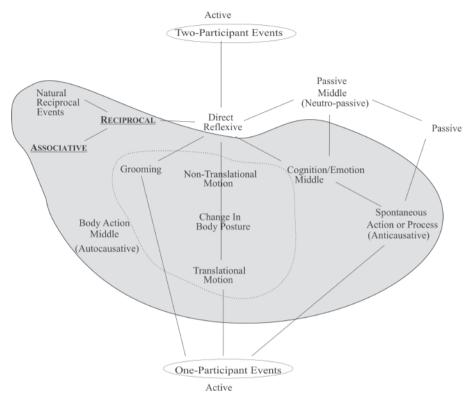


Figure 2. The semantic space of the suffix -a(n) in Fang covered in grey with the central meanings in small caps (after Kemmer 1993)

where it has become integrated in a reciprocal compound suffix and where it only turns up as an allomorph in certain contexts. This associative/reciprocal polysemy is certainly not restricted to the Bantu A70 languages alone. It is relatively common in Bantu and has been reported in a variety of languages world-wide (Dammann 1954; Kemmer 1993; Lichtenberk 2000; Maslova 2007; Schadeberg 2003; Seidl and Dimitriadis 2003). It has the more abstract meaning of "plurality of participants" or "co-participation" (Creissels and Voisin-Nouguier 2008). Within the Bantu A70 languages, the productivity of -an as associative/reciprocal marker contrasts with the nearly entirely lexicalized use of the suffix -VbV. Nevertheless, the suffix -a(n) also manifests certain middle meanings which are entirely lexicalized. If one compares Figure 2 with Figure 1, it becomes obvious that the semantic spaces of -a(n) and -VbV are partially overlapping. Both suffixes share a number of common middle meanings. In the next section, we argue that the central and original meaning of both

suffixes is clearly distinct, but that they most likely developed similar peripheral meanings through semantic shift along the same cline.

#### 4.4. Parallel semantic evolution of the -VbV and -a(n) suffixes

Regarding the origin and evolution of reflexive and reciprocal markers in African languages, Heine (2000: 7) describes a recurrent and directional semantic pattern of development, correlating with declining degrees of nominality and phonological heaviness: nominal > emphatic marker > reflexive > reciprocal > middle > passive. The semantic evolution of the suffixes studied here is clearly situated at the right end of this cline and involves neither reflexive marking nor any of the preceding stages. Both suffixes started out as bound morphemes, at least within the scope of Bantu A70 language history, and only the final steps of semantic evolution are attested, namely those beyond the proper reflexive. While both suffixes have a different central meaning, associative/reciprocal for -an and autocausative for -VbV, their semantic core underwent parallel extensions towards anticausative and neutro-passive/stative/resultative uses.

Consequently, both extensions developed meanings which come close to true passives. They share with the latter the semantic features of subject affectedness and reduced agentivity. They all give prominence to the entity affected by the event to which the verb refers by associating it to the syntactic subject position. In anticausatives and neutro-passives, the subject is presumed to undergo this event without the intervention of an external agent or initiator. Hence, the latter cannot be expressed syntactically. In true passive constructions, the agent is still implicitly involved and can assume the syntactic position of an oblique agent phrase. In other words, both historical constituents of the passive suffix had all the potential to become true passive markers by themselves, but none of them reached this stage of evolution. However, the passive meaning of the marker which resulted from their junction cannot be seen as the direct sum of their meanings, at least not synchronically. The compositional meaning rising from the synchronic stacking of these suffixes is not passive, as shown in (25) above. As we explain in the next section, the rise of -Vban as passive suffix is most likely the result of an independent semantic change, which may have run parallel, i.e., along the same cline, as its historical constituents.

#### 4.5. Polysemic nature of the passive suffix

Besides its productive use as passive morpheme, the suffix -Vban also has a more peripheral and lexicalized use as middle marker in the Bantu A70

languages. It is found in association with verbs referring to different kinds of middle situation types. Most closely related to its current-day core passive function are the neutro-passive and/or anticausative meanings which the verbs in (33) manifest. As the Eton and Ewondo examples in (33a) and (33b) show, these verbs may have a potential reading or refer to a certain predisposition of the subject. The Ntumu verbs in (33d) have been labeled "middle-causatives" (Ondo Mebiame 1992: 575), namely verbs referring to actions which you let someone else perform on your own body. Such a meaning can be easily derived from the simple neutro-passive/anticausative meaning. Although semantically close, these verbs cannot be considered as true passives syntactically. Their argument structure does not allow an oblique agent phrase, as the Atsi-Estuary example in (33f) indicates.

#### (33) Neutro-passive/autocausative verbs with the "passive" suffix

```
a.
    Eton
    à-Lté
                   L-dí-bàn
    SC<sub>1</sub>- PRS.AUX INF-eat-'PASS'
    'It is edible.' (lit. 'It is eaten.')
    ùwònò
                 à-Ltέ
                                L-pùm-bàn
    groundnut SC<sub>1</sub>-PRS.AUX INF-uproot-'PASS' LT (link tone)
    à-vól
    NP3-quick
    'Groundnuts harvest easily.'
    (Van de Velde 2008: 126)
b Ewondo
    hi-dí
               hí-dí-aban
    NPo-food SCo-eat-'PASS'
    'The food is eaten/can be eaten/is edible.'
    ma-lúg-əban
    SC<sub>1sG</sub>-marry-'PASS'
    'I am eligible to get married.'
               e-á-yāb-əban
    e-zímbí
                                           m-gbág
    NP<sub>7</sub>-box SC<sub>7</sub>-PRS-open-'PASS'
                                     LOC NPo-side
    'The box opens on the side.'
    (Redden 1979: 108-109)
    Bulu
C
    -yemban
                         'to become usual'
                                                  (< -yem 'to know')
    -jémban|-jéŋəban
                        'to be rare'
                                                  (< -jén 'to search')
```

(Alexandre 1966: 87)

# d. Fang: Ntumu

```
\acute{a}-k\grave{\partial} l-\grave{\partial} b\grave{\partial} n 'to have oneself circumcised' (= to be circumcised) (< \acute{a}-k\grave{\partial} l 'to circumcise') \acute{a}-k\grave{\partial} \eta-\grave{\partial} b\grave{\partial} n 'to have oneself shaved' (= to be shaved) (< \acute{a}-k\grave{\partial} \eta 'to shave')
```

(Ondo Mebiame 1992: 575)

#### e. Fang: Atsi-Estuary

```
f. m-bii ó-á-kpul-əba (**yə mə)

NP<sub>3</sub>-door sc<sub>3</sub>-PRS-open-'PASS' (**by me)

'The door is open/opens.' (**'The door is opened by me.')
```

Further removed from the canonical passive meaning are the body action and cognition/emotion middles in (34) involving inherent co-reference. These usages are not well documented in the available grammars, undoubtedly because they are rather rare. Most examples were found in the lexicon of the Atsi-Estuary dialect of Fang.

### (34) a. Atsi-Estuary

```
-fóg-ábá
             'to be scared, appalled; to tremble, shiver' (< **-fók)
             'to be appalled; to have fever chills; to tremble,
-lig-əba
            shiver' (< **-lik)
             'to be appalled; to shiver with fear, fever' (< **-nyan)
-nyaŋ-əba
            'to get used, accustomed to' (< **-y \ni n)
-vən-əba
-vá-bá
            'to get used, accustomed to / to match' (< **-va)
-bzii-ba
            'to throw oneself on the ground' (< **-bzii, -bziibə 'to
            hit')
            'to have bath, wash (oneself), put cream, oil on
-wá-há
            oneself' (< **-w⁄)
             'to purge oneself, to give oneself an enema' (< -wəl
-wɔl-əba
             'to purge')
            'to put make up on (oneself)' (< -kpal 'to make
-kpal-əba
            somebody up')
             'to shave (oneself)' (< -kəη 'to shave somebody')
-kəŋ-əba
```

```
    b. Eton
    mò-H-kèŋ-bàn
    1sg-pst-shave-'pass'
    'I shaved'
    (Van de Velde 2008: 125)
```

c. Bulu
-fó?oban 'to shiver' (< -fó?o 'to shake')
(Alexandre 1966: 87)

In Fang, a further usage of the "passive" suffix is closely related to the autocausative meaning, namely its proper reflexive use. It occurs with verbs referring to actions which are not inherently co-referential, but typically have two distinct entities as agent and patient. This use is not fully productive. As discussed in Section 4.2, Fang has a more productive reflexive strategy, i.e., the reflexive pronouns -myən (sg.)/-byən (pl.). Nonetheless, the suffix -Vban can be used with a good number of transitive verbs to derive proper reflexives as a substitute for this reflexive pronoun. The Atsi-Estuary examples in (35c) and (35d) are perfectly equivalent to the examples in (17a) using -myən (sg.)/-byən (pl.).<sup>23</sup> In the other Bantu A70 languages, this use of -Vban is not well documented. Some rare examples, as in (35e) and (35f), can nevertheless be found.

(35) a. Ntumu  $\acute{a}$ -kig- $\acute{a}$ b $\acute{a}$ n 'to cut oneself' (<  $\acute{a}$ -kik 'to cut')  $\acute{a}$ -dzig- $\acute{a}$ b $\acute{a}$ n 'to burn oneself' (<  $\acute{a}$ -dzik 'to burn')

(Ondo Mebiame 1992: 575)

b. Atsi-Estuary

-dzi-ba 'to stab, pierce oneself (with a knife, sword, spear)'
(< -zi 'to pierce')

-bág-ábá 'to hurt oneself' (< -bák 'to hurt')

-tán-ábá 'to register oneself' (< -tán 'to register')

-yán-ábá 'to see oneself' (< -yán 'to see')

- c. ma-yán-əba á yəna eti (Atsi-Estuary) 1sG-see-'pass' Loc mirror inside 'I see myself in the mirror.'
- d. bə-nga-zi-ba yə o-kəŋ
  SC<sub>2</sub>-PST-stab-'PASS' with NP<sub>11</sub>-knife
  'They stabbed themselves with a knife.'
- e. Eton

```
-nààbàn 'to tear oneself apart' (< -nàb 'to tear apart (tr.)')
```

(Van de Velde 2008: 125)

f. Ewondo

matooban 'I am getting (myself) established' (< -to 'to sit,

dwell, be')

(Redden 1979: 109)

Even though passivization is currently the most central and productive function of the passive suffix, it is clear from what precedes that this extension also manifests some peripheral and more lexicalized meanings going considerably beyond the core meaning. Figure 3 represents the semantic space of the suffix -*Vban* in Fang. If one compares this semantic map with the semantic maps of the suffixes -*VbV* (Figure 1) and -*an* (Figure 2), it becomes apparent that the secondary meanings of the passive suffix actually overlap, at least partially, with the semantic space of its historical constituents.

This overlap suggests that the polysemy of the suffix -Vban is the result of semantic changes that took place within a semantic space similar to that of its

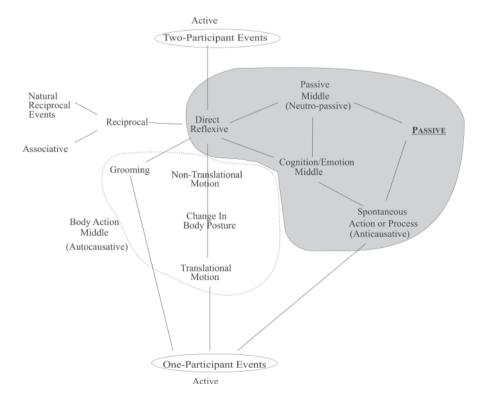


Figure 3. The semantic space of the suffix -Vban in Fang covered in grey with the central meanings in small caps (after Kemmer 1993)

historical constituents. From the present-day data, however, it is difficult to reconstruct the direction of this semantic evolution. It is not clear whether the passive meaning constitutes the beginning of a semantic cline or is rather the final outcome of it. Taking into account the semantic extensions which its historical constituents underwent, one is inclined to consider the passive meaning of *-Vban* as an endpoint. From their original core meanings, i.e., respectively autocausative and associative/reciprocal, both *-VbV* and *-an* developed peripheral meanings which were gradually more passive-like. In this regard, it seems at least plausible that the true passive meaning of *-Vban* is the outcome of a similar evolution along the final stages of this universally common cline: nominal > emphatic marker > reflexive > reciprocal > middle > passive reciprocal > middle > passive cline (Heine 2000: 7). The present-day peripheral middle uses of the passive morpheme as well as its marginal role as reflexive marker in Fang would then be relics of semantic developments preceding its emergence as a passive marker.

It could be claimed that a failing of this hypothesis is that the reciprocal is not represented among the secondary meanings of *-Vban*. This should not be a major problem, however, since reflexive markers often develop into middle markers without an intermediary reciprocal phase (Kemmer 1993).

Another objection could be that the meaning which we assume to be the original meaning of -Vban is currently rather peripheral in its semantic space. Its reflexive use is indeed chiefly attested in Fang, where it is certainly not the principle reflexive strategy. This is not consistent with the fact that the meanings which we propose as the original semantic core of its constituent suffixes -VbV and -an are still central today. However, this should not be too problematic. The passive tends to be a more productive voice distinction in Bantu than the middle. Derivational suffixes expressing passive voice can normally apply to any (transitive) verb and regularly commute with underived active base. Middle suffixes are applied less freely in current-day Bantu languages. As it is the case in Bantu A70, they are much more lexicalized and do not always alternate with underived active base verbs. It is therefore not hard to imagine that once a newly developed passive meaning has become grammaticalized, it starts to occupy a central position in the semantic space of a given suffix. This could explain how the passive meaning of -Vban rapidly became predominant, even though it represents a semantic innovation, possibly one that developed relatively late.

The third and most serious objection against the semantic evolution path proposed above is that the meaning of *-Vban* did not necessarily evolve along a unidirectional cline. Given its compound morphology, its original semantics were no doubt compositional. In Section 4.3, Example (25), we discussed the reading that emerges when the historical constituents of *-Vban* are synchronically combined in Fang, one of the rare cases of productive suffix stacking. If

the suffix -an- is stacked to an intransitive verb stem marked by the middle suffix -aha, a collective-anticausative reading surfaces. This reading is compositional in that the respective anticausative/neutro-passive and associative meanings of both suffixes are still transparent. The passive marker -Vban may originally have had a similar compositional meaning, before it developed its current core meaning as well as its other non-compositional meanings. In Section 6, we explain in more detail why it is not easy to reconstruct a unilinear evolution path for the rise of these secondary non-compositional meanings. We also propose a functional explanation for the fact that the associative/reciprocal suffix is involved in the emergence of a compound passive suffix. In Section 5, we first show that the Bantu A70 passive suffix is certainly not the only Bantu compound suffix in which the semantic contribution of the associative/reciprocal extension \*-an- is no longer obvious.

# 5. The role of \*-an- in Bantu double extensions with noncompositional meanings

The combination of two pre-existing verbal derivation suffixes might be a remarkable diachronic source of passive morphology from a typological point of view, especially when it is impossible to derive its meaning directly from the combination of its constituents' meanings. From a wider Bantu perspective, however, the evolution path of this innovative Bantu A70 passive suffix is less extraordinary if one reckons that double extensions with non-compositional meanings are a relatively common phenomenon in Bantu. What is more, the final component of this passive morpheme, i.e., the suffix -an-, happens to be particularly prolific throughout Bantu in producing compound verbal extensions with idiosyncratic meanings (Dammann 1954). A list of common Bantu verb stem reconstructions having a composite extension ending in -an-, as found in the Bantu Lexical Reconstructions (BLR3) database (Bastin and Schadeberg 2003) is presented in (36). The Guthrie zones in which these extended verbs are attested according to this source are mentioned in parentheses.

```
(36) Bantu verbs reconstructed with double extension ending in -an-
```

```
*-cádangan-
                'to disperse' (J M)
                'to be abolished' (J L M) < *-dim- 'be extinguished'
*-dímangan-
                'to roll (intr.)' (L M) < *-gad- 'to turn (tr.)'
*-gàdangan-
                'to spread, scatter (intr.)' (C H L) < *-pàd- 'to spread
*-pàdangan-
                (tr.)
*-càdangan-
                'to rejoice' (C)
*-bádangan-
                'to scatter, disperse' (D)
                'to yield in under weight; be flattened' (H J)
*-pùabagan-
*-càmbakan-
                'to go to meet someone' (L)
```

```
*-jàdakan-
                'to desire; regret' (L)
*-kàbakan-
                'to make bootless efforts' (L) < *-kab- 'to fail, be
                poor'
*-paatakan-
                'to be flat' (H L)
*-pìnakan-
                'to be narrow' (H L M)
*-gèndakan-
                'to move about everywhere' (L) < *-gènd- 'to go,
                travel'
*-búdongan-
                'to broil (tr./intr.)' (C L)
*-kómbinkan-
                'to be tangled' (L M)
*-dídikan-
                'to remember' (E J)
*-tèntikan-
                'to be superposed' (H L M)
*-jápokan-
                'to leave temporarily the marital house' (J)
*-kónkoman-
                'to be bent' (L M)
*-kúduman-
                'to meet one another' (D)
*-tédengan-
                'to shake' (L M)
*-kádahan-
                'to be ruthless' (L M) < *-kád- 'to be bitter'
```

As one can see, none of these double extension verbs is widespread throughout Bantu. They occur at most in three contiguous Guthrie zones. Even if the actual distribution of lexical items is generally underrated and some zones are better represented than others in BLR3, this limited geographical spread suggests that they are of relatively recent origin. These double extensions certainly do not go back to Proto-Bantu. Nonetheless, they are old enough to have become lexicalized. For most of the extended verb stems in (36), no corresponding base verb has been reconstructed. An even more important indication of their lexicalization is the fact that their meaning is unpredictable. Derived verb stems with perfectly transparent derivational meanings would not be reconstructed anyhow. If one compares the meaning of the few reconstructed base verbs with their derived form, it becomes apparent that a same compound extension does not always yield the same semantic effect. The extension -angan-, for instance, simply turns a transitive action verb into an intransitive anticausative verb in the case of \*-gàdangan- and \*-pàdangan-, while in the case of \*-dímangan-, the base verb is intransitive itself. Moreover, the meaning of the extended verb stems is non-compositional. Even though all end in -an-, whose core meaning in Bantu is generally associative/reciprocal, only two manifest a (naturally) reciprocal meaning, i.e., \*-kúduman- and \*-càmbakan-. Some verbs, such as \*-cádangan-, \*-bádangan-, \*-kàbakan-, \*-gèndakan, have an iterative/ intensive meaning, which is conveyed by the simple -an- extension in certain Bantu languages (Schadeberg 2003: 76). This meaning can be easily linked with the more central associative meaning by a shift from plurality of persons to a plurality of actions. However, for most of the extended verbs in (36), the possible semantic input of the -an- suffix has become obscure.

The most recurrent compound extensions in (36) are -a(n)gan- and -akan-. Their initial element is a morpheme which is known as "pre-final" in Bantu studies and takes different forms in different languages, its most frequents realizations being -ak-, -ang- and -ag- (Sebasoni 1967). It occurs in the same slot as the other verb stem extensions, but it is functionally unusual, because it is not only involved in verb-to-verb derivation, but also in verbal inflection. Both uses are semantically related in that the suffix often expresses a repetitive or intensive meaning as a derivation marker and imperfective meanings such as durative and habitual as an inflection marker (Schadeberg 2003: Nurse 2003). The most typical derivational meaning of this suffix comes close to the iterative/intensive meaning which the associative/reciprocal suffix -an- tout court developed in certain Bantu languages. Hence, if the double extensions -a(n)gan and -akan convey the same kind of meaning in certain verbs in (36). this meaning is certainly not compositional. Moreover, if both the simple extensions -ak-, -ang- and -ag- and the double extensions -a(n)gan- and -akantransmit the same iterative/intensive meanings, the exact semantic role of -an- is unclear. In certain languages, a double extension of the type -a(n)gan--akan- even adopts meanings which are in other languages reserved for -an- itself. As discussed in Section 4.3, see examples in (24), the associative/reciprocal suffix -an- also serves as an obligatory plurality marker in hortatives and 2PL imperatives in Fang. This is also the case in the other Bantu A70 languages, except in Eton, where the compound extension -éngán(à) assumes this function (Van de Velde 2008: 282; Van de Velde and van der Auwera 2009). In other languages, this double extension adopts the role of associative marker, which is one of the core meanings of the simple suffix -an- in numerous Bantu languages, amongst others in the Bantu A70 languages. In Makwe, for instance, -angan-"expresses the fact that many people are performing the same action" (Devos 2008: 208). In Luvale, -akan-/-angan- also functions as an associative marker (Horton 1949: 103), just like  $-a(\eta)kan$ - in Lamba (Doke 1938: 198– 199). In still other languages, this compound extension has simply become the proper reciprocal marker, like -angan- in Haya (Kaji 2000: 18). The suffix -anis also the final constituent of other double extensions, which function as regular reciprocal marker, such as -ijaan- in Ruund (Nash 1992: 630), -asan- in Luvale (Horton 1949: 102) and -isan-|-asan- in Yaka (Hyman 1998: 65).

Another well-known compound derivational suffix ending in -an- is frequent in Swahili and closely related languages, i.e., -ikan-. Seidl and Dimitriadis (2003: 244) call it "reciprocal stative", since it is composed of the stative suffix -ik- and the reciprocal suffix -an-. Schadeberg (2004) prefers the label "sociostative", since the reciprocal use of -an- is also in Swahili only a particular instantiation of a wider associative meaning and certainly not what -an- adds to the meaning of stative verbs with -ik-. As shown in (37), most so-called "sociostative" verbs correspond to a simple stative verb. The semantic difference

between both is very subtle or even inexistent. Both can have either a potential or factual interpretation depending on the particular tense in which the verb is used, the kind of verb and the non-linguistic context (Schadeberg 2004). However, the meaning of the double extended forms tends to be somewhat less predictable and thus more lexicalized than the forms with a single extension. The fact that only a restricted number of verbs allow a "sociostative" derivation suggests that it indeed underwent considerable lexicalization. As the last four examples in (37) illustrate, double extended -ikan- verbs that do not correspond to simple stative verbs do exist, but they are rather rare.<sup>24</sup> On the basis of text corpus analysis. Schadeberg (2004) observes that the preference for the simple stative form or its "sociostative" counterpart differs strongly from verb to verb and that there appears to be a cline with marked preferences at each end. He concludes moreover that -an- may add a reference to a multitude of (factual or potential) agents or experiencers to the meaning of simple stative verbs with -ik-. It is not is necessary but appropriate to use -ik-an- when many people are involved in an event. As we argue below, this notion of coparticipation may also have played a role in the emergence of -Vban as passive suffix in the Bantu A70 languages.

```
(37) "plain statives" vs. "reciprocal statives" in Swahili
```

```
'recognize'
-tambua
-tamani
           'desire'
           'hear'
-sikia
-jua
           'know'
           'err'
-kosa
-shinda
           'defeat'
-kuta
           'find, come across'
-ona
           'see'
           'get'
-pata
           'be able'
-weza
-semeka
             'be sayable'
-tambulika
             'be recognizable'
-tamanika
             'be desirable'
-sikika
             'be audible'
             'be knowable'
-julika
             'be unavailable'
-koseka
-shindika
             'be overcome'
-semekana
                'be believed'
-tambulikana
                'be recognized'
-tamanikana
                'be desirable'
```

'say'

-sema

-sikikana 'be heard' -iulikana 'he famous' -kosekana 'be unavailable' -shindikana 'be unable to' -kutikana 'be discovered'25 'be visible' -onekana -patikana 'he available' -wezekana 'be possible' (Seidl and Dimitriadis 2003: 245)

The Swahili -ikan- extension and related "sociostative" extensions, such as -aman- and -ukan- (Schadeberg 2004), resemble the Bantu A70 -Vban- extension, in that a middle suffix combines with the suffix -an-. The fact that these extensions can combine is for Seidl and Dimitriadis (2003: 270) a proof that the semantics and argument structure of middle suffixes constitute "a suitable substrate for combining with the sociative use of the reciprocal". Given that middle suffixes derive intransitive verbs, they do not fit the reciprocal meaning of -an-. However, along with Schadeberg (2004), we would rather interpret this from a different angle, namely that the reciprocal is only a specific concretization of a wider (as)sociative meaning. As demonstrated in Section 4.3, its uses as a marker of pluractionality, intensity and iterativity are other closely related instantiations. In combination with detransitivizing suffixes like -ikand -VbV-, the suffix -an- may have gradually evolved from an associative marker to an intensity/iterativity marker to eventually become semantically bleached, thus paving the way for the double extension to develop an idiosyncratic meaning.

This overview shows that the loss of compositional meanings in double extensions ending in -an- is a common phenomenon in Bantu. Compound suffixes tend to undergo idiosyncratic semantic changes, independently from their constituents. Two rough evolutions can be distinguished. On the one hand, there are those double extensions which lose their productivity, become entirely frozen and leave only traces in the lexicon. Their semantic role becomes gradually opaque. Given that the base verb is often no longer available, it is impossible to trace back the semantic contribution of each of the constituents. for instance the associative/reciprocal meaning of -an-. Moreover, it has even become difficult to distinguish the original derivational function of the double extension. Such is the case for most extended verbs in (36) as well as for the verbs taking -ikan- in (37). On the other hand, there are double extensions which are still productive, but have developed an idiosyncratic meaning which is no longer compositional, but close to or derived from the meaning of one or both of its constituents. The semantic input of the suffix -an- in the last type of double extension may become invisible, for example in those -a(n)gan -akan- suffixes which have more or less the same iterative/intensive meaning as the first suffix. Alternatively, the compound suffix may simply take over one of its core functions, i.e., reciprocal or associative marking.

## 6. Co-participation and the emergence of *-Vban* as passive suffix

The Bantu A70 passive suffix fits in the above elementary typology of Bantu double extensions as one which developed a productive, idiosyncratic meaning. In this respect, the compound origin of the Bantu A70 passive suffix is less peculiar than it seems at first glance. It is part of a wider Bantu phenomenon. Even so, it remains somehow unusual, since it is — as far as we know — the only Bantu double extension of its kind which developed a passive meaning. From a functional point of view, however, the involvement of the associative/ reciprocal suffix -an- in the emergence of such a passive meaning can be accounted for. If we depart from the more abstract meanings of "plurality of participants" or "co-participation", which spans the more concrete meanings "(natural) reciprocal" and "associative" commonly associated with the -ansuffix in Bantu, as we argued in Section 4.3, it is not unthinkable that the coupling of this meaning with middle meanings resulted in a canonical passive meaning.<sup>26</sup> Middle verbs typically refer to one-participant events and middle derivational suffixes are commonly used to derive one-participant verbs from verbs referring to two-participant events. This is also the case for the Bantu A70 suffix -VbV. Middle verbs with this suffix whose base verb still exists are often — not always — derived from a transitive action verb involving two participants, especially when they have an anticausative meaning, as in (38).

### (38) Middle transformation in Atsi-Estuary

- a. *b-ɔŋá bá-ngá-fár m-bíí*NP<sub>2</sub>-child SC<sub>2</sub>-PST-close NP<sub>3</sub>-door

  'The children closed the door.'
- b. *m-bii ó-ngá-fər-əbə*NP<sub>3</sub>-door SC<sub>3</sub>-PST-close-MID

  'The door closed.'
- c. b-ənəngá bá-ngá-sók bi-vín  $NP_2$ -woman  $SC_2$ -PST-peel  $NP_8$ -bark 'The women peeled the bark.'
- d. *bi-vín bí-ngá-sóg-əbə*NP<sub>8</sub>-bark sc<sub>8</sub>-pst-peel-mid

  'The bark came off.'

Just as in the passive transformation, the object of the active verb becomes subject of the middle verb. In contrast to the passive, the subject of the active

verb cannot be demoted to an oblique argument. It is obligatorily deleted. The middle verb refers to an event that is assumed to happen spontaneously without the intervention of an agent. For such an anticausative to be reinterpreted as a true passive, a new participant needs to be introduced. In the world's languages, the passive reinterpretation of middle verbs often happens through a purely semantic operation whereby an additional agent is integrated in the argument structure without additional morphological marking, for example when reflexive pronouns become involved in the expression of anticausative events and are eventually grammaticalized into passive markers (Creissels 2006; Haspelmath 1990). In Bantu A70, on the contrary, the introduction of the supplementary participant of the passive construction may have been enabled through a morphosemantic process, i.e., by the stacking of the associative/ reciprocal suffix -an-. As we show in Section 4.3, Example (25), the latter suffix adopts an associative meaning when it is synchronically stacked to an anticausative verb ending in -aba. Diachronically, however, this notion of "togetherness", which invokes a plurality of participants, may have been reanalyzed and grammaticalized as the extra agentive participant in the argument structure of a passive verb. Extra evidence for the semantic affinity between associative/ reciprocal and passive constructions in Bantu, and especially for the correspondences in their argument structure, is found in the fact that both constructions regularly rely on the same comitative marker to introduce a supplementary participant. It is well-known that agent phrases of passive constructions in Bantu are frequently marked by the preposition na (Fleisch 2005: 97–98). The original meaning of this preposition is comitative, but it often has an instrumental meaning too, the comitative > instrumental shift being a crosslinguistically regular diachronic shift (Creissels and Voisin-Nouguier 2008). The Swahili examples in (39) illustrate the three uses of this preposition.

# (39) Polysemy of the "comitative" preposition *na* in Swahili

- a. ni-li-rudi na baba  $sc_{1sG}$ -pst-return com my.father 'I returned with my father.'
- b. *ni-li-ku-pig-a na tawi*  $sc_{1sG}$ -PST-OC<sub>2sG</sub>-beat-FV COM stick 'I beat you with a branch.'
- c. ni-li-pig-w-a na mu-alimu  $sc_{1sg}$ -pst-beat-pass-fv com  $Np_1$ -teacher 'I was beaten by the teacher.'

This comitative marker *na* is widely believed to be the historical source of the Bantu associative/reciprocal marker *-an-* (Creissels 2006; Heine 2000; Schladt 1996; Van de Velde and van der Auwera 2009). Moreover, extra par-

ticipants in associative/reciprocal constructions are often introduced by this same comitative marker, as the Venda examples in (40), cited in Maslova (2000), show. The comitative marker may function as a conjunction in a coordinate subject that precedes the reciprocal verb and triggers a 3PL subject agreement. It can also serve as a preposition which introduces an oblique argument following the reciprocal verb, similar to its use in the Swahili examples in (39). In the latter case, the subject is singular and the second element of the coordinated subject in the first construction is demoted to the prepositional phrase.

- (40) The comitative marker *na* in Venda reciprocal constructions
  - a. *mu-sidzana na mu-tukana vha-khou-rw-an-a*NP<sub>1</sub>-girl COM NP<sub>1</sub>-boy SC<sub>2</sub>-PRS.CONT-hit-RECP-FV

    'The girl and the boy are hitting each other.'
  - b. *mu-sidzana u-khou-rw-an-a na mu-tukana*NP1-girl SC1-PRS.CONT-hit-RECP-FV COM NP1-boy

    'The girl and the boy are hitting each other.'

    (lit. 'The girl is hitting each other with the boy.')

    (Poulos 1990: 188)

Reciprocal constructions similar to those in Venda are found in Fang. The comitative marker na does not exist in Bantu A70. As shown in (41), one comitative marker in Fang is  $b\dot{a}$ . The first construction with the coordinate plural subject is most frequent, but the second construction with an oblique argument following the verb is also accepted.

- (41) Reciprocal constructions with the comitative marker  $b\dot{a}$  in Atsi-Estuary
  - a.  $\mathcal{O}$ -fám bá m-ənəŋá bé-ngá-bzíb-á NP9-man COM NP1-woman SC2-PST-hit-RECP 'The man and the woman hit each other.'
  - b. OPS-fám é-ngá-bzíb-á bá m-ənəŋá
    NP9-man SC9-PST-hit-RECP COM NP1-woman
    'The man and the woman hit each other.'
    (lit. 'The man hit each other with the woman.')

Another comitative marker in Fang is  $y\partial$ . It is near-synonymous with  $b\acute{a}$ , but can also be used as an instrumental marker. In reciprocal constructions, it may simply replace  $b\acute{a}$  in coordinate subjects preceding the verb, as in (42a). However, when it follows the verb at the beginning of the prepositional phrase, the verb receives another reading, as shown in (42b). It is no longer interpreted as a truly reciprocal event. It is rather read as an event which involves co-participation, but in which the subject participant clearly takes the lead

- (42) Reciprocal constructions with the comitative marker yo in Atsi-Estuary
  - a.  $\emptyset$ -fám yə m-ənəŋá bé-ngá-bzíb-á NP<sub>9</sub>-man COM NP<sub>1</sub>-woman SC<sub>2</sub>-PST-hit-RECP 'The man and the woman hit each other.'
  - b.  $\mathcal{O}$ -fám é-ngá-bzíb-á yə m-ənəŋá NP9-man SC9-PST-hit-RECP COM NP1-woman 'The man quarrelled with the woman.'

The particular reading of the reciprocal construction in (42b) comes close to the naturally reciprocal meaning of the verbs in (26) above. As shown in (43), such verbs use the comitative marker  $y\partial$  in exactly the same way. They can only introduce an extra participant as an oblique argument preceded by this preposition. The use of  $b\acute{a}$  is not allowed in this context.

- (43) Naturally reciprocal constructions with the comitative marker  $y \ge in$  Atsi-Estuary
  - a.  $\emptyset$ -fám é-ngá-tób-á yə m-ənəŋá NP<sub>9</sub>-man sc<sub>9</sub>-PST-meet-RECP COM NP<sub>1</sub>-woman 'The man met (with) the woman.'

Interestingly, the preposition introducing the agent phrase in passive constructions in Fang is the same marker  $y_{\partial}$ , as seen in Section 4.1, Examples (14) to (16). Hence, even though the common Bantu comitative marker na is absent from Bantu A70, a same correspondence in argument structure exists between (naturally) reciprocal and passive constructions as in many other Bantu languages. This adds weight to the hypothesis that a combination of the middle marker -VbV and the associative/reciprocal marker -an- may have become historically reanalyzed as a morpheme with a noncompositional passive meaning.

We admit that the evidence available in the contemporary languages is not sufficient to fully support our hypothesis about the development of *-Vban* in terms of passive grammaticalization. However, if the notion of co-participation did indeed play a role in the emergence of the idiosyncratic passive meaning of this compound suffix, its original compositional meaning may have been close to the collective-anticausative reading which surfaces when the historical constituents of the passive morpheme are synchronically stacked; see Section 4.3, Example (25). If so, the currently secondary meanings of *-Vban*, i.e., "neutropassive", "anticausative", "cognition/emotion middle" and "direct reflexive", are also historically derived meanings. They all share the loss of the notion of "co-participation". In that case, it is difficult to conceive how the different contemporary meanings of *-Vban* may have developed as consecutive steps in

linear semantic evolution path of the type reflexive > reciprocal > middle > passive. In this cline, the reciprocal is the only meaning embracing the notion of co-participation, but it is not part of the *-Vban* polysemy. If the idea of participants' plurality was indeed reinterpreted in order to license the introduction of an oblique agentive argument, which is not allowed by the simplex middle suffix *-VbV*, the emergence of the passive meaning must have preceded that of the other noncompositional meanings which *-Vban* may convey. The reason is that its reflexive and middle meanings all miss the notion of co-participation. As a consequence, if one wishes to interpret the polysemy of *-Vban* in terms of a diachronic unidirectional cline, it must have developed against the universal trend described above. It is therefore perhaps more plausible to assume that the semantic development of *-Vban* was not unilinear and that its reflexive and middle meanings emerged independently from its passive meaning.

## 7. Historical origin of the middle suffix -VbV

A final question which we wish to address is the historical origin of the initial constituent of the Bantu A70 passive suffix. As we mentioned in the introduction, one of the allomorphs of the Proto-Bantu passive suffix is \*-*ibo*-. Given that the Bantu A70 passive marker also contains a /b/ consonant, could it then not simply result from a fusion of the inherited passive marker and the associative/reciprocal suffix, which lost its semantic content, as it often does in double extensions in Bantu? In other words, could the initial *-VbV* element be a reflex of the passive suffix reconstructed for Proto-Bantu? This protomorpheme not only contains the /b/ consonant which is attested in both the Bantu A70 middle and passive suffix, but it also has the VCV structure, just like the middle suffix in most Bantu A70 languages. Nevertheless, it is rather unlikely that the Bantu A70 middle suffix is a reflex of this allomorph of the Proto-Bantu passive suffix.

The initial vowel of the middle suffix does not match well with that reconstructed for \*-ibo-. In those Bantu A70 languages where both the passive suffix and middle suffix still have an initial vowel, i.e., in all except Eton and the Atsi-Moyen Ogooue dialect of Fang, its unconditioned realization is a schwa. This central vowel is assimilated to certain root vowels in Ewondo and Bulu; see Table 1 in Section 3.1. The central vowel /a/ in Bantu A70 could only be a reflex of the Proto-Bantu closed front vowel \*i in some very exceptional cases (Nzang-Bie 2008). In his systematic study of diachronic vowel evolutions in the different dialects of Fang, Medjo Mvé (1997) demonstrated that /a/ most commonly corresponds to the Proto-Bantu non-closed front vowels \*I and \*e or to the central vowel \*a. Hence, the etymon of the Bantu A70 middle suffix — and by extension the initial constituent of the passive suffix — most prob-

ably had an initial central or non-closed front vowel. A suffix with an initial closed front vowel is much less likely. An extension of the form \*-(a)b(e) would thus be a better candidate than \*-ibo-. Schadeberg (2003: 78) mentions the existence of "suffixes of the general shape \*-(a)b(e)" in most of Guthrie's zones A and B, with vowels differing from language to language. The synchronic co-existence of this suffix with the reflex of the Proto-Bantu passive suffix in certain languages, such as Basaá (A43), suggests that both verbal extensions are historically unrelated. Probable reflexes of \*-(a)b(e) have been reported in other north-western Bantu languages, e.g., Lundu (A11) -àb- (Kuperus 1985), Duala (A24) -Vbè (Biloa 1994), Noho (A32) -abe (Schadeberg 1980). The middle prefixes bé- in Nen (A44) (Mous 2003) and bá- in Gunu (A62) (Orwig 1989) are no doubt also related, although it should be examined more closely why they do not occur there as a suffixes.

The semantics of the Bantu A70 -VbV suffix also favors \*-(a)b(e) as most probable etymon. In Basaá, where reflexes of both \*-ibo- and \*-(a)b(e) occur, the reflex of the former is involved in the derivation of (neutro-)passives. The reflex of the latter, on the contrary, is labeled "reflexive", but is also used to derive anticausatives (Hyman 2003: 275). Moreover, this opposition between the \*-(a)b(e) reflex as middle marker and a true passive morpheme — generally not a reflex of \*-ibo- — is also observed in the other zone A languages mentioned above. Even in a language as Lundu, where Kuperus (1985) describes -ab- as a passive suffix, it is questionable whether it is a proper passive marker. The fact that the agent cannot be mentioned suggests that it is at most neutro-passive. Dugast (1971: 239–241) also calls the abovementioned  $b\acute{e}$ - prefix in Nen "passive", but as Mous (2003: 291) argues, its basic meaning is also middle. In other words, the Bantu A70 -VbV suffix is not only phonologically a more likely reflex of \*-(a)b(e), but its function as a middle marker as opposed to a proper passive marker also requires considering it as unrelated to \*-ibo-.

From the angle of Bantu language history, it is important to know whether the middle suffix \*-(a)b(e) is an innovation characteristic of north-western Bantu or rather an archaism. A detailed study of this question goes beyond the scope of this paper. However, it is interesting to note in this respect that the BLR3 database contains several verbs stems which have an extension that ends in /b/ and an initial vowel that is assimilated to the root vowel (Bastin and Schadeberg 2003). Most of these verbs refer to a typical middle situation type. Among the reconstructed verbs cited in (44), body action middle, emotion middle, anticausative and neutro-passive meanings can be observed. These extended verb stems all have reflexes beyond the north-western Bantu languages. The Guthrie zones in which these occur, according to Bastin and Schadeberg (2003), are given in parentheses. Note that the vowel of this -Vb- extension is subject to harmony with root vowel just like the initial vowel of the -VbV suffix in Bantu A70.

(44) Lexical reconstructions including a *-Vb-* extension and having a middle meaning

*-kádab-	'wash one's hands'	(JR)
*-kàdab-	'crawl on all fours'	(L)
*-jodob-	'become soft'	(CJNMPS)
*-pùdob-	'be seized with convulsions'	(L M)
*-cídɪb-	'shake one's feet'	(JL)
*-kıdıb-	'walk sp.'	(HL)
*-kokob-	'walk with a slight stoop'	(R S)
*-kákabad-	'to be hard and dirty'	(L M)
*-jòngobed-	'be weak by illness'	(J)
*-tàndabad-	'stretch oneself out, stretch legs'	(L M R)
*-tòndobad-	'be silent'	(J)
*-pótobad-	'be hunched up'	(L M)
*-jíjibɪd-	'be accustomed to'	(L M)

The Bantu-wide distribution of lexicalized middle verbs taking this suffix suggests that the middle marker \*-(a)b(e), which most regularly occurs in the north-western Bantu languages, is an archaism rather than a innovation of this specific region. Hence, even if the initial component of the Bantu A70 passive marker is not a reflex of the Proto-Bantu passive suffix, this compound morpheme did build on inherited morphology.

#### 8. Conclusions

The Bantu A70 languages have a cognate passive morpheme that is neither inherited from Proto-Bantu nor the outcome of a universally common evolution path. It grew out of the fusion of two existing verbal derivation suffixes, which is an exceptional source of passive morphology, not only in the world's languages, but also within Bantu. Hence, along with similar shared innovations, this atypical morphological innovation could be a good indicator of shared ancestry defining the Bantu A70 languages as a distinct historical subgroup. In spite of its particular origin, this passive suffix results from the merger of two inherited early Bantu morphemes. Its final constituent \*-an- was reconstructed as Proto-Bantu associative/reciprocal marker. Its initial component -VbV is not a reflex of the Proto-Bantu passive suffix \*-ibv-, but of a phonologically similar middle suffix, possibly \*-(a)b(e). This suffix must also be quite old. It might even go back to Proto-Bantu. It currently occurs most frequently in the north-western Bantu languages, where it only has a limited productivity as a middle derivational suffix, but where it is very regularly observed with lexicalized middle verbs no longer corresponding to a base verb.

However — and this is less well-known — it is also observed, although more sporadically, in lexicalized middle verbs in other Bantu languages.

The typological peculiarity of the Bantu A70 passive morpheme is easier to understand if one bears in mind that it belongs to a wider complex of Bantu double extensions which have the suffix \*-an- as their final component. It is a phenomenon which needs more systematic study, but the available data show that this common Bantu associative/reciprocal marker often becomes semantically translucent in such constructions and that this kind of double extensions tend to develop idiosyncratic meanings which cannot be directly derived from the semantics of its constituents. The Bantu A70 group is unique in that they are the only Bantu languages in which such a double extension became a productive passive marker. There seems to be a plausible functional explanation for the emergence of this non-compositional passive meaning from the combination of the middle suffix -VbV and the associative/reciprocal suffix -an-. The abstract notion of "co-participation" or "plurality of participants" shared by the reciprocal, associative and passive may have enabled the passive reading of the compound suffix -Vban. In the rare instances of synchronically productive stacking involving the suffixes -VbV and -an in Fang, the former maintains its intransitive middle meaning, while the latter adopts an associative meaning. Diachronically, a reanalysis of the notion of co-participation included in this associative meaning may have made it possible to introduce an oblique agent participant which is precisely the criterion that distinguishes true passives from middles, such as the anticausative or neutro-passive. The polysemy of -Vban shows that the adoption of the passive function is not the only semantic innovation which the suffix underwent. It also developed other non-compositional meanings. It occurs as a proper reflexive marker, though not fully productively, and it has lexicalized uses as middle marker. The notion of co-participation is entirely absent in these uses. Accordingly, the universally common reflexive > reciprocal > middle > passive cline is difficult to conceive as a plausible semantic evolution path for -Vban. It is even questionable if unidirectional semantic change is a reasonable scenario anyhow. If the passive meaning indeed evolved from a reinterpretation of the notion of co-participation, the meanings entirely missing this notion — reflexive and middle — would need to be later developments in a unilinear pathway, which would oppose a universal trend. It is therefore perhaps more likely to assume a polygenetic evolution in which the middle and reflexive meanings of -Vban rose independently from its passive meaning and possibly along a part of the typologically common semantic cline described above.

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## Appendix. Abbreviations

PPL applicative associative ASSOC auxiliary AUX comitative COM continuous CONT demonstrative DEM extension FXT FUT future final vowel intensifier INTS locative LOC middle MID noun prefix NP object concord of class 2 passive

OC2

PASS possessive POSS

pр pronominal prefix personal pronoun PPR progressive PROG PRS present past PST RECP reciprocal reflexive marker RM subjunctive SBJV

subject concord of class 1  $SC_1$ 

### Notes

- 1. Research for this paper was conducted at the Linguistics Service of the Royal Museum for Central Africa. We wish to thank Yvonne Bastin, Denis Creissels, Maud Devos, Mark van de Velde and two anonymous peer reviewers for having read and commented an earlier version of this paper. The usual disclaimers apply. Correspondence address: Koen Bostoen, Royal Museum for Central Africa, Leuvensesteenweg 13, 3080 Tervuren, Belgium. E-mail: koen. bostoen@africamuseum.be.
- 2. Guthrie (1971) subdivided the Bantu languages into 15 "zones" (represented by a capital letter) and each of these zones into "groups" (referred to by decimal numbers). Within these groups, each language is attributed a unique digit starting with the first number of the group's decimal. Guthrie's classification is purely referential. It is based on typological and geographical grounds, but not historically motivated.
- 3. The sign \*\* signals forms which are not attested (synchronically) in the languages under study.
- 4. The examples cited in this paper remain faithful to the spelling as it is found in the sources. Some authors adopt a notation which is rather phonetic, others one which is rather phono-

- logical. The phonological differences between the Bantu A70 languages may therefore seem bigger than they actually are.
- 5. We analyze the -\(\phi\) final forms in (4c), like most other CVCV verbs in Bantu A70, as bimorphemic verb stems, consisting of a verb root and a derivational suffix. It should be underlined that this is a diachronic stance. From a synchronic point of view, many of these verbs, including \(-tsib\phi\) and \(-bzib\phi\) in (4c), can be considered monomorphemic. The simplex verb with CVC structure is often no longer attested. On the other hand, even if the base verb is synchronically absent, the commutation of this final \(\phi\) with other suffixes on the same verb root is frequently observed in the lexicon, which implies a morpheme boundary, at least historically, e.g., \*\*-lon-> \(-lon-\phi\) 'to calm down (irt.)', \(-lon-\phi\) 'to be calm', \(-lon-\phi\) 'to calm down (intr.)'. The first suffix in this example is the same as in (4c) and homophonous with one of the synchronic causative-transitive suffixes (Nzang-Bie 2008). The second is the stative/neutro-passive suffix, while the third is the autocausative suffix. The latter two will be discussed further on.
- Data in Nekes (1911: 186) suggest that the same happens in Ewondo. Data in Angenot (1971: 90) indicate that there are even variants of Ewondo where the initial vowel of the passive suffix is systematically dropped.
- Van de Velde (2008) analyzes such noncanonical verbs stems as synchronically monomorphemic. They are probably historically derived, but heir final (C)V expansion is no longer identifiable as a derivational suffix (see also Note 5).
- 8. As can be observed in (7), the final vowel of the -bà suffix is assimilated to certain root vowels
- 9. The identical realization of the passive and reciprocal suffix due to prosodic constraints causes ambiguity between a passive and a reciprocal reading for the derived verbs in (10b) (Van de Velde 2009).
- The extension -*əz* is only rarely observed in Fang and very often interchangeable with -*əl*-.
   It is more common in the other Bantu A70 languages, cf. (13).
- 11. As we discuss in the introduction to Section 4 below, the suffix -an can also be involved in some rare instances of synchronic suffix stacking, see the examples in (25).
- 12. In Eton, the -àn allomorph of the passive and reciprocal suffixes can also be productively agglutinated to the causative -là suffix, which is the only type of synchronic suffix stacking found in Eton, e.g., dʒɔŋ 'be hot' > dʒɔŋ-lɔ̂ 'heat' > dʒɔŋ-l-ân 'be heated/heat each other', jégì 'learn' > jég-lâ 'teach' > jég-lân 'be taught/teach each other' (Van de Velde 2009).
- 13. In Eton, the preposition èèy, meaning 'with' and cognate to yo in Fang is reported (Van de Velde 2006: 127). In Bulu, the marker á is homophonous to the locative preposition (Alexandre 1966: 87). In Ewondo, cognates of both the Bulu particle and the Fang/Eton particle are used: á or ee (Redden 1979: 156).
- 14. In Fang and the other Bantu A70 languages, nearly every verb can take a beneficiary object without extra morphological marking. The applicative suffix commonly used in Bantu to increase a verb's valency with a beneficiary object does not exist. In double object constructions, the first object is always beneficiary, the second patient. In single object constructions, the patient or beneficiary reading of an object with human reference usually depends on the lexical meaning of the verb. For a discussion of this phenomenon of "applicative" complements in Eton, see Van de Velde (2008: 295–299).
- 15. In certain Bantu languages, such as Rwanda (Kimenyi 1980) and Chewa (Trithart 1977), instrumentals, locatives and other oblique arguments of active clauses can be passivized by combining the passive suffix with other verbal derivational morphemes, as mentioned in Keenan and Dryer (2007). Data from Eton suggest that even in Bantu A70 languages, under certain circumstances, the noun of a locative adjunct can be promoted to the subject function of a passive clause without any additional morphological marking on the verb. Compare the

- active sentence àkúb méndīm á sí 'he poured water on the ground' with its passive counterpart sí íkūúbán mèndím 'the ground was poured water on' (Van de Velde 2006: 128).
- 16. The passivization of intransitive action verbs or transitive state verbs whose objects are not patients is rather universally uncommon, but this kind of impersonal passives are reported in certain Bantu languages such as Rwanda (Kimenyi 1980) and Shona (Keenan and Dryer 2007: 346).
- 17. In the literature, the term "autocausative" has received different definitions. Kemmer (1993) herself does not use the term. Voisin-Nouguier (2002) unites all Kemmer's body action verbs under this title, while Geniušiene (1987) only includes verbs referring to body motion and changes in body posture.
- 18. "NF" stands for "the suffix of the nonfinal form of the Hesternal and Hodiernal past perfective" (Van de Velde 2008: xvii), which is a high tone, just like the past tense marker.
- 19. Kemmer (1993: 56) conceives nontranslational motion as "actions of motor manipulation of the body or a body part, without any particular change of location of the body". They involve "contained motion rather than motion along a path". She ascribes verbs, such as "turn", "bend", "bow", to this subclass. We consider them as changes in body posture.
- 20. The last two verbs in (21) seem to be homonyms. There is no tone difference.
- 21. We have joined the cognition and emotion middle under one label and added, for reasons which will become clear below, the "associative" meaning. The meanings "indirect middle", "indirect reflexive", "logophoric middle" and "logophoric reflexive" have been omitted, because they have no relevance for this paper.
- 22. In 1PL hortatives and 2PL imperatives, transitive verbs can only get a reciprocal reading if the reduplicated personal pronoun of the 1PL or 2PL follows the derived verb, e.g., n-záŋ-á byâ byâ 'let's search each other', záŋ-á mína mína 'search each other'.
- 23. The two strategies are mutually exclusive. A co-occurrence of the suffix -əba(n) on the verb and the reflexive pronoun postverbally is considered improper Fang, but can occasionally be heard. The reflexive pronoun can not only be used as an alternative for proper reflexive verbs marked by -ábá(n), but also for certain autocausative verbs having this suffix and even for certain body action verbs ending in -əbə. This suggests that the current organization of the reflexive-autocausative polysemy in Fang needs closer study.
- 24. Schadeberg (2004) reports some rare occurrences of the verb stems *-oneka* and *-patika* in Swahili texts, but admits that they are quite unacceptable for certain speakers.
- 25. Seidl and Dimitriadis (2003: 245) cite these verb stems as -ta and -tikana in the wrong assumption that /ku/ is the prefix of the infinitive. We thank the peer reviewer who pointed this out.
- We wish to thank Denis Creissels for having attracted our attention on this semantic connection.

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