Mark L.O. Van de Velde and Dmitry Idiatov*

The Trapped-in-Univerbation hypothesis for Bantu object prefixes

1 Introduction

During one of our first discussions, perhaps the first, Tom Güldemann wanted to know my (Mark's) views on the shape of Proto-Bantu verb forms: did I think they were as reconstructed by Meeussen (1967), or more like the auxiliary constructions of contemporary Eton (Bantu A71). I cannot remember what I must have mumbled in response, as at that time I had not given much thought to this fascinating question.

The Niger-Congo (N-C) phylum is indeed known for its extreme internal diversity in terms of the semantic density of verb forms. Whereas some N-C languages are strongly analytical, others have exuberantly synthetic verb forms, and many more are somewhere in between. Much like specialists of the Sino-Tibetan phylum, where a similar situation exists (see e.g. Jacques and Pellard 2021), linguists working on the Niger-Congo languages ask themselves which typological profile is original, be it in Niger-Congo as a whole or in lower-level branches such as Benue-Congo, Bantoid or Bantu. Tom Güldemann has been one of the main voices in this debate (e.g. 2007; 2011; 2022), arguing for an overall evolution from more analytical/ intermediate structures towards the highly synthetic ones attested in Eastern Bantu, often reacting to his sparring partner Larry Hyman (e.g. 2004; 2011; 2017). He has expressed disappointment about our relative lack of commitment to this debate, which is certainly not due to a lack of interest on our part, but rather to a certain reluctance to speculate in writing. Reconstructing a morphological typological profile with some certainty is tricky, since typological profiles can change cyclically and criteria for

* **Corresponding author:** Van de Velde, Mark L.O. Langage, Langues et Cultures d'Afrique (LLACAN, CNRS-INaLCO). E-mail: mark.vandevelde@cnrs.fr.
To be cited as: Van de Velde, Mark L.O. and Dmitry Idiatov. 2025. The Trapped-in-Univerbation hypothesis for Bantu object prefixes. In: Ines Fiedler and Lee J. Pratchett (eds.), *Areas, families, and pools aplenty: a Festschrift for Tom Güldemann,* 181-194. Berlin: Humboldt-Universität zu Berlin. DOI: 10.18452/32623.
Appears in: Fiedler, Ines and Lee J. Pratchett (eds.). 2025. *Areas, families, and pools aplenty: a Festschrift for Tom Güldemann*. Berlin: Humboldt-Universität zu Berlin. DOI: 10.18452/31543.

wordhood tend to be language-specific and are often mutually contradictory. We will give up our reluctance here, and concentrate on one hypothesis advanced by Tom, which we will call the *Trapped-in-Univerbation hypothesis for Bantu object prefixes* (TiU), the idea that Bantu object prefixes are reflexes of object pronouns that used to be placed in between an auxiliary and a main verb. This is all we can cover in the ten pages that the editors have kindly allowed us, but it does give us the opportunity to raise some methodological questions.

We will start in Section 2 by framing the TiU hypothesis into Tom Güldemann's wider criticism of Meeussen's reconstruction of a synthetic verbal template with ten slots, some of which can host multiple morphemes. Güldemann (2022) does not reject this reconstruction as such, but argues that it is only valid for "a later stage in Bantu", which Güldemann calls Mainstream spread zone Bantu (MSZB) (2022: 391), and not for the ancestral language of all the languages that have a Guthrie number, namely *Proto-Bantu* (PB). We will use the term *Northwestern Bantu* (NWB) for the equally vaguely delimited Narrow Bantu languages outside of Mainstream spread zone Bantu and *Bantoid* as short for the non-Bantu Bantoid languages.[1] Section 3 briefly comments on the importance of areal typology for morphosyntactic reconstruction in Güldemann's approach. We discuss the methodological consequences of this for the Trapped-in-Univerbation hypothesis in Section 4. In Section 5, we will stick out our neck a bit further and share our current hypotheses on PB verbal morphology.

2 Interpreting Meeussen's (1967) reconstruction

Güldemann (2022: 390) uses the schematic representations of predicate structures in (1) to distinguish Meeussen's influential PB reconstruction (1a) from his own proposal (1b). C represents the verb root.

(1) a. [A-B-C-D-E-F]
b. [A-B] [C] [D-E-F]
[A-B] [C-[D-E-F]]
+ other patterns

[1] The notion of *Mainstream spread zone Bantu* (MSZB) does not correspond to an identified clade, nor to a geographical area that can be clearly delimited. The same is logically the case for its counterpart NWB. It is therefore impossible that a single historical univerbation event could be at the origin of all contemporary synthetic verb forms that conform to Meeussen's template. If the emergence of Meeussen's template did take place after the dispersal of PB, it must have occurred on more than one occasion, or it must somehow have spread. In this contribution, we follow Güldemann in using MSZB (and NWB for the Bantu languages outside of MSZB) for the sake of the argument.

The representation in (1b) is instantiated by the probably non-exhaustive set of more specific patterns in (2) (2022: 392).

(2) a. i. [SBJ-STEM]
ii. [OBJ-STEM]
iii. [INF-STEM]
b. i. [SBJ-AUX] [Ø STEM]
ii. [SBJ-AUX] [SBJ-STEM]
iii. [SBJ-AUX] [OBJ-STEM]
iv. [SBJ-AUX] [INF- STEM]

Güldemann (2022: 392) rightly points out that the structures in (2b) are currently attested in languages throughout the Bantu area, where they show a tendency for univerbation towards the template reconstructed by Meeussen. It strikes us as very unlikely that anybody has wanted to claim that PB lacked auxiliary constructions. Meeussen's concise writing style left out everything that he deemed obvious, so auxiliary constructions are not explicitly reconstructed, although they are mentioned in passing (1967: 113). [2] However, he and his students were obviously aware of the fact that a lot of the affixal material found in synthetic Bantu verb forms originates in auxiliaries, infinitive markers and other ingredients of more analytical constructions. For instance, Meeussen (1967: 109) points out that very few of the attested Formatives (i.e. tense-aspect prefixes) can be shown to be reflexes of a PB prefix. Likewise, Bastin (1989 / 2020) has shown in great detail how auxiliary constructions consisting of a 'be' verb (preceded by a subject index) and an infinitive (preceded by a locative marker) arise time and again to express progressive aspect and how these analytical constructions follow a multitude of paths towards synthetic verb forms that conform to Meeussen's template.

Incidentally, the recurrent emergence of auxiliary constructions that subsequently undergo univerbation is found in NWB as much as in MSZB. In Eton (A71), some speakers of dialects close to the Ewondo (A72) area have the synthetic Present tense form found in the other Beti-Bulu-Fang languages (3a), next to a newer present progressive expressed by an auxiliary derived from the verb 'stand' (3b). This auxiliary construction generalized to become the Present tense in the majority of dialects, where the original construction with prefix *à-* was lost, though leaving a trace in the initial floating low tone of the Present auxiliary *ˡtə́*. Among younger speakers, the initial consonant of

[2] "A number of languages seems to postulate conjunctive tenses; these are characterised by an initial high tone (not conflicting with the prefixal tone?), and are used as special verb form of otherwise unmarked subordinated clauses (also after auxiliaries)."

the new Present tense marker undergoes lenition to [r], showing that it has been reinterpreted as a prefix (3c). This is because the consonant /t/ is restricted to the initial position of lexical stems in Eton. The initial /t/ of the Present tense marker was clearly reinterpreted as /d/, which is realised [r] in non-prominent (e.g. affixal) syllables, in a process of univerbation (Van de Velde 2008: 17, 25).

(3) Eton (Van de Velde 2008 and field notes)
   a. m-à-dí [1SG-PRS-eat] 'I eat.'
   b. mə̀-tə́ ˈdí [1SG-PRS INF.eat] 'I am eating.' > 'I eat.'
   c. mə̀-rə́-ˈdí [1SG-PRS-eat] 'I eat.'

In our view, the synthetic verb forms in (3a) and (3c) are not fundamentally different from those attested in MSZB. The main differences are a shorter stem and the absence of object indexes. The former is due to maximality constraints.[3] The latter is not unique to NWB within Bantu.

Therefore, if we wish to evaluate the validity of Meeussen's reconstruction, we need to try and determine whether his highly synthetic verb form existed next to more analytical constructions. The questions are thus: (i) since when have analytical verb forms shown a tendency for univerbation, and; (ii) which were the exact properties of the goal construction of this tendency? We will propose a tentative answer in the Conclusion.

3 Areal arguments for grammatical reconstruction

Tom Güldemann often rightly points out that the highly synthetic nature of verbs in MSZB languages is a typological rarity within Bantoid and the wider Benue-Congo family. He also argues for the existence of a linguistic area called Macro-Sudan belt, defined in terms of a set of typological features typical there, rare elsewhere, and crosscutting genealogical boundaries, and he states that PB was spoken in that area. Consequently, he argues, it is likely that PB had the typological characteristics of the area, including the absence of highly synthetic verb forms. Although we agree that typological considerations can be useful for hypothesis formation, they should not be used as arguments or evidence. Hypotheses based on typological

[3] The how and why of maximality constraints are in need of explanation, but their existence is in no doubt, since they are synchronically active in the grammars of a number of contemporary Bantu languages. In Orungu (B11), for instance, adding a Beneficiary to the argument structure of a verb requires the use of an applicative suffix, except if the resulting verb stem would have more than three syllables, in which case no applicative suffix can be used.

considerations should always be backed up by detailed scenarios of change that are compatible with the facts.

As for the idea of PB as a Macro-Sudan language, our study of the lexical distribution of labial-velar stops (Idiatov and Van de Velde 2021) has shown that this feature associated with the Macro-Sudan belt has a non-trivial geographical distribution: it is most deeply entrenched in low altitude forests. Preliminary work on languages with a very high noun to verb ratio shows a similar areal distribution (Idiatov et al. 2021). In both cases, the feature was definitely absent in PB, suggesting that its speakers were more adapted to areas with a savanna vegetation situated on higher altitudes in the general region where PB must have been spoken.[4] Assuming that a Macro Sudan linguistic area was already in place at the time PB was spoken—which is not a trivial assumption—it strikes us as unlikely that PB shared its features.

If, for the sake of the argument, we side with Güldemann and assume that PB had the typological features of the NWB/Bantoid languages currently spoken in its assumed homeland, then we must be careful not to cherry-pick those features that happen to be compatible with our historical hypothesis. This will be the main topic of the next section.

4 From S-AUX PRO V to S-TA-O-V?

In this section, we point out some problems with Tom Güldemann's Trapped-in-Univerbation hypothesis, the highly intuitive idea that the object pronouns in the S-AUX PRO V patterns found in, for instance, the contemporary A70 languages became trapped in a process of univerbation to become the object prefixes of synthetic Bantu verb forms.

4.1 OV versus VO order and the role of information structure

Following leads by Talmy Givón, Tom Güldemann (2007: 88; 2022: 389, 401) argues that the Ewondo example in (4) illustrates the likely source construction for synthetic MSZB verb forms.

[4] As we discuss in Idiatov & Van de Velde (2021:98), we believe that the initial diversification of both Bantoid and later Bantu is likely to have started in a more northerly location than the general region of the Grassfields Plateau, contrary to what is typically assumed in the literature. In particular, we argue that a more plausible location should be somewhere to the north of the western end of the Adamawa Plateau closer to the Alantika mountains.

(4) Ewondo (Güldemann 2007: 88, citing Redden 1979)
a-kad mə soób bī-yé
3SG-HAB 1SG wash 8-clothes
'He washes clothes for me.'[5]

This idea is very appealing, as all the necessary elements are exactly in the right place. All that is needed is their gradual morphological integration, a crosslinguistically common evolution. Moreover, Güldemann argues, preverbal objects correlate with higher topicality in Benue-Congo, whereas the presence of object prefixes in several Narrow Bantu languages is conditioned by definiteness of the object, thus providing a further connection between the presence of preverbal object pronouns and that of object prefixes.[6]

However, if we take the typological profile of contemporary NWB and Bantoid languages to be indicative for that of PB, the relative rarity of the Ewondo construction in (4) is problematic. Apart from some scattered examples in the Mbam languages (such as Tunen, Mandi-Nyokon and Gunu), adjacent Southern Bantoid languages such as Ndemli and A80 (Gyeli) languages, preverbal objects are mostly found in languages currently classified as Northern Bantoid languages, such as Tikar, Wawa or Nizaa, where they are morphosyntactically conditioned and usually not restricted to pronominal objects. If one wishes to argue that the existence of S AUX O V patterns in NWB/Bantoid is relevant for the reconstruction of PB verb forms, then the fact that O can typically be nominal in these structures is a complication, because the presence of nominal objects would have blocked the assumed process of univerbation.[7]

The idea that preverbal object position is somehow related to topicality in NWB/Bantoid is in need of firmer justification. One could argue that

[5] Strictly speaking, this is not an example of the auxiliary construction that it is meant to illustrate, but it has equivalent properties. Habituality is here expressed by a verb (called quasi-auxiliary in Van de Velde 2008) in a serial verb construction. It is itself inflected for the Present tense by means of a prefix à-: à-à-kàd 3SG-PRS-HAB. Crucially, these quasi-auxiliaries can be endlessly combined in one complex predicate, where the first verb is inflected and the following verbs are infinitives, marked by a floating low tone prefix, including the lexical verb.

[6] For instance: "(…) the verbal object prefixes in Savannah Bantu, which arose from an earlier S-(Auxiliary)-O-V pattern, correlate with a definite postverbal object" (Güldemann 2007: 97).

[7] A reviewer pointed out that the problem of preverbal nominal objects blocking univerbation rests on the assumption that they already existed at the time PB split, versus only pronominal ones. Remember that the goal of this section is not to argue for or against a certain scenario of change, but to argue for methodological rigour: if you take the typological traits of a set of contemporary languages to be indicative for the structure of a proto-language, you cannot cherry-pick those characteristics that conform to your hypotheses about the structure and evolution of that proto-language.

pronouns are inherently more topical than nouns, and that this is why they are preverbal in the A70 languages. However, although S-AUX PRO V constructions can be elicited in A70 languages, they are fairly rare in spontaneous discourse, precisely because topical objects tend to be left unexpressed, especially patients. This too appears to be an areal feature found in at least the NWB and Bantoid languages, but this is in need of further study.

4.2 The mutual ordering of multiple objects

Assuming still that the grammatical characteristics of the languages currently spoken near the PB homeland are relevant for its reconstruction, the differences in the mutual ordering of multiple unmarked objects in NWB/Bantoid versus object prefixes in MSZB are problematic for the TiU hypothesis. Benji Wald (2022) proposes the very useful terms *descending* and *ascending* for the order of objects, where a descending order is one in which objects are arranged from more to less prominent, and ascending from less to more prominent. There are two relevant typological differences between NWB/Bantoid and MSZB. First, whereas the order of multiple unmarked objects is always fixed and descending in NWB/Bantoid (5), object prefixes in MSZB are almost always ascending when their order is fixed (6).

(5) Eton (Van de Velde 2008: 302)
a. m-èè ɲí dɔ̂ ᴸ-vɔ́ **Goal Theme**
1SG-FUT him it INF-give
'I will give it to him.'
b. * m-èè dɔ́ ɲí ᴸ-vɔ́ ***Theme Goal**

(6) Luganda (Ranero 2015: 13; cited via van der Wal 2020)
a. Omusajja y-a-zi-ba-wa **Theme Goal**
1.man 1SBJ-PST-it-them-give
'The man gave them it.'
b. *Omusajja y-a-ba-zi-wa. ***Goal Theme**

The second difference concerns the way in which relative prominence is defined in the two regions. In NWB/Bantoid, relative prominence appears to be determined exclusively by thematic role (Goal > Theme) as far as word order is concerned. In contrast, thematic roles are in competition with inherent and/or contextual topicality in MSZB, depending on the language and the construction (Wald 2022: 427–430). The competing hierarchies are summarized in (7).

(7) Prominence hierarchies determining prefix orders in MSZB
   a. inherent topicality (person): 1 > 2 > 3 [anim] > 3 [inan]
   b. contextual topicality: DEF > SPEC > NON-SPEC
   c. thematic role: GOAL > THEME

They can be illustrated by the examples in (8) from Rwanda, which has a strictly ascending order of object prefixes. In (8a) the two object prefixes differ in both inherent topicality and (obviously) thematic role. In this case it is inherent topicality that determines the order of object indexes, leading to ambiguity in the mapping of participants onto thematic roles. When both objects have the same degree of inherent topicality, their mutual order is determined by thematic role (8b).

(8) Rwanda (Wald 2022, citing Ngoboka 2005 and Yokoyama 2016)
   a. y-a-mu-ku-eretse
      SBJ_1-PST-OBJ_1-OBJ_{2SG}-show.PFV
      'He showed her to you / you to her.'
   b. y-a-ba-mw-eretse
      SBJ_1-PST-OBJ_2-OBJ_1-show
      'He showed them to her.' *her to them

We can contrast this with languages from the NWB/Bantoid area such as Wawa (Mambiloid < Northern Bantoid) (9) and Mbula (Jarawan Bantu) (10), where the order is descending and prominence depends entirely on thematic role. As illustrated in (9), the Goal always precedes the Theme, irrespective of animacy or morphosyntactic status, i.e. nominal versus pronominal. Whether the Goal object cannot, can or must stand in between an auxiliary and the main verb, as in (9d), is determined by the morphosyntactic status of both objects.

(9) Wawa (Martin 2012)
   a. mə́ nárə́ Aliou ʤǔrǎì 'I gave Aliou a present.' **Goal Theme**
   b. mə́ nárə́ mū ʤǔrǎì 'I gave him a present.' **Goal Theme**
   c. mə́ nárə́ Aliou dèì 'I gave this to Aliou.' **Goal Theme**
   d. mə́ də́ mū nan ʤǔrǎì 'I am giving him a present.' **Goal Theme**

In Mbula, relative inherent topicality can determine whether a pronominal object is a suffix or an independent pronoun, but object order is still uniquely determined by thematic role, and always descending (10).

(10) Mbula (elicited with Tsekambo Nelson)

a. lə́mdàmì **Goal Theme**
lə́md-^{H}-àm-ì
show-APPL-OBJ$_{1SG}$-OBJ$_{3SG}$
'Show him to me!'

b. lə́mdì mîm **Goal Theme**
lə́md-^{H}-ì mîm
show-APPL-OBJ$_{3SG}$ 1SG
'Show me to him!'

For the sake of completeness: when one of multiple objects is flagged by an adposition in NWB/Bantoid, the flagged object follows the unmarked one, irrespective of thematic roles, as illustrated in (11).[8]

(11) Noni (Hyman 1981: 78)

a. mē nɔ́ɔ̀ n-dɛ̀ɛ̀ wǎn bè-ŋkfǔ **Goal Theme**
1SG FOC SBJ$_{1SG}$-cook.P$_0$ 1.child 8-yam
'I have cooked the child yams.'

b. mē nɔ́ɔ̀ n-dɛ̀ɛ̀ bè-ŋkfǔ **ɛ̄** wān **Theme Pr Goal**
1SG FOC SBJ$_{1SG}$-cook.P$_0$ 8-yam for 1.child
'I have cooked yams for the child.'

In conclusion, in order for the Trapped-in-Univerbation hypothesis to be viable, it should come with a clear and realistic scenario that explains when and how the mutual ordering of object pronouns was reversed in the process of univerbation.

4.3 The order of object indexes and infinitive markers

The TiU hypothesis has another ordering problem, already pointed out by Wald (2022: 450), namely that the pronouns of the alleged source construction precede the infinitive prefix that marks the main verb in the presence of an auxiliary. This is shown explicitly in the Eton example in (5a), but it is equally true for the Ewondo example in (4), where the glossing is less accurate. The Ngwi examples in Figures 3 and 4 of Pacchiarotti and Bostoen (this volume) illustrate synthetic verb forms that recently evolved from auxiliary constructions in a process of univerbation that did trap the original object pronoun, showing that the TiU hypothesis is in theory perfectly

[8] Following Hyman (2017), the two examples of NWB/Bantoid languages known to us to have Theme–Goal order among unmarked lexical objects, viz. Medumba and Nyokon, most likely lost an indirect object adposition. Both are closely related to languages that have such an adposition.

realistic. Predictably, their object prefixes precede the reflex of the infinitive marker *n*-.

However, in MSZB languages, object prefixes follow the infinitive marker in infinitive verb forms (12). They also follow reflexes of the infinitive marker in synthetic verb forms that evolved from auxiliary constructions (13).

(12) Makwe (Devos 2008: 410)
kú-m-pélekeéza
INF-OBJ$_1$-send
'to send her'

(13) Mwani (Bastin 1989, citing Philippson 1983)
ni-waŋku-kw-âmbír-a ~ na:nkukwâmbíra[9]
1SG-PRS.PROG-OBJ$_{2SG}$-tell-FV
'I am telling you.'

Here too, we need a concrete scenario explaining how and when object markers and infinitive markers switched positions in order to make the Trapped-in-Univerbation hypothesis compatible with the facts.

5 Conclusion

When trying to determine (i) since when analytical verb forms have shown a tendency for univerbation in the (pre)history of Bantu, and (ii) which morphological positions existed in the earliest reconstructible template, the age of the specific morphological material that we find in the pre-stem domain is hardly relevant, as this material is subject to loss and renewal. We agree with Güldemann (2022) that Meeussen's reconstructed paradigm of object prefixes is unlikely to be valid for PB, but not that this implies that the "Infix" (i.e. object prefix) position in the template itself is invalid as a PB reconstruction. Rushing through the pre-stem domain of Meeussen's template, we can observe the following. First, we have good reasons to assume that the Preinitial position in Meeussen's template—the prefix position preceding the one that is typically occupied by a subject prefix—is an innovation that did not yet exist at the PB stage (see Van de Velde 2022 for arguments).

We believe PB verbs (including auxiliaries) had an Initial position, occupied by a subject index. Güldemann (2022: 395) points out that subject

[9] The presentation and glossing in Bastin (1989/2020) reflects the etymology of the present progressive marker: wa-ŋ-ku- 'be'-18-15-, where 18 is a locative marker and 15 the prefix of the infinitive. Note that the variant presents a further step towards formal compliance with Meeussen's template.

indexes hardly ever attach directly to the stem in Benue-Congo languages outside of Bantu, where they are often integrated into a so-called STAMP cluster (or "morph"). This, however, is not a difference between Bantu and the rest of Benue-Congo, as subject indexes typically precede a TAM marker or auxiliary in the Bantu languages, rather than directly the stem of the main verb. The main difference is that STAMP clusters show a greater degree of fusion, generally suggestive of older morphology (i.e. older combinations of specific forms). Traces of subject indexation in Bantoid languages that currently do not have subject agreement might be found in the initial high tone of subjunctive verb forms. Variation in subjunctive marking in the contemporary Bantoid languages (Beavon-Ham, Hamm and Robinson 2024) suggests that this high tone is likely to come ultimately from a clause initial high toned demonstrative, which lost its segmental material and attached to the nominal or pronominal subject. Subsequently subject pronouns were prefixed and they then lost their segmental material too, leaving only their high tone as a trace, exapted as the verbal marker of the Subjunctive.

In the absence of a Preinitial morpheme in PB, Meeussen's Postinitial position may have been the original site for negation marking, if negation was marked on the verb at all. We have not searched specifically for indications for or against its existence in PB.

Nurse and Philippson (2006) argue that some tense-aspect prefixes can be reconstructed in PB. If this is correct, then it counts as evidence for the existence of their position in Meeussen's template, i.e. the Formative position. The same can be said for their reconstruction of itive **ka-* and its Limitative position. However, the strength of the verbal template and its nature as a goal construction favoring (C)V- prefixes makes it hard to prove that formally and functionally similar prefixes are cognate and reconstructible, thereby paradoxically complicating the reconstructibility of the template itself.

Turning to the Infix position, which accommodates reflexive markers and object indexes, our doubts about the validity of the TiU hypothesis do not provide evidence for or against its reconstruction. Object prefixes could still be an innovation in MSZB, in which case they must have originated in postverbal object pronouns or enclitics undergoing some process of clitic climbing. Wald (2022) argues in favor of Meeussen's reconstruction of an Infix position that can host multiple object prefixes, and adds that their mutual ordering may have been free. Outside of MSZB, traces of a reflexive prefix in Infix position can be found in root-initial consonant alternations between cognate transitive and intransitive verbs. In Mbula, for instance, the formal difference between *tàmsə́* 'stop (tr)' and *ʧàmé* 'stop (intr)', involves the presence of a causative suffix *-sə* in the transitive counterpart and the

palatalization of the root-initial stop in the intransitive verb. The latter is arguably due to an earlier reflexive prefix with a front close vowel.

Summarizing, our currently preferred hypothesis regarding the typological profile of Proto-Bantu verb forms is schematized in (13), where TA is short for tense-aspect and AM for associated motion.

(14) Proto-Bantu verb forms
  a. SBJ-(NEG?)-TA-(AM?)-OBJ-STEM
  b. SBJ-AUX INF-STEM
  c. perhaps other analytical patterns too

To be continued…

Acknowledgements
We wish to thank Larry Hyman, Lis Kerr, and Koen Bostoen for useful comments.

Abbreviations

AM	associated motion	NEG	negation
ANIM	animate	NWB	Northwestern Bantu
APPL	applicative	OBJ	object
AUX	auxiliary	P_0	perfect/immediate past
DEF	definite	PB	Proto-Bantu
FOC	focus	PROG	progressive
FUT	future	PRS	present
FV	final vowel	PST	past
HAB	habitual	SBJ	subject
INAN	inanimate	SG	singular
INF	infinitive	SPEC	specific
MSZB	Mainstream spread zone Bantu	TA	tense-aspect
		TiU	Trapped in Univerbation

References

Bastin, Yvonne. 1989. El prefijo locativo de la clase 18 y la expresión del progresivo presente en bantú (i). *Estudias africanos: revista de la Asociación Española de Africanistas* 4(6). 35–55.
Bastin, Yvonne. 2020. The Class 18 Locative Prefix and the Expression of the Present Progressive in Bantu. *Africana Linguistica* 26. 5–58.
Beavon-Ham, Virginia, Cameron Hamm and Rachel Robinson. 2024. Subjunctive marking in Grassfields languages that lack verbal subject markers. In. Yaoundé.
Devos, Maud. 2008. *A Grammar of Makwe*. München: LINCOM.

Güldemann, Tom. 2007. Preverbal objects and information structure in Benue-Congo. In Enoch Oladé Aboh, Katharina Hartmann and Malte Zimmermann (eds.), *Focus strategies in African languages: the interaction of focus and grammar in Niger-Congo and Afro-Asiatic.* (Trends in Linguistics - Studies and Monographs 109), 83–111. Berlin: Mouton de Gruyter.

Güldemann, Tom. 2011. Proto-Bantu and Proto-Niger-Congo: Macro-areal Typology and Linguistic Reconstruction. In Osamu Hieda, Christa König and Hirosi Nakagawa (eds.), *Geographical Typology and Linguistic Areas*, 109–141. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Güldemann, Tom. 2022. Predicate structure and argument indexing in early Bantu. In. Zenodo. https://doi.org/10.5281/ZENODO.7575831.

Hyman, Larry M. 2011. The Macro-Sudan Belt and Niger-Congo Reconstruction. *Language Dynamics and Change* 1(1). 3–49.

Hyman, Larry M. 2017. Multiple argument marking in Bantoid: from syntheticity to analyticity. In Walter Bisang and Andrej Malchukov (eds.), *Unity and diversity in grammaticalization scenarios* (Studies in Diversity Linguistics 16), 67–96. Berlin: Language Science Press. https://doi.org/10.5281/ZENODO.823230.

Hyman, Larry Michael. 1981. *Noni Grammatical Structure with special reference to verb morphology* (Southern California Occasional Papers in Linguistics 9). Los Angeles: Department of Linguistcs, USC.

Hyman, Larry Michael. 2004. How to become a “Kwa” Verb. *Journal of West African Languages* 30(2). 69–88.

Idiatov, Dmitry and Mark L. O. Van de Velde. 2021. The lexical distribution of labial-velar stops is a window into the linguistic prehistory of Northern Sub-Saharan Africa. *Language*. Linguistic Society of America 97(1). 72–107. https://doi.org/10.1353/lan.2021.0002.

Jacques, Guillaume and Thomas Pellard. 2021. Phylogenies based on lexical innovations refute the Rung hypothesis. *Diachronica* 38(1). 1–24. https://doi.org/10.1075/dia.19058.jac.

Martin, Marieke. 2012. *A grammar of Wawa: an endangered language of Cameroon*. University of Kent phd.

Meeussen, Achille Emile. 1967. Bantu grammatical reconstructions. *Africana Linguistica* 3. 81–121.

Ngoboka, Jean-Paul. 2005. *A syntactic analysis of Kinyarwanda applicatives.* Durban: University of KwaZulu-Natal PhD Thesis.

Nurse, Derek and Gérard Philippson. 2006. Common tense-aspect markers in Bantu. *Journal of African Languages and Linguistics*. De Gruyter Mouton 27(2). 155–196. https://doi.org/10.1515/JALL.2006.009.

Pacchiarotti, Sara and Koen Bostoen (this volume). Verb-final subject suffixes in Ngwi (West-Coastal Bantu B861, DRC): language-internal innovation or language-external imposition. In: Fiedler, Ines and Lee J. Pratchett (eds.). 2025. *Areas, families, and pools aplenty: a Festschrift for Tom Güldemann*. Berlin: Humboldt-Universität zu Berlin. https://doi.org/10.18452/31543.

Philippson, Gérard. 1983. Quelques données sur le mwani (Mozambique). In. Sèvres. Ranero, Rodrigo. 2015. *The syntax of dislocated objects in Luganda*. Cambridge: University of Cambridge PhD Thesis.

Redden, James E. 1979. *A Descriptive Grammar of Ewondo* (Occasional Papers on Linguistics). Vol. Number 4. Carbondale: Department of Linguistics Southern Illinois University.

Van de Velde, Mark L.O. 2008. *A Grammar of Eton* (Mouton Grammar Library). Berlin: Mouton de Gruyter.
Van de Velde, Mark L.O. 2022. Agreement on Proto-Bantu relative verb forms. In Koen Bostoen, Gilles-Maurice de Schryver, Rozenn Guérois and Sara Pacchiarotti (eds.), *On reconstructing Proto-Bantu grammar* (Niger-Congo Comparative Stucies), 463–492. Berlin: Language Science Press.
Wal, Jenneke van der. 2020. The AWSOM correlation in comparative Bantu object marking. In Peter W. Smith, Johannes Mursell and Katharina Hartmann (eds.), *Agree to agree: Agreement in the Minimalist Program* (Open Generative Syntax 6), 199–234. Berlin: Language Science Press.
Wald, Benji. 2022. On reconstructing the Proto-Bantu object marking system. In. Zenodo. https://doi.org/10.5281/ZENODO.7575833.
Yokoyama, Tomohiro. 2016. Structure and features: The ordering of object markers in Kinyarwanda. In *URL https://blogs. helsinki. fi/bantu-6/files/2016/09/Bantu6-WS4-Yokoyama-Ordering-OMs-In-Kinyarwanda. pdf, Presentation handout from the 6th International Conference on Bantu Languages (BANTU 6)*. Helsinki.