

Elisabeth J. Kerr* and Jenneke Van der Wal

Indirect truth marking via backgrounding: evidence from Bantu

<https://doi.org/10.1515/zfs-2023-2010>

Abstract: Verum focus has long been analysed as part of information structure, being accounted for within a theory of focus as generation of alternatives on a polarity value. Recently, however, this view has been challenged, with some authors arguing for a separation between verum and focus. The empirical debate focuses on two types of strategies: either verum is marked identically to focus (e.g., pitch accent in German, English) or through a dedicated strategy (e.g., dedicated markers in Gitksan, Bura, South Marghi). On the basis of the second type, it has been argued that the link between focus and verum is only superficial, with verum instead arising from a lexical operator VERUM. In this paper, we provide evidence in support of the traditional link between truth marking and focus, using original field data on the morphosyntactic expression of information structure in 11 Bantu (Niger-Congo) languages. By working from function to form, we show that these languages use a variety of grammatical strategies for truth expression, strategies that are used elsewhere in the information structural system for backgrounding. In this way, verum is not directly marked by focal accent but marked indirectly via backgrounding, which we formulate as the BACKGROUNDING AND UNDERSPECIFICATION THESIS (BUT). On the basis of this Bantu evidence, we add a third type of strategy to the typology, where verum is marked indirectly via backgrounding. We use this updated typology to argue in favour of maintaining a conceptual link between verum, polarity focus, and predicated-centred focus more broadly.

Keywords: verum; information structure; Bantu; backgrounding; truth focus

1 Introduction

The term VERUM FOCUS was coined by Höhle (1988, 1992) to refer to the subtype of focus scoping over the truth of a proposition, which in German and English is marked by a pitch accent (1). An early example in the Africanist literature is discussed in terms of

***Corresponding author: Elisabeth J. Kerr**, Leiden University, Leiden, The Netherlands,

E-mail: e.j.kerr@hum.leidenuniv.nl

Jenneke Van der Wal, Leiden University, Leiden, The Netherlands,

E-mail: g.j.van.der.wal@hum.leidenuniv.nl. <https://orcid.org/0000-0003-1136-5884>

POLARITY FOCUS (a subtype of AUXILIARY FOCUS), which is marked morphologically in the Grassfields Bantu language Aghem (Hyman and Watters 1984), illustrated in (2).

- (1)

Karl

HAT

den

Hund

gefüttert.

Carl has the dog fed

‘Carl DID feed the dog.’

(pitch accent, German; Höhle 1988, 1992, cited in Lohnstein 2016: 290)
- (2)

m̩

máà

zí

bé-’kó

né.

1SG P1/FOC ate fufu today

‘I DID eat fufu today.’

(verb form, Aghem (Grassfields Bantu); Hyman and Watters 1984: 234, glosses adapted)

In the now-standard model of focus scope, verum focus is subsumed under OPERATOR FOCUS within the notion of PREDICATE-CENTRED FOCUS (PCF) (see e.g., Dik 1997: 331; Güldemann 2009; Zimmermann 2016), as presented in Figure 1.

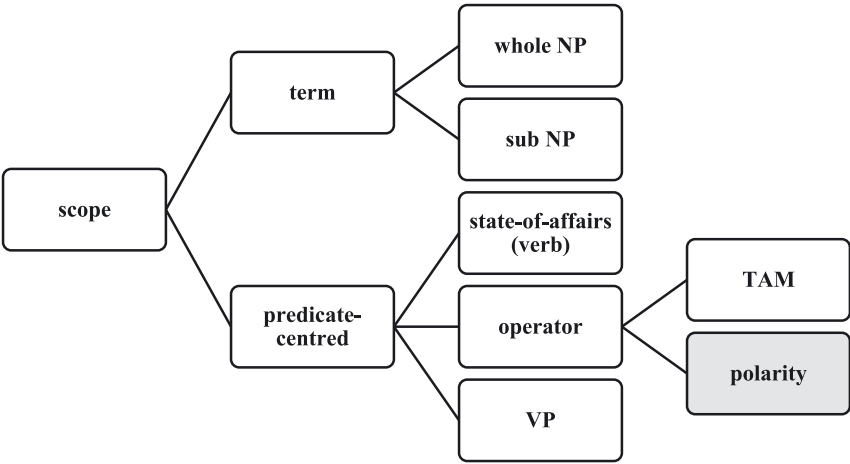


Figure 1: Diagram of focus scope, showing polarity focus as subtype of predicate-centred focus (Van der Wal 2021, based on Dik 1997: 331; Güldemann 2009; Zimmermann 2016; Güldemann and Fiedler 2022: 540).

More recently, the association between emphasis on the truth of a proposition and the notion of focus has been challenged, with Gutzmann et al. (2020) explicitly arguing that VERUM should be divorced from FOCUS. They support this claim on the basis that the languages Gitksan (Tsimshianic), Bura (Chadic) and South Marghi (Chadic) have different marking for verum contexts to (other) focus contexts, concluding that

the link between the use of pitch accent in (1) and in other focal contexts in German and English is in fact “superficial”:

we think that the concept of ‘verum focus’ should be abandoned, as it was motivated by the **superficial similarity between verum and focus** marking in languages like German and English. [...] **what is called ‘verum focus’ is not focus**, but just a way to mark verum. (Gutzmann et al. 2020: 42 [emphasis added])

Thus, instead of invoking the notion of focus, Gutzmann et al. (2020) propose that markings such as (1) and (2) are due to the presence of a pragmatic operator VERUM, which functions to downdate the question about the truth of a proposition ($?p$) from the discourse (working under a Question Under Discussion (QUD) framework; Roberts 1996 et seq.). In other words, VERUM is used to refer to a situation whereby a speaker “fixes the polarity left uncertain in the question, and in addition adds emphasis on the polarity of the answer” (Gutzmann et al. 2020: 11). Building on earlier work by Romero and Han (2004), Gutzmann and Castoviejo-Miró (2011), and Repp (2009, 2013), they provide the following semantics for the VERUM operator:

- (3) $[[\text{VERUM}]]^{u,c}(p) = 1$, if the speaker c_s wants to prevent that QUD(c) is downdated with $\neg p$.

(Gutzmann et al. 2020: 9)

Here, we see that VERUM is a use-conditional operator that applies when the speaker not only asserts the truth of a proposition p , but moreover wants to prevent the reverse polarity $\neg p$ (not p) being added to the common ground. The negotiation of the question under discussion is therefore argued to be key to VERUM, rather than the polarity value of the proposition.

This separate conceptualisation of focus is formalised as the LEXICAL OPERATOR THESIS (LOT) by Gutzmann et al. (2020), where verum marking arises due to the presence of the VERUM operator. The approach stands in contrast with the FOCUS ACCENT THESIS (FAT), whereby verum marking is a form of focus marking. As the languages that Gutzmann et al. (2020) bring forward have dedicated strategies for the verum contexts, i.e., strategies that are not found in polarity focus contexts, they propose a two-way typology:

- (4) Gutzmann et al.’s (2020) **two-way typology of verum strategies wrt focus**
 Type I. verum marking = focus marking (earlier motivation for FAT)
 Type II. verum marking \neq focus marking (new motivation for LOT)

The existence of Type II is used to provide evidence against the FAT in motivating a separation between verum and focus. The authors argue that the LOT applies universally, in that verum should be seen as separate from polarity focus, but has been previously unnoticed due to the “superficial” overlap between verum marking and focus in Type I.

It is therefore clear that *verum* can (at least in some languages) be distinguished from polarity focus, and we agree with Gutzmann et al. (2020) that this is indicative of a conceptual difference. However, in this paper we argue against the larger conclusions of Gutzmann et al. (2020) that the two concepts are unlinked, instead showing that *verum* is still dependent on focus (and background) marking. In the rest of this paper, we make a terminological distinction between *VERUM* (the pragmatic notion related to QUD management) and *POLARITY FOCUS* (the traditional notion of focus on the polarity of a proposition), thus avoiding the term *VERUM FOCUS*. We use the term *TRUTH* as a cover term that includes both polarity focus and *verum*.

Empirically, the difference between polarity focus and *verum* can be identified by means of different discourse contexts, as provided in Matthewson and Glougie's (2018) update of Zimmermann and Hole (2008), shown in (5) (see also Matthewson 2021).¹ For example, a neutral answer to a yes/no question (ii) can be said to contain polarity focus, but not *verum* ('Did you find the keys?' 'Yes, I found them'/'#I DID find them').

(5) **Discourse contexts not compatible with *verum***

- i. Discourse-initially
- ii. Neutral answers to questions

Discourse contexts compatible with *verum*

- iii. Correction of a previous utterance
- iv. Correction of negative expectations
- v. Emphatic agreement
- vi. Confirmation of expected path of events
- vii. Answers to questions (with emphatic effect)
- viii. Answers to biased yes/no questions
- ix. Answers to indirect questions
- x. In the antecedent of conditionals ('stressing the conditionality')
- xi. Inside yes-no questions (with an 'Is it really?' effect)

(adapted from Matthewson and Glougie 2018: 14–15)

Here, the difference between a *verum* context and a polarity focus context is that the former not only requires salient alternatives but also an "open conflict between salient alternatives" or "the final settlement of a question (regarding salient alternatives)" (Gutzmann et al. 2020: 14). For example, in a negatively biased yes/no

¹ Matthewson and Glougie (2018) list these contexts on the basis of the properties of 'verum emphasis' in English and German, going on to show how the distribution of contexts is "almost identical" in Gitksan. We interpret this list together with the other authors in this volume as a proposal that is expected to apply cross-linguistically.

question, the alternative $p = 1$ is not only salient but also in conflict with the assumptions of the person asking the question (namely, $p = 0$).

With this terminological background in place, we can return to the empirical picture. Gutzmann et al. (2020) acknowledge that their claims are based on a small number of languages, and therefore encourage the investigation of verum in more languages: further studies “have to look at languages that do not use accents as their means to mark focus” (Gutzmann et al. 2020: 15). In this paper we therefore investigate the morphosyntactic expression of verum and polarity focus in eleven Bantu (Niger-Congo) languages, as part of the broader cross-linguistic investigation of truth marking conducted by the authors in this volume. We find that the Bantu languages in our sample use a wide variety of grammatical strategies to express truth, with only one language having a dedicated strategy that directly marks verum (Type II). However, the other ten Bantu languages in our sample do not use focus accent (or other dedicated focus marking) to express truth (as in Type I). Instead, we show that verum can be marked indirectly by means of backgrounding strategies (in addition to universally-available lexical strategies), which we will add to the cross-linguistic typology as Type III.

(6) **Updated typology of strategies with respect to the expression of verum and focus**

- Type I. Verum is marked directly as focus (verum accent; German, English)
- Type II. Verum is marked directly by a dedicated marker (particles; Gitksan, Cinyungwe)
- Type III. Verum is marked indirectly via backgrounding (dislocation, topic doubling etc.; BaSIS languages)

Importantly, our data cover the expression of polarity focus and verum (truth) within the broader context of information structure, taking an onomasiological approach: by which linguistic means is truth expressed? This allows us to show more clearly whether and how polarity focus and verum are linked to focus more generally, in contrast to other work in the literature that has focused on the semantics and pragmatics of a particular strategy (i.e., the semasiological approach). As we will discuss, such consideration of the wider information-structural system is crucial for the evaluation of the relationship between truth and focus.

The remainder of this paper is structured as follows. Section 2 introduces our methodology and the languages in our sample, Section 3 illustrates the different strategies used to mark verum, Section 4 argues for distinctions in degree of underspecification through backgrounding, Section 5 relates the Bantu results to the cross-linguistic and theoretical picture, and Section 6 concludes.

2 Methodology

The starting point for our investigation is the question as to whether and how the expression of truth interacts with focus expression. To answer this question, we need to have a broader look at where truth is in the ecology of information structure in various languages. The Bantu languages are particularly interesting for such a study, as they are known to use morphosyntactic strategies to express various aspects of information structure (see e.g., Downing and Marten 2019; Van der Wal 2015).

In this study we draw upon the data on the expression of information structure in nine Bantu (Niger-Congo) languages that were systematically gathered by the members of the Bantu Syntax and Information Structure (BaSIS) research project, using a specially-designed methodology for the project (Van der Wal 2021). These languages are Tunen (A44, Cameroon), Teke-Kukuya (B77a, Republic of Congo), Kĩitharaka (E54, Kenya), Kirundi (JD62, Burundi), Rukiga (JE14, Uganda), Kinyakyusa (M31, Tanzania), Makuwa-Enahara (P31E, Mozambique), Changan

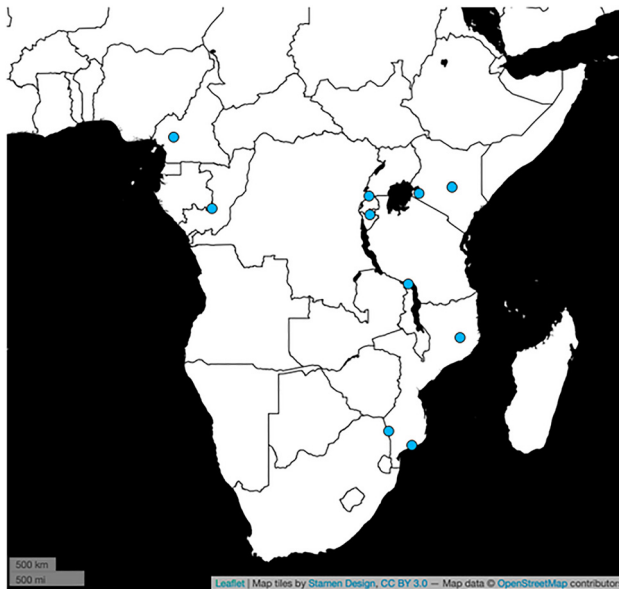


Figure 2: Map of ten Bantu languages in the BaSIS sample [plotting in R using *lingtypology* (Moroz 2017) with co-ordinates from Glottolog (Hammarström et al. 2022)].

(S54, Mozambique) and Cicopi (S61, Mozambique).² We provide additional data from a short field study on Gusii (JE42, Kenya) and additional work on Cinyungwe (N43, Mozambique). The map of BaSIS languages plus Gusii is shown in Figure 2. This set of languages was chosen as a convenience sample based on the expertise of our collaborators and languages of focus of the PhD students on the project, and therefore is not a balanced sample (specifically, there is over-representation of eastern Bantu). Furthermore, as the Bantu languages number approximately 550 varieties (Hammarström 2019), such a study can only be an initial investigation, rather than an exhaustive account of truth expression in Bantu. One point we can however already remark on is that the Southern Bantu languages in the Nguni cluster were not included in our study, but Bloom-Ström and Zeller (this volume) interestingly report similar findings with respect to the strategies used for truth expression.

The BaSIS project methodology (Van der Wal 2021) builds on earlier work on the investigation of information structure resulting in the Questionnaire on Information Structure (QUIS) methodology (Skopeteas et al. 2006). Diagnostic contexts for focus in the BaSIS methodology include function-to-form tests for the different focus scopes in Figure 1. Additionally, different types of focus are investigated, from information focus (tested via question-answer pairs) to more contrastive focus types including contrastive focus (an alternative is explicitly contrasted with another), corrective focus (an alternative is provided in correction of a previously asserted alternative), and mirative focus (an alternative is expressed that is high on a scale of surprisal) (see e.g., Cruschina 2021).³ Form-to-function tests are also used for further investigation of interesting strategies found in individual languages. Importantly, the elicitation tests involve explicit introduction of a discourse context, either by verbal or visual means, which controls for the focus interpretation of the answer. Finally, natural speech data were collected for each of the 9 BaSIS languages in order to observe focus expression in more natural speech contexts, allowing for example for study of discourse-initiality and interactive speech.

In terms of polarity focus and verum, the BaSIS methodology provides a more limited list of contexts than those in (5), due to having been designed prior to this investigation into the expression of truth cross-linguistically. However, investigation of polarity focus versus verum is still possible from our databases, as we have data

2 Following Bantuist tradition, we indicate the Guthrie referential classification code for each language (Guthrie 1948) according to Hammarström (2019). These Guthrie codes reflect geographical groupings.

3 Note here that we use the term CONTRASTIVE FOCUS in the traditional sense, in a system where information focus is non-contrastive. This differs from the approach adopted by Wagner (2006, 2012), Buring (2019), and Goodhue (2022), who claim that all focus is contrastive, including information focus (cf. Bloom Ström and Zeller 2023).

from both unbiased yes/no questions (polarity focus context) and corrective focus tests (i.e., dispute context; verum context), in addition to supplementary material from the natural speech data. We have also collected additional judgements from our native-speaker linguist collaborators (whom we thankfully acknowledge). Examples where the source is not explicitly indicated all come from the databases in the project; further information on these databases is provided at the end of the paper.

3 Verum strategies in Bantu languages

In conducting this study, we documented all of the strategies found in polarity focus and verum (jointly referred to as ‘truth’) contexts for each of the ten languages in our sample (see Table 1). By working from function to form, we show that each language has multiple means of truth expression. At the same time, in considering the broader information-structural system of each language (as detailed in Van der Wal ms. and chapters therein) we observe that none of the strategies found are dedicated to truth marking. We therefore see that there is no 1-to-1 mapping between the expression of truth and a given strategy. This multifunctionality of the strategies found in truth contexts will be important in our discussion in Section 4, where we link it to the notion of indirect focus marking via backgrounding. First, though, we will go through each of the strategies in turn: lexical strategies, unmarked verb form, marked verb form, dislocation of terms from comment, predicate doubling, and OM-doubling. We then turn to data from one additional language (Cinyungwe) that shows a dedicated verum marker. Due to space constraints, we will not exemplify each strategy for each language; we refer the reader to Table 1 for an empirical summary and to the Appendix for a full list of supplementary material.

Table 1: Overview of field data on strategies for truth marking in ten Bantu languages of sample (✓ = used for truth marking; N = not used for truth marking; ? = no data; N/A = not applicable).

	Lexical	Unmarked V	Marked V	Dislocation	Predicate doubling	OM doubling
<i>Tunen</i>	✓	✓	N/A	?	N/A	N/A
<i>Teke</i>	✓	✓	N/A	N	N	N/A
<i>Kirundi</i>	✓	?	✓	✓	✓	?
<i>Rukiga</i>	✓	✓	N/A	✓	✓	✓
<i>Gusii</i>	✓	?	✓	?	N/A	?
<i>Kĩitharaka</i>	✓	✓	✓	✓	✓	?
<i>Kinyakyusa</i>	✓	✓	N/A	✓	✓	N/A
<i>Makhuwa</i>	✓	✓	✓	✓	✓	N/A
<i>Changana</i>	✓	?	✓	✓	N	?
<i>Cicopi</i>	✓	?	✓	✓	✓	?

3.1 Lexical strategies: periphrasis and ‘truth’

There are two types of lexical strategies for truth marking: dedicated lexical items and peri-phrasis. The first is illustrated in (7) for Kinyakyusa (in a verum context). Here, the lexical item *nalooli* ‘truly’ is used to express truth of the proposition in the QUD.

- (7) ‘I don’t believe he went to Malawi.’
A-a-buuk-ile nalooli.
 1SM-PST-go-PFV truly
 ‘He really went!’ (lexical item, Kinakyusa)

The second lexical strategy is periphrasis, i.e., circumlocution. For example, speakers can add expressions such as ‘it is true’ and ‘I saw it’. This is illustrated for verum contexts in Rukiga and Makhuwa in (8) and (9).

- (8) ‘Did the gorillas (really) sing for you?’
N’ámazim’ zó záátwéshongorera.
 ni a-ma-zima z-o zi-aa-tw-eshongor-er-a
 COP AUG-6-truth 10-CM 10SM-N.PST-1PL.OM-sing-APPL-FV
 ‘It is true they have sung for us.’
 (periphrasis, Rukiga, Allen Asiimwe p.c., adapted
 from Asiimwe and Van der Wal 2021: 21)
- (9) A: Maria didn’t cook beans.
 B: She did cook beans.
 A: No she didn’t.
 B: *Ohaápéya, mí kohoóna!*
 o-o-a-pey-a mi ki-o-oon-a
 1SM-PFV.DJ-cook-FV 1SG.PRO 1SG.SM-PFV.DJ-see-FV
 ‘She did cook (them), I saw it!’ (periphrasis, Makhuwa)

Note that lexical strategies are not obligatory; all languages in our sample have alternative means of expressing the truth. We assume that lexical strategies are available cross-linguistically, and so will focus our discussion on the grammatical strategies.

3.2 Unmarked verb form

Many languages can use an unmarked strategy in truth contexts, i.e., a strategy where there is no extra marking on the verb form nor difference in word order, with

the same form used in other contexts such as thetics (which contrast with categorical statements in having no topic-comment split; Lambrecht 1994; Sasse 1987, 1996). This is shown for Tunen and Teke in (10) and (11).

- (10) ‘Did we give the presents to Shania and Hamida?’
Éé, tɔ ka búábu índi.
 éé tɔ ka búábu índiá
 yes 1PL.SM PST3 PRO.2 give
 ‘Yes, we did give them them.’ (unmarked V, Tunen)
- (11) Q: *Ndé ka-ká-bvúúr-í we mi-pará ní?*
 1.PRO NEG-1SM.PST-return-PST 2SG.PRO 4-money NEG
 ‘He did not return you the money?’
 A: *Ndé á-bvúúr-i me mi-pará.*
 1.PRO 1SM.PST-return-PST 1SG.PRO 4-money
 ‘He did return me the money.’ (unmarked V, Teke)

By comparing these examples with the thetic contexts in (12) and (13), we can see that there is neither a change in word order nor any additional marking on the verbs to express a different information structure.⁴

- (12) ‘What happened at church?’
Bé-ndɔ bá ná matala sómbak
 ba-ndɔ bá ná ma-tala sómb-aka.
 2-person 2SM PST2 6-palm.fronds cut-DUR
 ‘People cut palm fronds.’ (unmarked V, Tunen)
- (13) ‘What happened?’
Mpúku súruk-i kulá nzó.
 1.rat fall-PST PREP.from.above 9.house
 ‘A rat fell from the house.’ (unmarked V, Teke)

Note that this unmarked verb form strategy is not always available. This is because some languages have morphological alternations in verb form, forcing a choice between marked verb forms, at least in certain tense/aspects. An example is the conjoint/disjoint alternation found in various Eastern Bantu languages (see Van

⁴ Tunen is unusual for a Bantu language in having a split in predication between the subject marker and tense/aspect marker (SM-TA) and the verb, with the object canonically intervening (SM-TA-O-V) (see e.g., Dugast 1971; Mous 1997). The important point here is that there is no extra marking on the Tunen predicate in the truth context (and no difference in word order).

der Wal and Hyman 2017), where either a conjoint or disjoint conjugation of the verb must be used, with consequences for the interpretation. Similarly, other Eastern Bantu languages in our sample have an alternation of the *ni-* prefix on the verb (derived historically from the Proto-Bantu copula **ní*; Güldemann 2003; Meeussen 1967) in certain tenses. These are further discussed and illustrated in Section 3.3. Nevertheless, these languages also have tense/aspect conjugations without such marking, and these can typically also use unmarked verbs in a verum context. For example, Makhuwa has the conjoint/disjoint alternation in four basic tenses, but not in the Present Habitual. As this form can be used in a polarity focus/verum context (14), among other contexts (15), Makhuwa is coded as having this strategy.

- (14) ‘Why don’t you eat dark shima (made from cassava)?’
Mí ki-ńńí-c’ eshímá y-oóríppa
 1SG.PRO 1SG.SM-HAB-eat 9.shima 9-dark
(tántú eshímá y-oóttéela).
 as 9.shima 9-light
 ‘Me, I DO eat dark shima (just as light shima).’ (unmarked V, Makhuwa)
- (15) Context: beginning of story (Van der Wal 2009: 34)
Hĩ ni-ńńí-tsúwélá wíirá, onghípítí ńńó etiíni
 1PL.PRO 1PL.SM-HAB-know COMP 17.Ilha 17.DEM.PROX 9.religion
e-n-tthár-íyá oisilámu.
 9-PRS-follow-PASS.REL 14.islam.PRL
 ‘We know that on Ilha the religion which is adhered to, is Islam.’
 (unmarked V, Makhuwa)

This complexity highlights the need to collect field data across tense/aspect contexts for each language. Our database does not provide sufficient contexts for all languages – for example, elicitation for Gusii was only conducted for tense/aspects with the marked *ni-* verb form, and so Gusii is coded as “?” in Table 1 for the unmarked V strategy in the absence of more detailed information.

3.3 Marked verb form

As mentioned above (Section 3.2), some languages have a difference in verbal conjugation dependent on information structure. In our sample, there are two such markings: the conjoint/disjoint alternation and the *ni-* prefix. We illustrate the conjoint/disjoint alternation in Section 4, and show the *ni*-marked verb form here.

In Gusii and Kĩitharaka, the *ni*-marked verb form is found both in polarity focus and verum contexts, as shown in (16) and (17), respectively.

- (16) 'Is the man hitting the ball?' (+ QUIS picture stimulus Task 18 Item 6)
Ee, ngoákaare (omopiira).
ee ni-ko-ak-a a-re o-mo-piira.
 yes ni-15-hit-FV 1SM-be AUG-3-ball
 'Yes, he is hitting the ball.' (ni-form, Gusii)
- (17) A: The girl didn't cook the beans.
 B: *Ó-mo-íséké ni-á-iyegete chí-nyeende.*
 AUG-1-girl ni-1SM-cook.PFV 10-bean
 'The girl DID cook beans.' (ni-form, Gusii)

Note that these marked verb forms are not limited to such contexts and are used elsewhere in the information-structural system, for example when the verb is clause-final, inthetic subject inversion (18) or for the expression of state-of-affairs focus.⁵

- (18) Context: Reporting on what happened yesterday.
Í kúráátúúbágá twáána.
ni kú-ra-túúb-ag-a tú-ana
 FOC 17SM-YPST-jump-HAB-FV 13-children
 'The children were jumping.'
 (ni-form, Kĩitharaka; Kanampiu and van der Wal (ms.))

3.4 Dislocation of terms from comment

Dislocation refers to a difference in position of terms with respect to the canonical word order. This is illustrated below for Kĩitharaka: in (19), 'the child' is given information (provided in the discourse context), and so the noun phrase *kaanã* 'the child' is dislocated from its canonical post-verbal position to the beginning of the sentence.⁶

⁵ Note that *ni* is also still used as a copula in these languages and can as such be used in clefts, marking focus. We do not have the space to go into the analysis of *ni* here and therefore gloss the Gusii form simply as *ni* for present purposes, but see e.g., Schwarz (2003, 2007), Abels and Muriungi (2008) and Morimoto (2017) for discussion on the status of *ni* as a focus marker in Kikuyu and Kĩitharaka.

⁶ Note that (19) includes the preverbal marker *ni*, here in its allomorph *i*, which must be present here because the verb is clause-final. This relates to a broader point that strategies may be combined, which we come back to when arguing against a one-to-one mapping between a given morpho-syntactic strategy and truth interpretation.

- (19) Context: You're accused of not bathing the child, which was one of your tasks.

Ka-anǎ, i tû-ka-thaamb-iir-i-e.

12-child FOC 1PL.SM-12OM-wash-PFV-IC-FV

'The child, we DID bathe him/her.'

(dislocation, Kĩitharaka)

This strategy is not unique to truth expression, being used elsewhere in the language to background terms, as in (20) and (21).

- (20) 'Can I buy bananas here?'

Ndígú nwa úgúre.

n-digu nwa û-gur-e

10-banana POT 2SG.SM-buy-SBJV

'Bananas you can buy.'

(dislocation, Kĩitharaka;

Kanampiu & Van der Wal (ms.))

- (21) A: You move along the path until you find a butterfly. (QUIS map task)

B: ***Ikolokotwa ndiagile.***

i-kolokotwa n-li-ag-ile

AUG-5.butterfly 1SG.SM-5OM-find-PFV

'I found the butterfly.'

(dislocation, Kinyakyusa)

The use of backgrounding strategies to indirectly mark different types of predicate-centred focus will be discussed further in Section 4 below.

3.5 Predicate doubling

Predicate doubling consists of a non-finite form of a verb co-occurring with an inflected form. Güldemann and Fiedler (2022) provide an overview of three different types of predicate doubling across Bantu: topic doubling, *in-situ* doubling, and cleft doubling (in their terminology called "preposed verb topic doubling", "*in situ* verb focus doubling", and "preposed verb focus doubling" respectively). In our sample, cleft doubling (wherein an infinitive is clefted) cannot be used in a truth context, but only with State-of-Affairs focus (e.g., 'it is eating that I do/eat, not drinking'). Topic doubling and *in-situ* doubling on the other hand were found in verum contexts, exemplified for topic doubling in (22), where the infinitive *okurya* 'to eat' forms a topic preceding the finite form. The use in verum contexts is shown for *in-situ* doubling in (23), where the class 14 nominalisation of the verb *burye* follows the finite verb.⁷

⁷ Note that (22) includes a disjoint verb form as well as predicative doubling – see the previous footnote.

- (22) Context: Mother doubts whether I have eaten.
Yéég' ó-ku-ry-a n-áá-ry-a.
 yes AUG-15-eat-FV 1SM-N.PST-eat-FV
 'Yes, I have truly eaten.' (topic doubling, Rukiga)

- (23) 'Have you eaten a snake?'
Yeemwe naarariye burye.
 yeemwe ni-á-ra-ri-ye bu-ri-e
 DP 1SG.SM-REM.PST-DJ-eat-PFV 14-eat-SBJV
 'Sure, I've really eaten (it)! (I'm not joking)' (in-situ doubling, Kirundi)

Further introspection by our collaborators reveals that using predicate doubling in an answer to a yes/no question would require a non-neutral context, suggesting a verum rather than polarity interpretation. Nevertheless, predicate doubling is not a dedicated strategy for verum expression – both types of predicate doubling were also used for contrastive topic marking (24) and with intensifying (25) and depreciative meanings.

- (24) Context: You're going out for dinner and you're asked what you want to eat and drink.
(U)kuryá, ndy'inyama, kunywá nywa ifanta.
u-ku-rya n-rí-a i-nyama **ku-nywá** n-nyó-a i-fanta
 AUG-15-eat 1SG.SM-eat-FV AUG-10.meat 15-drink 1SG.SM-drink-FV AUG-9.fanta
 'For eating, I eat meat, for drinking, I drink Fanta.'
 (topic doubling, Kirundi; Nshemezimana and Van der Wal (ms.))

- (25) Context: Mary is getting fat and her aunt is surprised with her. What is happening with Mary?
Kudya wâ:dya.
 ku-dya w-a-dy-a
 15-eat 1SM-DJ-eat-FV
 'She is eating too much.'
 (topic doubling, Cicopi, Nhantumbo and Van der Wal ms.)

It is possible to link the semantics of truth with these contrastive topic and intensifying/depreciative meanings; see Van der Wal and Jerro (2022) for further theoretical discussion. For space reasons, we cannot do justice to all the intricacies of the two predicate-doubling constructions, their interpretations, and the cross-linguistic variation attested; we refer to the Appendix and the chapters in Van der Wal (ms.) for more extensive data and explanation, and conclude here that topic doubling and *in-situ* doubling are attested in verum contexts.

3.6 OM-doubling

One interesting strategy not originally tested in our fieldwork is the use of object markers together with non-dislocated lexical DP objects in languages which do not normally allow doubled objects. The term OM-DOUBLING thus refers to double expression of the object, by a prefixal object marker (OM) on the verb as well as a lexical DP present in the same domain (i.e., not dislocated).⁸ An OM-doubling construction is schematised in (26) below:

(26) ((Subj) SM-TAM-OM-verb-FV Obj)

Recent work by Sikuku et al. (2018), Sikuku and Diercks (2021, ms., and see further references therein on other Bantu languages), has reported that Bantu languages like Lubukusu (JE31c, Kenya) that do not normally allow doubling object marking, as shown in (27), do allow doubling in specific pragmatic contexts, specifically in verum contexts, as in (28).

Lubukusu (Sikuku et al. 2018: 360)

(27) *N-á-mu-βon-a* (#*Weekesa*).

1SG.SM-REM.PST-1OM-see-FV 1.Wekesa

‘I saw him.’ (in a context where Wekesa is salient in the discourse)

(28) Context: Someone is doubting whether the speaker ate ugali.

N-aa-βu-l-úlé *βúu-suma*.

1SM.SM-PST-14OM-eat-PFV 14.14-ugali

‘I DID eat the ugali!’

(OM-doubling, Lubukusu)

Interestingly, Sikuku and Diercks (ms.) show that doubling object marking is facilitated not only in a verum context, but also with an intensive reading, a mirative reading, and when focus is on another constituent in the verb phrase. The common factor between these contexts, they show, is the status of the object-marked constituent as GIVEN.⁹

In our sample, the North-Western languages Tunen and Teke do not have object markers at all, and the languages Kinyakyusa and Makhwa normally already allow doubling object marking, meaning this strategy is not applicable for verum in these languages. In follow-up reflection for Rukiga, which does not allow object markers in co-occurrence with lexical objects, Allen Asimwe indicated that doubling is in fact

⁸ We use the term OM-DOUBLING to match existing terminological use within Bantu linguistics. Readers with a general linguistics background may find it useful to compare the use of the term CLITIC DOUBLING in syntax, i.e. a construction in which one item (OM/clitic) is found in addition to a full noun phrase (and not a construction in which there are two OMs/clitics).

⁹ Although Sikuku and Diercks (ms.) show one context in which the doubled object is not given, when the whole situation is surprising.

possible in a verum context, as shown for the contexts in (29) where *akahuunga* ‘posho’ is doubled on the verb by the object marker *-ka-* (see also Asiimwe to appear; Asiimwe and Van der Wal ms.).

(adapted from Van der Wal and Asiimwe 2020: 52; Allen Asiimwe p.c.)

(29) Context 1: #‘What did Peter do today?’

Context 2: #‘What did Peter cook today?’

Context 3: ‘I don’t believe that Peter cooked posho today!’

Píta y-áá-ka-téek-a a-ka-húúnga e-ri-zóoba.

1.Peter 1SM-N.PST-12OM-cook-FV AUG-12-posho AUG-5-day

(Int.) ‘Peter cooked posho today.’ (OM-doubling, Rukiga)

The mirative (30) and intensity interpretation (31) are equally found in Rukiga with object marking, matching what Sikuku and Diercks (ms.) report for other Bantu languages.

Rukiga (examples from Asiimwe and Van der Wal ms.)

(30) Context: It was expected that the sorghum would be ground well, which was not the case.

W-áá-gu-s-a o-mu-gúsha (báasi)!

2SG.SM-N.PST-3OM-grind-FV AUG-3-sorghum (really)

‘You have ground the sorghum!’ (What happened? It is not fine-ground!)

(OM-doubling, Rukiga)

(31) Context: The sorghum is so fine-ground.

W-áá-gu-s-a o-mu-gúsha (buzima)!

2SG.SM-N.PST-3OM-grind-FV AUG-3-sorghum (really)

‘You have ground the sorghum.’ (It is fine!)

(OM-doubling, Rukiga)

While our data on doubling object marking are currently limited, Bloom Ström and Zeller (2023) interestingly report parallel findings for Nguni Bantu languages of Southern Africa, providing further evidence for OM-doubling as a means of truth expression in Bantu (cf. Lippard et al. to appear; Sikuku et al. 2018; Sikuku and Diercks 2021, ms). We will discuss in Section 4 how object marking in Bantu can be linked to backgrounding of terms and so can be taken as an indirect form of truth marking alongside the other strategies discussed in this section.

3.7 Dedicated verum marker

The final strategy for truth expression in our study of Bantu languages is a dedicated grammaticalised marker to express verum (and not polarity focus). No such marker was found in our fieldwork studies on the 9 BaSIS languages nor the short study on

Gusii. However, subsequent communication with Crisófia Langa da Câmara showed evidence for a dedicated verum marker =*di* in the Bantu language Cinyungwe (N43, Mozambique), as identified by its presence in verum context of emphatic assertion in (30) and its infelicity in polarity focus contexts (31) (recall the diagnostic contexts from (5)).¹⁰

(32) Context: We are travelling far and becoming tired.

A: *Ti-m-fik-a* *lini?*

1PL.SM-PRS-arrive-FV when

‘When will we arrive?’ (Are we there yet?)

B: *Ku-fika, t-a-fik-a(=di).*

15-arrive 1PL.SM-PST-arrive-FV=VERUM

‘We have (indeed) arrived.’ (lit. ‘To arrive we arrived.’)

A: *Aah, t-a-fik-a=di.*

yes 1PL.SM-PST-arrive-FV=VERUM

‘(I see) we have indeed arrived.’

(clitic, Cinyungwe)

(33) ‘Have you eaten?’

Nd-a-dy-a(#=di).

1SG.SM-PST-eat-FV=VERUM

‘I have eaten.’

(clitic, Cinyungwe)

In this way, Cinyungwe matches the Type II strategy of Gutzmann et al.’s (2020) typology in having a dedicated marker for pragmatic verum contexts. We are not aware of another Bantu language with such a marker, and at this point do not have a firm idea of the etymology (i.e., the grammaticalisation source) of the =*di* marker in Cinyungwe – a reviewer suggests the verb ‘say’, which is reconstructed to **t̪i* in Proto-Bantu (Bastin et al. 2002). We gloss it simply as VERUM for present purposes.

3.8 Combination of strategies

Note finally that combinations of these strategies are possible, as observed already in footnotes 6 and 7 in relation to the combination of marked verbal morphology with dislocation and predicate doubling. It should be noted that in some cases, the combination of strategies is automatic, for example in languages that force a choice between marked verb forms, where a marked verb form must therefore be used in addition to any other strategy. In other cases, strategies may be optionally combined for stylistic reasons, for example in adding a lexical item to make a truth reading

¹⁰ This marker differs from the lexical particles in Section 3.1 in that it is a bound morpheme, and it has no lexical meaning on its own, i.e., it is a grammatical marker.

more salient. In the appendix, we provide further examples of possible combinations of strategies. Further research into optional strategies is needed to establish the precise pragmatic effects of their combinations.

3.9 Overview

A full inventory of the attested strategies for each language is provided in Table 1, and supported by the data in the appendix. The appendix also includes negative data for the absence of the use of a strategy with the intended interpretation (indicated in the table by ‘N’)

There are two important conclusions we draw from this overview and the discussion of the strategies found to express truth in our Bantu sample. The first is that there is no one-to-one mapping between truth expression and a particular grammatical marking, with each language having multiple strategies available for truth expression. The second conclusion is that most strategies are used elsewhere in the IS system. These conclusions form the basis of our analysis in the next section, where we argue that these strategies show different degrees of underspecification through backgrounding.

4 Degrees of underspecification through backgrounding

Apart from lexical markers such as the word for ‘truth’ (Section 3.1) and the dedicated verum marker (Section 3.7), the other strategies presented in Section 3 show multifunctionality: they can all be used in more than one context and/or with more than one meaning. Therefore, the marking in these strategies only *indirectly* expresses truth, as the marking does not directly (i.e., does not by itself) indicate truth. Instead, we believe that the marking in these strategies consists of the backgrounding of what should *not* be interpreted as the focus, leaving what should be in focus open to be resolved via the discourse context. What is (directly) marked is therefore neither focus nor verum, but non-focus (background).

In previous work on information structure in African languages, Güldemann (2016) describes the backgrounding of non-focus as an alternative strategy to (direct) focus marking with potentially the same effect as direct marking of focus: when everything else apart from the focused constituent is marked as backgrounded, this essentially also highlights the focus. Güldemann refers to this strategy as *MAXIMAL BACKGROUNDING*, on account of it leaving “all but one potential focus host from the

assertion domain” (Güldemann 2016: 577). However, as we shall see below, we believe that while the truth expression involves backgrounding, it is less helpful to phrase this as *maximal* backgrounding, in the sense that multiple sizes of focus scope can be identified (as also acknowledged by Güldemann 2016: 578). Our use of the term BACKGROUNDING instead of MAXIMAL BACKGROUNDING moreover links the African language data more clearly to earlier work on backgrounding as an indirect focus marking strategy in Germanic languages and the related idea of GIVENNESS DEACCENTING (see e.g., Schwarzschild 1999).

We analyse the multifunctional potential of the strategies as varying in degrees of underspecification, corresponding to different degrees of restriction on the scope of what is left as the possible focus. Specifically, we distinguish four levels of underspecification, as illustrated in Figure 3: (i) no restriction (full underspecification), (ii) restriction to the predicate (partial backgrounding), (iii) restriction to operators (further backgrounding), and (iv) restriction to verum (no underspecification). We discuss and illustrate each below.

1	comment				
2	term	predicate			
3	term	SoA	operator		
4	term	SoA	TAM	polarity	verum

Figure 3: Four degrees of underspecification via different degrees of backgrounding (dark shading), varying in what remains as scope of focus domain (unshaded).

The first degree of underspecification in our investigation is full underspecification, i.e., the use of the canonical SVO (or SOV in the case of Tunen) word order with an unmarked verb form (cf. Section 3.2). We see this unmarked strategy appearing in a topic-comment structure, where the comment may or may not contain narrow focus on an argument, adjunct, or the predicate. The multifunctionality of this maximally underspecified structure is clearly visible in example (34), where the canonical order and verb form can be used in a whole range of contexts, including polarity focus, and only excluding subject focus.¹¹

11 Note that this goes against Goodhue’s generalisation “that there is an unexpected asymmetry between answers to polar questions and constituent questions” (Goodhue 2022: 121), where focus marking is obligatory in the former but apparently optional in the latter (Goodhue 2022: 126). The examples he uses contain subject focus, which we know is treated differently from non-subject focus in many languages (see e.g., Fiedler et al. 2010). His generalisation thus refers to the subject-non/subject asymmetry and not necessarily to a distinction between polarity and term focus, and in any case we do not see the asymmetry in terms of obligatory marking in the languages of our sample.

Kinyakyusa (database Lusekelo, Msovela, Van der Wal, and Amani Lusekelo p.c.)

- (34) Q1: 'What happened?/Why is Suzan's mother happy?' (thetic)
 Q2: 'What did Suzan buy her father?' (term focus on theme)
 Q3: 'Who did Suzan buy shoes for?' (term focus on recipient)
 Q4: 'What did Suzan do with the shoes?' (state-of-affairs focus)
 Q5: 'What did Suzan do?' (VP focus)
 Q6: 'Did Suzan (really) buy her father shoes?' (polarity focus)
 Q7: '#What bought her father shoes?' (#term focus on subject)
 A: (Ee) *Suzani amuuliile ugwiise ifilato.*
 ee Suzani a-m-ul-il-ile u-gwiise i-fi-lato
 yes 1.Suzan 1SM-1OM-buy-APPL-PFV AUG-father AUG-8-shoe
 'Yes,) Suzan bought her father shoes.' (unmarked V, Kinyakyusa)

The second degree of underspecification has a moderate restriction, with backgrounding only of terms.¹² By marking arguments and adjuncts (terms) as non-focus, the predicate and all its aspects are left as the potential focus (cf. Figure 1). We propose that this second level of underspecification is the case in our sample for dislocation, marked verb forms, pronominalisation and object marker doubling. We discuss these in turn.

As illustrated in Section 3.4 above, dislocation of arguments and adjuncts is used to indicate that the referents of these phrases are given information and therefore cannot form the focus in the current sentence. A typical effect of dislocation is the verb ending up in clause-final position. When the object is pronominalised as an object marker on the verb as part of a non-doubled object construction, it also indicates givenness. Although intonation does not seem to play a major role in the expression of information structure in the languages under study, there may still be an association between (prosodic) phrase-finality and focus. We can link this to the tendency in other languages to locate the focus element in the prosodically most prominent sentence position, either by moving the focused element to the position,

¹² A reviewer points out that this level of underspecification may not include all terms, and may instead involve backgrounding of certain terms in order to indirectly mark focus on another term, as found for example for object and non-argument focus in the Central Sudanic language Tar B'arma (Jacob 2010). As we are interested here in the possibility of truth interpretation, which relies crucially on PCF being available, we do not discuss backgrounding for term focus further in this paper. The reviewer's observation could be captured by an intermediate level between level 1 and level 2 in Figure 3 in which only some terms are backgrounded, or else a less restrictive definition of level 2 that allows some terms to be left within the scope of focus.

or by evacuating non-focal material away from the position (Buell 2006, a.o.; Szen-drői 2003; Zubizarreta 1998).

In some of the languages in our sample, the verb form can also indicate what is or is not in focus. We illustrate this with data from Makhuwa, which has the conjoint/disjoint verbal alternation. The conjoint verb form indicates that the element following the verb is in exclusive focus (Van der Wal 2011), whereas the disjoint form indicates that there is no such focus and must be used when the verb is clause-final. The disjoint form can thus be used in various predicate-centred focus interpretations, indicated in (35), but not for object focus, where the conjoint form must be used, as in (36). Note that in (35), the lexical object *ehopa* ‘fish’ can either precede or follow (but not both), and can easily be omitted altogether. Importantly, even when the lexical object follows, the disjoint form has to be used in the indicated contexts Q1–4.

Makhuwa (database Van der Wal, and Zanaira N’gamo p.c.)

- (35) Q1: ‘Are you grilling the fish?’ (truth focus)
 Q2: ‘I don’t believe you are grilling the fish.’ (verum)
 Q3: ‘What are you doing with the fish? Frying (state-of-affairs focus)
 or grilling?’
 Q4: ‘Have you grilled fish already?’ (TAM focus)
 Q5: #‘What are you grilling?’ (#term focus on object)
{Ehóp’ éela} Kinámwáneéla {ehópa}.
ehopa ela ki-na-aaneel-a ehopa
 9.fish 9.DEM.PROX 1SG.SM-PRS.DJ-grill-FV 9.fish
 ‘(This fish) I’m grilling (it).’ (disjoint form, Makhuwa)
- (36) Q3: #‘What are you doing with the fish? Frying (#state-of-affairs focus)
 or grilling?’
 Q5: ‘What are you grilling?’ (term focus on object)
Kinaáneéla ehopá.
ki-n-aaneel-a ehopa
 1SG.SM-PRS.CJ-grill-FV 9.fish
 ‘I’m grilling a/the fish.’ (conjoint form, Makhuwa)

The same goes for OM-doubling in languages where object marking is otherwise pronominal (not agreement): the generalisation is that the object marker defocuses the object, i.e., excludes it from the focus domain via backgrounding. Such defocusing merely indicates that the doubled object is not the focus – if another constituent is present in the postverbal domain, such as the adverb *bwaangu* ‘quickly’ in (37), this is now interpreted as the focus.

Lubukusu (Sikuku and Diercks 2021: 14)

- (37) *N-a-ka-teekh-a ka-ma-kanda bwaangu.*
 1SG.SM-PST-6OM-COOK-FV 6-6-beans quickly
 ‘I cooked the beans quickly.’
 (not: ‘I DID cook the beans *quickly*.’) (doubling OM, Lubukusu)

Therefore, OM-doubling only restricts the possible focus by indicating what is *not* in focus, leaving the possibility of other focus scopes within predicated-centred focus open – including verum (in the right context, as seen in e.g., (28) above).¹³

The third degree of underspecification illustrated in Figure 3 is found when not only terms are defocused but the predicate itself too. In this case, focus cannot be on a referential value, i.e., an actual referent in the case of arguments, a time or location in the case of adverbs, and the intentional meaning of an event in the case of predicates. Instead, the only aspects that are left to form the new information are the TAM value or truth of the statement. This leads to a restriction to operator focus, including verum, which therefore is still underspecified but less so than in the second level. The backgrounding of both terms and predicate is encountered in predicate doubling, specifically in topic doubling.¹⁴ The predicate here is marked as topical by placing an infinitive in the left periphery, which may also be marked by a contrastive topic marker (*ko* in (39) and *kwé* in (40) below). Logically speaking, the interpretation is underspecified in that it allows TAM focus, neutral polarity focus, or emphatic verum (biased context). However, we are unsure whether all these theoretically possible interpretations are actually possible for topic doubling in our sample. This is because, first, we do not know empirically whether topic doubling is actually used for TAM focus; and second, since an unmarked sentence is also acceptable as an answer in the same context, the extra marking must (through Gricean reasoning) have an

¹³ For OM-doubling as a phenomenon Lubukusu, this cannot be the whole explanation, though, as Sikuku and Diercks (2021) show that OM-doubling is accepted with subject focus only in a verum context. Further research into the relation between verum and backgrounding in OM-doubling, also in languages beyond Lubukusu (see e.g., Lippard et al. to appear), is required to fully understand what is going on here.

¹⁴ Note that topic doubling requires the defocussing of both the predicate and terms in order to function as operator focus. If a term is left in the focus domain, the more natural reading will have focus on that term, e.g., as in example (i) from Rukiga. When the object is left in the postverbal focus domain, the sentence is used in answer to an object question, i.e., with focus on the object rather than an operator.

- (i) ‘What will you mingle?’
O-ku-góyá tu-ryá-góy-á á-ká-ro.
 AUG-15-stir 1PL.SM-FUT-stir-FV AUG-12-millet.bread
 ‘(As for mingling,) We will mingle *millet bread*.’

added dimension of interpretation with respect to polarity focus, as illustrated in (38) and (39).¹⁵

Kinyakyusa (database Lusekelo et al., and Amani Lusekelo p.c.)

- (38) ‘Do you want to eat sugarcane?’ – only as a non-neutral question, insisting
U-ku-londa tu-ku-lond-a.

AUG-15-want 1PL.SM-PRS-Want-FV

‘We DO want it.’ (topic doubling, Kinyakyusa; Lusekelo et al. (ms.))

- (39) Context 1: #I come home and I’m not sure whether the two helpers in my household have swept the floor or not. It’s not that I had particular expectations or that I am annoyed; I just come into the house and see some dirt but also some clean parts. I ask in a friendly way ‘Have you swept?’
Context 2: Father told us to sweep when he left; now he comes back and we are sitting watching TV; he says ‘Why are you lazy watching TV and haven’t swept?’

Ukupyaaagila ko tupyaaagiile!

u-ku-pyagila ko tu-pyagil-ile

AUG-15-sweep 15.PRO 1PL.SM-SWEEP-PFV

‘We DID sweep!’ (topic doubling, Kinyakyusa)

Moreover, topic doubling can have additional pragmatic flavours of intensity, depreciation, and mirativity, as illustrated in the contexts for (40). Note, however, that these contexts all build on the contrastive topic interpretation of the infinitive (as argued by Jerro and Van der Wal 2022).

Rukiga (Asiimwe and Van der Wal ms.)

- (40) ***O-kw-óg-a kw-é n-áá-yog-a.***

AUG-15-swim-FV 15-CM 1SG.SM-N.PST-SWIM-FV

‘I have (really) swum (, but...).’ (topic doubling, Rukiga)

Verum: Pool attendant sees me walking away from the pool area showing no sign that I entered the water.

Contrast: I was expected to swim and play baseball.

Intensity: I went into the pool and swam for a long time with lots of energy.

Depreciative: The water was too cold, but I went ahead and swam anyway.

Mirative: I have always feared to get into the water but hey I can swim!

¹⁵ This phrases the verum interpretation in pragmatic terms; an alternative is Goodhue’s (2022) analysis stating that focus requires a true contrast.

The final degree of underspecification is the complete lack of underspecification, i.e., the use of a marker that is dedicated to verum (direct truth marking). This strategy cannot be used in a neutral polarity question but only in a context of debate/doubt, or a biased question (see the diagnostic in (Sviii) above). Examples are the particles in Gutzmann et al.’s (2020) data from Bura, South Marghi, and Gitksan, and our example of the Cinyungwe enclitic =*di* seen in Section 3.7 above.

In summary, we have seen that the Bantu languages in our sample use strategies that are underspecified to various degrees with respect to the scope of focus. The context by itself can be sufficient to trigger a verum interpretation from a completely unmarked form, while further restrictions (to the predicate, more narrowly an operator, or even more narrowly verum) provide “extra” indications to help the addressee identify the intended interpretation. In the second and third degrees of underspecification, the languages mark (to a lesser or greater degree) what is *not* in focus, rather than directly marking the focal content. By explicitly backgrounding non-focal information, these strategies *indirectly* mark what is in the scope of focus, leaving underspecified where the focus is precisely. For these strategies, any verum interpretation is therefore a pragmatic effect, in line with what Gutzmann and Castroviejo-Miró (2011) suggest when they say verum is a use-conditional rather than a truth-conditional operator.

Adding these Bantu data to the picture, we thus arrive at a new typology of truth-marking strategies, as represented in Figure 4. Note that, in contrast to the direct strategies, the strategies under ‘indirect’ mark the backgrounded information, rather than the focal information.

With these insights about indirect marking of verum, we can return to the main research question about the relation between verum and focus.

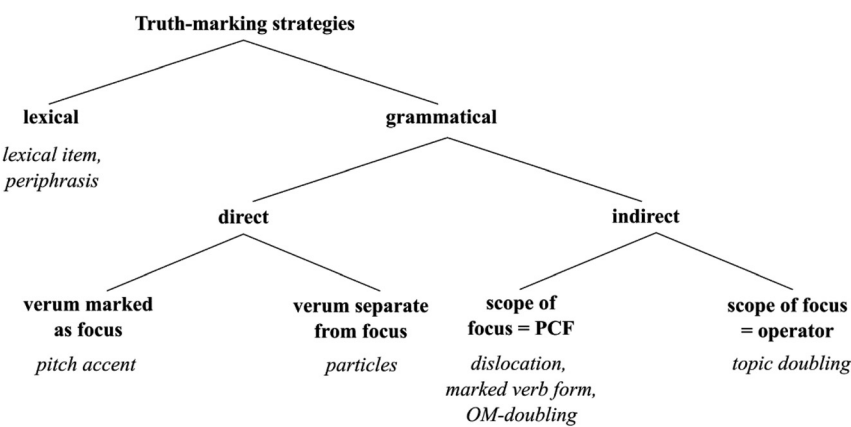


Figure 4: A typology of truth-marking strategies (with examples in italics).

5 Discussion: (how) does verum relate to focus?

Returning to Gutzmann et al.'s (2020) comparison of how focus and verum relate in various languages, we have seen in the introduction that they only consider those (strategies in) languages where verum is marked directly as focus, and those where verum is marked separately. On the basis of the Bantu languages in our sample, we propose an updated typology in (41), adding the type in which verum may be marked indirectly via backgrounding.

- (41) **Types of strategies with respect to the expression of verum and focus**
- Type I. Verum is marked directly as focus (verum accent; German, English)
 - Type II. Verum is marked directly by a dedicated marker (particles; Gitksan, Cinyungwe)
 - Type III. Verum is marked indirectly through backgrounding strategies (dislocation, topic doubling etc.; BaSIS languages)

Thinking back on how languages with Type I strategies led to proposals of the Focal Accent Thesis (FAT) and how the attestation of Type II strategies led to the Lexical Operator Thesis (LOT), we can ask what Type III tells us about the link between focus and verum. In order to do that, we first consider whether Type I can actually be reinterpreted as Type III. Gutzmann et al. (2020) in the very last paragraph of their article suggest the following, discussing whether the use of the same strategy for verum and focus marking in Type I strategies is a case of accidental homonymy:

the parallel realisation [between focus and verum in English and German, EK & JW] may be due to more general constraints on the prosodic systems of the languages. Suppose that (i) there must be a nuclear pitch accent in every utterance; (ii) this pitch accent must not be realised on given material (Schwarzschild 1999); and (iii) the core proposition is always given under verum and may therefore not carry accent. **A similar idea, suitably adapted, could extend to non-accent languages, and could account for the parallel realisation of verum and focus in some languages without resorting to accidental homonymy.** Confirmation of this idea, and further cross-linguistic investigation of this important question, will have to await future research.

(Gutzmann et al. 2020: 43 [emphasis added])

The shift of the focal accent in verum contexts could thus be due not to the marking of verum, but to the deaccenting of given material. With our investigation of 11 Bantu languages, we have confirmed that the main motivation for 4 out of our 6 grammatical strategies for verum marking is the backgrounding (or defocussing) of other potential targets of focus. Type I could thus be reinterpreted as or subsumed under

Type III.^{16,17} We leave the possible reclassification of Type I to one's analytical preferences regarding the relationship between focal accent and givenness deaccenting. Importantly for our current purposes, Types I and III show that it is untenable to maintain the complete independence of focus and verum. The emphatic verum interpretation is crucially only available in contexts where the truth of the proposition is on the table (i.e., *?p* is the QUD). In other words, a potential VERUM operator can only apply in sentences in which the focus is neither on a term, nor on (the lexical content of) the predicate. This is a necessary precondition at the conceptual level, independent of the expression of verum and/or focus in individual languages. The use-conditional verum interpretation then builds on the information-structurally restricted set of potential focus targets.

Our results therefore give rise to what we call the BACKGROUNDING AND UNDERSPECIFICATION THESIS (BUT), capturing the intuition that through the backgrounding of non-focal material, the scope of focus can be narrowed to *?p* to a lesser or greater degree (42).

(42) **Backgrounding and Underspecification Thesis (BUT)**

verum marking = marking one or more non-focal constituents as backgrounded, resulting in underspecification in the scope of focus, leaving at least *?p* as a possible focal target. (NB: Verum may be left unmarked, in which case there is full underspecification.)

If direct focus marking of verum as in Type I can be reanalysed as an accent shift due to deaccenting of given constituents (i.e., analysing Type I as Type III), then the BUT can replace the FAT to subsume both languages with accent marking and languages with morphosyntactic marking. We may wonder, however, if the BUT can replace the LOT. It is clear that languages like Cinyungwe (and Bura, Southern Marghi, and

16 The reasoning could actually go two ways. First, as we say here, the backgrounding strategies confirm that the relevant factor for verum is expressing what it *not* in focus, and therefore the accent-shift in German and English could be motivated not by wanting to mark focus, but by needing to shift the accent away from other potential focus targets. Second, we could flip the reasoning and say that the reason that these Bantu languages use the strategies they do is because information structure is not (primarily) expressed through intonation and therefore focus marking is not flexible, with focus instead marked through word order and syntactic constructions (like clefts) – these are strategies that are not available for inflected verbs (or indeed polarity). Given the fact that the accent in German can also target items other than the auxiliary (Höhle 1992), it seems more likely that the first reasoning is true (and German has a potential-focus-avoiding stress shift – note that this negative motivation is potentially different from Givenness deaccenting, for which see overviews in Féry 2020, Rochemont 2016, among others).

17 If this reinterpretation of Type I is on the right track, then the flowchart in Figure 4 should be adjusted to shift “verum marked as focus (pitch accent)” from “direct” to “indirect”.

Gitksan) formally distinguish between polarity focus on the one hand, and the emphatic verum interpretation on the other. Therefore, as mentioned, we agree with Gutzmann et al. (2020) when they claim that “verum is, semantically, not just focus” – the (use-conditional) semantics of verum and focus are indeed different. But how the verum reading is theoretically modelled is then another question. In languages that show a dedicated marker for verum (Type II), this marker could be seen as the spellout of the proposed VERUM operator (Gutzmann and Castroviejo-Miró 2011; Gutzmann et al. 2020; Repp 2009, 2013; Romero and Han 2004), which can be taken as evidence for the existence of such an operator. However, there is no empirical evidence in languages without a grammaticalised marker for the existence of a VERUM operator. This leaves only the conceptual proposal that since all languages can express verum, there must be a universal VERUM operator. Goodhue (2022: 153) in reaction to Gutzmann et al. (2020) “urge[s] caution before deciding in favor of an operator account for Germanic on the basis of evidence from other languages. After all, it is possible for different languages to make use of different grammatical constructions to achieve similar functional ends”. We agree with Goodhue, but in the end, it comes down to how much one would want to formalise pragmatics: should every shade of interpretation be captured as a feature or operator, or do we leave space for underspecification within the pragmatics? We leave this question open, and conclude here that while polarity focus can exist without the emphatic verum interpretation, the reverse is not true: verum needs a situation in which the truth of the proposition is under discussion, and it needs a sentence in which no other potential focal targets are marked. Empirically, the cross-linguistic findings of Type I and III strategies provide important evidence for the link between verum and predicate-centred focus. It is therefore misleading to completely separate the concept of verum from the concept of polarity focus.

While we leave the precise semantic/pragmatic modelling for further theoretical work, we note here that our proposal of indirect truth marking via backgrounding overlaps conceptually with the Unalternative Semantics approach of Büring (2015, 2016, 2019), in which crucially what is *not* available for focal interpretation (the so-called UNALTERNATIVES) is key, rather than what is directly marked as focal. In other words, what is relevant is not the production of alternatives (in the sense of Rooth 1985, 1992) but rather the restriction of focus alternatives, i.e., the restriction of potential focus targets (Büring 2019: 14, 16). Because backgrounding is a means of limiting the scope of focus by removing possible targets (as we illustrated in Figure 3), such backgrounding strategies could thus be formalised as a means of marking unalternatives, rather than as means of marking focus (in contrast to the FAT-style approach). Note here in

relation to the formalism that the Bantu language data show backgrounding via morphosyntactic means rather than prosodic deaccenting as found in Germanic languages, requiring a formalisation in non-prosodic terms (cf. Assmann et al. 2023 for an extension of a similar formalism to languages which mark focus morphologically).

6 Conclusions

In this paper, we have presented new data from ten Bantu languages to show that lexical as well as grammatical means are employed in the expression of truth focus, and that the grammatical strategies mark backgrounded, non-focal constituents, resulting in different degrees of underspecification of the scope of focus. We have also added data from one additional Bantu language showing evidence for a dedicated verum strategy that cannot be used in a polarity focus context. On the basis of these data, we extended the typology for truth marking strategies, adding indirect marking via backgrounding as a type (Type III) alongside the use of direct focus marking strategies (Type I) and dedicated verum marking (Type II). The notion of indirect focal marking via backgrounding builds on Güldemann's (2016) notion of focus marking via maximal backgrounding but more explicitly highlights that strategies can vary in the degree of backgrounding, as understood in terms of focus scope (from maximal underspecification through generalised predicate-centred focus to focus on nothing but the truth value).

Our results have implications for the theoretical debate about the relation between verum and focus. Considering our typology, we see that the VERUM operator of Gutzmann et al. (2020) is well-motivated for Type II, but there is no evidence for it in the indirect strategy cases. While such an operator may be assumed to be covertly present in Type I and III strategies, we nevertheless argue that verum must be connected to focus, both on conceptual grounds and due to the non-trivial number of languages that have empirical overlap in markings – either of focus or of non-focus (i.e., backgrounding). We propose, then, that the emphatic verum reading, whether or not dependent on the presence of a VERUM operator, is dependent on having an information-structural context in which nothing other than the polarity value of the verb (i.e., *?p*) is the QUD, and that the sentence expressing this may explicitly mark what is non-focal. The overlap in marking between verum and backgrounding in many languages is therefore non-superficial. We formulate this as the Backgrounding and Underspecification Thesis (BUT).

Since our study began as a research project on the expression of information structure in Bantu, it could be extended in further research by investigating truth

expression in more detail. Further field investigation could systematically check more of the verum contexts of Matthewson and Glougie (2018) and Matthewson (2021), for example embedding, which is taken by Goodhue (2022) as crucial data for evaluating the lexical operator thesis in Germanic. Finally, while this paper was motivated by empirical data from Bantu languages, we also expect that indirect truth marking via backgrounding is available in other language families. This can be investigated further as part of studies on other languages, where we advocate for considering the (possible) multifunctionality of a given strategy in terms of the broader information-structural system of the language.

Abbreviations and symbols

Numbers refer to noun classes unless followed by *SG* or *PL*, in which case they refer to persons. High tones are indicated by an acute accent; low tones are generally left unmarked but are sometimes marked as a grave accent. Words in ALL CAPS in the translation indicate a pitch accent.

!	downstep
*	ungrammatical
#	infelicitous in given context
?	questionable acceptability
{ }	constituent in either position (but not both)
A	Changana determiner (unclear function)
APPL	applicative
AUG	augment
CJ	conjoint
CM	contrastive marker
CONN	connective
COP	copula
DEM	demonstrative
DM	discourse marker
DIST	distal
DJ	disjoint
DUR	durative
EXCL	exclusive
FOC	focus
F.PST	far past
FUT	future
FV	final vowel
H	floating high tone
HAB	habitual
IC	immediate causative

INF	infinitive
IPFV	imperfective
LOC	locative
NEG	negation
N.PST	near past
OM	object marker
P/PREP	preposition
PASS	passive
PFV	perfective
POSS	possessive
POT	potential
PRS	present
PRL	predicative lowering
PRO	(independent) pronoun
PROX	proximal
PST	past tense
Q	question marker
QUD	question under discussion
QUIS	Questionnaire on Information Structure
REL	relative
REM.PST	remote past
SBJV	subjunctive
SM	subject marker
STAT	stative
SUBS	subsecutive
YPST	yesterday past

Acknowledgements: The research reported here forms part of the Bantu Syntax and Information Structure (BaSIS) project (NWO Vidi grant 276-78-001). We are grateful to Crisófia Langa da Câmara for the Cinyungwe data, to our BaSIS colleagues Allen Asiimwe, Patrick Kanampiu, Zhen Li, Amani Lusekelo, Nelsa Nhantumbo, Ernest Nshemezimana, and the late Aurélio Simango, as well as all the speakers of the languages we worked with: Bahati Laikon Mwakasege, Peter Mwasyika Mwaipyana, Yona Mwaipaja, Pamellah Geiga Birungi, Joel Tumusiime, Ronald Twesigomwe, Dennis Muriuki Katheru, Philip Murithi Nyamu, Onesmus Mugambi Kamwara, Constancia Zaida Mussavele, Arlindo João Nhanthumbo, Gomes David Chemane, Menrage Buananli, Joaquim Nazário, N'gamo Saida Aly, Patient B. Batanoken, Edmond Bilouloung Bikok, Emmanuel Enganayat, Alain Georges Essomo, Angel Molel, Pierre Molel, Étienne Ondjem, Jeanne Ong'omolaleba, Enoch O., Bonface Omagwa, Zacharie Ngouloubi, Gilbert Mbou, Alain Mbiambourou and Gabriel Ntsiebele. We also thank Malte Zimmermann and the audiences at Bantu9, SLE55, CALL2022, Leuven LISTEN, and ACAL54 for their comments. All errors remain ours alone.

Appendix

Overview of strategies in truth contexts

Table 2: Overview of truth strategies in BaSIS language sample (see end of Appendix for Cinyungwe data).

	Periphrasis/ particle	Unmarked V	Marked V	Dislocation	Predicate doubling	OM-doubling
Tunen (A44)	(1)	(17) (18)	N/A	?	N/A	N/A
Teke (B77)	(2)	(20)	N/A	–	–(49)	N/A
Kirundi (JD61)	(11)	?	(32)	(44)	(53) (54)	?
Rukiga (JE14)	(8)–(9)	(23)	N/A	(39) (41)	(51)	(58)–(60)
Gusii (JE42)	(4)	?	(27) (17)	?	N/A	?
Kĩitharaka (E54)	(5)	(22)	(29)–(18)	(39)	(50)	?
Kinyakyusa (M31)	(10)	(24)	N/A	(21) (43)	(39)	N/A
Makhuwa (P31)	(12) (13)	(25)	(33)	(46) (45)	(56)	N/A
Changana (S53)	(14)	?	(34)	(47)		?
Cicopi (S61)	(16)	?	(37) (38)	(48)	(57)	?(61)

Key: – =absent (for verum); N/A = not applicable; ? = no data, example numbers = present.

Below, we illustrate each of these strategies in turn, starting with the lexical strategies and moving from left to right through the table to OM-doubling. For each strategy, we show the data that we base the analysis and the table on for each language in turn, but without going into further explanation or detail (for which we refer to the paper).

Source of data

The data, unless otherwise stated, are from fieldwork conducted under the BaSIS project, involving recording of elicitation sessions, recording of natural speech, and supplementary judgements from the native-speaker project members (Patrick Kanampiu for Kĩitharaka, Ernest Nshemezimana for Kirundi, Allen Asimwe for Rukiga, Amani Lusekelo for Kinyakyusa, Nelsa Nhantumbo for Cicopi). The data are represented according to the languages’ orthographies, but with added tone marking and vowel length. Where morphology is not transparent, an extra line with morpheme break is added.

The data were transcribed and annotated using the Dative GUI to the Online Linguistic Database (OLD) (<https://www.dative.ca/>). All the databases from the BaSIS project are to be archived open access with The Language Archive (expected early 2024). For Tunen, the raw audio and video recordings will also be archived.

- (8) (Are you sure the visitors are in the house?)
- a. **Ku** *ba-ri-mu o-mu n-ju*
 DM 2SM-be-18 AUG-18 9-house
 'I am certain that they (the visitors) are in the house.'
- b. **Bu-zima** *ba-ri-mu ó-mu n-ju*
 14-DM 2SM-be-18 AUG-18 9-house
 'Truly they (the visitors) are in the house.' [particle, Rukiga]
- (9) A: *Hoona omuri égi nyungu harimu ámaízi?*
 hoona o-mu-ri e-gi n-yungu ha-ri-mu a-ma-izi
 DM AUG-18-be DEM-9.PROX 9-pot 16SM-be-18 AUG-6-water
 'Is there water in this pot?' (I doubt whether there is water in this pot.)
 B: **Ma-zima** *ga-ri-mu.*
 6-DM 6SM-be-18
 'There is (water).' = 'I am sure there is water in this pot.' [particle, Rukiga]
- (10) (I don't believe he went to Malawi.)
A-a-buuk-ile nalooli.
 1SM-PST-go-PFV truly
 'He really went!' [particle, Kinyakyusa]
- (11) *Ego ni vyo umukózi aratéemvye.*
 ego ni bi-ó u-mu-kózi a-ra-téemb-ye.
 yes COP 8-PRO AUG-1-cook 1SM-DJ-fell.down
 'Yes, that's true the cook fell down.' [periphrasis, Kirundi]
- (12) A: Maria didn't cook beans.
 B: She did cook beans.
 A: No she didn't.
 B: *Ohaápéya, mí kohoóna!*
 o-o-apey-a mi ki-o-oon-a
 1SM-PFV.DJ-cook-FV 1SG.PRO 1SG.SM-PFV.DJ-see-FV
 'She DID cook (them), I saw it!' [periphrasis, Makhuwa]
- (13) *Seértú/ekhweelí a-ńń-óóth-a.*
 certainly/9.truth.PRL 2SM¹⁹-HAB-lie-FV
 'She certainly lies.'
 'It is true she lies.' [particle/periphrasis, Makhuwa]

19 The plural noun class 2 is used here to express respect.

- (14) (The giraffes are greeting someone!)
Ahí ntí:só tíhohlu tíngémuxoweti mú:nhu.
 a-hi ntiso ti-hohlu ti-nga-mu-xowet-i mu-nhu
 NEG-COP truth 10-giraffes 10_{SM}-POT-greet-NEG 1-person
 ‘It’s not true, giraffes cannot greet people.’ [periphrasis, Changana]
- (15) A: They are not fighting.
 B: *Wahé:mba; vó:lwa!*
 w-a-hemb-a va-o-lw-a
 2_{SG}.SM-DJ-lie-FV 2_{SM}-EXCL-fight-FV
 ‘You’re lying, they are fighting.’ [periphrasis, Changana]
- (16) (I don’t believe there’s no water.)²⁰
(Ngu) Ditshure, mati ma-gum-ile.
 PREP true 6.water 6_{SM}-finish-PFV
 ‘It is true, there’s no water.’ [particle/periphrasis, Cicopi]

Unmarked verb form

By an unmarked verb form we mean just the verb without any additional information structure-related marking (whether morphosyntactic or tonal). Note that the unmarked verb form is also used in other contexts, such as thetics or VP focus.

The use of an unmarked verb form is not applicable for the conjugations that have a conjoint/disjoint alternation or *ni*-marking, as they force a choice between marked verb forms.

- (17) a. (BaSIS picture stimulus of 3 women, 1 called Maria holding a bottle of water)
Báne Maliá a báka na mǎndíngǎ wó mǎnífǎ eé?
 báne Maliá a bá-aka na mǎndíngǎ wó ma-nífǎ eé
 is.it 1.Maria 1_{SM} be-DUR with 3.bottle CONN.3 6-water Q
 ‘Does Maria have a bottle of water?’
- b. *Éé, a bá-aka na mǎndíngǎ wó mǎnif.*
 Éé, a bá-aka na mǎndíngǎ wó ma-nífǎ
 yes 1_{SM} be-DUR with 3.bottle CONN.3 6-water
 ‘Yes, she does have a bottle of water.’ [unmarked V, Tunen]

²⁰ Tone and length indication missing.

- (18) (Did we give the presents to Shania and Hamida?)

ée, tɔ ka búábu índi.

ée tɔ ka búábu índiá

yes 1PL.SM PST3 PRO.2 give

‘Yes, we did give them them.’²¹

[unmarked V, Tunen]

Compare this unmarked verb form to the unmarked verb form found in Tunenthetic constructions.

- (19) What happened at church?

Be-ndo bá ná matala sómbak.

ba-ndo bá ná ma-tala sómb-aka.

2-person 2SM PST2 6-palm.fronds cut-DUR

‘People cut palm fronds.’

[unmarked V, Tunen]

- (20) a. *Ndé ka-ká-bvúúr-í we mi-pará ní?*

1.PRO NEG-1SM.PST-return-PST 2SG.PRO 4-money NEG

‘He did not return you the money?’

- b. *Ndé á-bvúúr-I me mi-pará.*

1.PRO 1SM.PST-return-PST 1SG.PRO 4-money

‘He DID return me the money’

[unmarked V, Teke]

Compare with unmarked verb forms in Teke thetics:

- (21) (What happened?)

Mpúku súruk-i kulá nzó.

1.rat fall-PST PREP.from.above 9.house

‘A rat fell from the house.’

[unmarked V, Teke]

For Gusii, the unmarked verb form is not applicable in basic tenses due to *ni*-marking in basic tenses forcing a choice of marked verb form. We have no data for tenses without the *ni*-alternation.

For Kĩĩtharaka, the unmarked verb form is not applicable in basic tenses due to *ni*-marking in basic tenses forcing a choice of marked verb form. In other tenses, an unmarked verb form is possible with a verum interpretation, as illustrated for the present tense:

- (22) (Why are you still sitting if I have instructed you to sweep the compound?)

Ng’úciáta.

ni-kũ-ciat-a

1SG.SM-PRS-sweep-FV

‘I have indeed swept!’

[unmarked V, Kĩĩtharaka]

²¹ Here, Tunen allows null expression of a given object, which is not idiomatic in English.

Rukiga and Kinyakyusa can use an unmarked verb form in verum context:

- (23) A: The cook has finally come.
 B: No, he didn't come.
 A: *Yááyizire*.²²
 a-a-ij-ire
 1SM-N.PST-COME-PFV
 'He came./He DID come.' [unmarked V, Rukiga]
- (24) (Yona isn't coming today.)
Mma ikwiisa.
 mma i-ku-is-a
 no 1SM-PRS-COME-FV
 'No, he IS coming.' [unmarked V, Kinyakyusa]

For Kirundi, Cicopi, and Changana, no unmarked V form is possible in the present tense due to the conjoint/disjoint alternation forcing the choice of a marked V form. For these languages, we have no data testing whether an unmarked verb form is possible for verum interpretation in other tenses.

For Makhuwa, the unmarked verb form is not applicable in basic tenses due to conjoint/disjoint marking in basic tenses forcing a choice of marked verb form. In other tenses, an unmarked verb form is possible with a verum interpretation, for example the habitual:

- (25) (Why don't you eat dark shima (made from cassava)?)
Mí ki-íní-c' eshímá y-oóríppa (tántú eshímá y-oóttéela).
 1SG.PRO 1SG.SM-HAB-eat 9.shima 9-dark as 9.shima 9-light
 'Me, I DO eat dark shima (just as light shima).' [unmarked V, Makhuwa]

Compare the use of the habitual in a presentationalthetic context:

- (26) (Which animals can be found here?)
Tsi-íní-phwary-an-éy-á enámá ts-íníceéne, ntokó
 10SM-HAB-find-RECP-STAT-FV 10.animals 10-much like
epúrí a-khólē ...
 10.goats 2-monkeys
 'Many animals can be found, like goats, monkeys, ...' [unmarked V, Makhuwa]

²² In standard Rukiga orthography, this word would be written as 'yaizire' (Allen Asimwe, p.c.).

Morphologically marked verb form

By a morphologically marked verb form, we mean a verb form which in the conjugation indicates information structure. In our data this refers specifically to the conjoint/disjoint verb forms and the *ni*- prefix on the verb in certain Eastern Bantu languages. Note that these verb forms are also used in other contexts, for example when the verb is clause-final, or with state-of-affairs focus (i.e. focus on the lexical content of the verb).

For Tunen and Teke, no marked verb form is possible due to the lack of morphological marking on the verb for any information-structural purposes, meaning that this strategy is not applicable in these languages.

Gusii and Kĩtharaka use the prefix *ni*- on the verb in verum (and other) contexts.

- (27) (The girl didn't cook the beans.)
Ó-mo-íséké ni-á-yegete chí-nyeende.
 AUG-1-girl NI-1SM-cook.PFV 10-bean
 'The girl DID cook beans.' [ni-form, Gusii]
- (28) ('Is the man hitting the ball?' + QUIS picture stimulus Task 18 Item 6)
Ee, ngoákaare (omopiira).
 ee ni-ko-ak-a a-re o-mo-piira.
 yes NI-15-hit-FV 1SM-be AUG-3-ball
 'Yes, he is hitting the ball.' [ni-form, Gusii]
- (29) (Did Muthoni sell the beans?)
Ntiménya ikú aláirire mboócó índí ímbíye #(n)'áárééndírie mpeémpe.
 n-ti-meny-a ni ku a-ra-ir-ire m-booco
 1SG.SM-NEG-know-FV foc where 1SM-YPST-take-PFV 10-beans
 índí ni m-bíye ni a-ra-eend-ir-i-e m-pempe
 but foc 1SG.SM-know foc 1SM-YPST-sell-PFV-IC-FV 10-maize
 'I don't know where she took the beans but I know she sold the maize.'
 [ni-form, Kĩtharaka]

Compare the use of the *ni*-form in a simple affirmative (no truth focus) and in a thetic sentence (default agreement inversion):

- (30) *Íkaririkana n'yatûmirwe kûgûira mwanki i nkáángá.*
 î-ka-ririkan-a ni î-a-tu-m-ir-w-e
 9SM-SUBS-remember-FV foc 9SM-PST-send-APPL-PASS-FV
 kû-gûir-a mû-anki ni n-kaanga
 15-take-FV 3-fire COP 9-guineafowl
 'He remembers he had been told to collect fire by Guinea fowl.'
 [ni-form, Kĩtharaka]

- (31) (Reporting on what happened yesterday.)

*Í kùrátùùbágá twaána.***ni** kù-ra-tùùb-ag-a tù-anaFOC 17_{SM}-YPST-jump-HAB-FV 13-children

'The children were jumping.'

[ni-form, Kĩitharaka]

For Rukiga, there is some tonal reduction on the verb as a reflex of the conjoint/disjoint alternation (Van der Wal and Asimwe 2020), but we do not have data on this for truth expression.

For Kinyakyusa, no marked verb form is possible due to the lack of morphological marking on the verb for information structural purposes.

Kirundi, Makhuwa, Changana, and Cicopi have the conjoint/disjoint alternation in basic tenses, where the conjoint verb form indicates that the focus follows the verb, and the disjoint verb form may be used in verum contexts (among others).

- (32) Q: Nooné murí aya magúme, abashíingaántaáhe hári icó baáfashije?

A: Abashíingantaáhe kóko baárafáshije.

nooné murí a-a ma-gúme a-ba-shíingantaáhe ha-ø-ri

Q 18_{LOC} 6-DEM_a 6-crisis AUG-2-traditional.councillor 16_{SM}-PRS-bei-ki-ó ba-á-fásh-ye^{ti}AUG-7-PRO 2_{SM}-REM.PST-help-PFV.RELa-ba-shíingaántahe [kóko ba-á-ra-fásh-ye]^{FOC}AUG-2-traditional.councillor obviously 2_{SM}-REM.PST-DJ-help-PFV

Q: 'Was there anything during that crisis in which the traditional councillors helped?'

A: 'The traditional councillors [did obviously help]_{FOC}.' (*Mushingantahe*, peace, 2000s)

[marked V, Kirundi, Nshemezimana and Bostoen 2017: 409]

- (33) a. (Maria didn't cook (the) beans.)

María ohaápéy' ekútte.

Maria o-o-a-pey-a ekutte

1.Maria 1_{SM}-PFV.DJ-cook-FV 10.beans

'Maria DID cook (the) beans.' [disjoint form, Makhuwa]

- b.
- María aapenyé ekutté.*

Maria o-a-pey-ale ekutte

1.Maria 1_{SM}-cook-PFV.CJ 10.beans

'Maria cooked (the) beans.' (answer to 'What did Maria cook?')

#'Maria DID cook (the) beans.' (not as reply to 'Maria didn't cook the beans')

- (34) a. (Are the girls bringing me two eggs?)
Tánítisélá *mátanzá mámbi:re.*
 ti-a-ni-tis-el-a ma-tanza ma-mbire
 10_{SM-DJ-1SG.OM-bring-APPL-FV} 6-eggs 2-two
 ‘They are bringing me two eggs.’ [disjoint form, Changana]

Compare the use of the conjoint verb form with postverbal focus:

- b. (*Tintombi*) **tínítisélá** *ts’éná mátanzá mámbi:re.*
 ti-ntombi ti-ni-tis-el-a ntsena ma-tanza ma-mbire
 10-girls 10_{SM-1SG.SM-bring-APPL-FV} only 6-eggs 2-two
 ‘The girls are bringing me only two eggs.’

Compare also the use of the disjoint form in a simple affirmative statement and in athetic sentence with subject inversion:

- (35) **Nalává** *khú:lu kúpéndlá yí:ndlu.*
 ni-a-lav-a khulu ku-pendla yindlu
 1_{SG.SM-DJ-Want-FV} hundred 15-paint 9.house
 ‘I want/need a hundred to paint the house.’ [disjoint form, Changana]

- (36) **Yi-á:-ná** *mpfû:la*
 9_{SM-DJ-With} 9.rain
 ‘It’s raining.’ [disjoint form, Changana]

- (37) (She didn’t eat matapa.)
E:né á-dy-i:te (*mátha:pa*).
 yes 1_{SM-eat-PFV} 6.mathapa
 ‘Yes, she ate/DID eat (mathapa).’ [marked V, Cicopi]

- (38) a. (You don’t draw water. /Are you doing what I told you?)
A:thú hářê:ka (*mâ:ti*).
 athu hi-a-rek-a mati
 1_{PL.PRO} 1_{PL.SM-DJ-draw-FV} 6.water
 ‘We DO draw (water).’ [disjoint form, Cicopi]

Compare the conjoint verb form with postverbal focus, not accepted in this context (but felicitous as an answer to an object question):

- b. **#Hireká** *mâ:ti.*
 hi-rek-a mati
 1_{PL.SM-draw-FV} 6.water
 ‘We are drawing water.’ [conjoint form, Cicopi]

Dislocation of terms from comment

Dislocation refers to the occurrence of an otherwise postverbal element in a left-peripheral or right-peripheral position, i.e. a non-canonical position, typically so that the verb is final. Note that dislocation of terms is not exclusive to truth expression; it also occurs to mark terms as topic, and to evacuate the verb phrase in order to focus other constituents.

No examples are found in the data for Tunen, Teke, or Gusii of dislocation in a verum or polarity focus context.

- (39) (You're accused of not bathing the child, which
was one of your tasks.)
Ka-ană, i tû-ka-thaamb-iir-i-e.
12-child FOC 1PL.SM-12OM-wash-PFV-IC-FV
'The child, we DID bathe him/her.' [dislocation, Kiitharaka]
- (40) (I don't think Jane cooked posho today.)
a. *Jéini a-ka-húnga y-áá-ka-téek-a.* SOV
1.Jane AUG-12-POSHO 1SM-N.PST-12OM-cook-FV
'Jane cooked posho today (I am certain about that).'
- b. *A-ka-húnga Jéini y-áá-ka-téek-a.* OSV
AUG-12-posho 1.Jane 1SM-N.PST-12OM-cook
'Jane cooked posho today (I am certain about that).' [dislocation, Rukiga]
- (41) (Did you say that the visitors brought bananas?)
a. *(eego) A-ba-gyenyi é-mi-nekye b-áá-gi-réet-a.* SOV
(yes) AUG-2-visitor AUG-4-banana 2M-N.PST-4OM-bring-FV
'(It is true), the visitors brought bananas.'
- b. *(eego) E-mi-nekye á-ba-gyenyi b-áá-gi-réet-a.* OSV
(yes) AUG-4-banana AUG-2-visitor 2SM-N.PST-4OM-bring-FV
'(It is true), the visitors brought bananas.' [dislocation, Rukiga]
- (42) A: You move along the path until you find a butterfly.
B: *Ikolokotwa ndiagile.*
i-kolokotwa n-li-ag-ile
AUG-5.butterfly 1SG.SM-5OM-find-PFV
'I found the butterfly.' [dislocation, Kinyakyusa]

Compare how left dislocation is also used to have the interrogative as sole postverbal constituent (non-verum use), i.e. evacuation movement:

- (43) *Amafumbi ikupijja bulebule?*
a-ma-fumbi i-ku-piij-a bulebule?
AUG-6-egg 1SM-PRS-COOK-FV how
‘How does she cook eggs?’ [Kinyakyusa]
- (44) (Masiko didn’t write the letter.)
Ni vyó, ikeéte yaráryanditse.
ni bi-ó i-keéte a-á-ra-ri-andik-ye
COP 8-PRO 5-letter 1SM-PST-DJ-5OM-WRITE-PFV
‘It’s true, she DID write the letter.’
[periphrasis, dislocation, marked form; Kirundi]
- (45) (Various animals have tried to get to the other side of the lake, but now came Lion, and he said:)
Ki-nró-tuph-ak-á; nrátthy’ úulé mí ki-náá-lápúw-a.
1SG.SM-FUT-jump-DUR-FV 3.lagoon 3.DEM.DIST 1SG.PRO 1SG.SM-PRS.DJ-CROSS-FV
‘I will jump; that lagoon I jump (over it).’ [dislocation, Makhuwa]
- (46) *K-oo-várihel-a (, eveéla).*
1SG.SM-PFV.DJ-light-FV 9-candle
‘I DID light a candle.’ (answer to ‘Why didn’t you light a candle?’)
‘I lit it (the candle).’ (answer to ‘What did you do with the candle?’)
[dislocation, Makhuwa]
- (47) (These beans, did Maria eat them?)
Anísvítí:ví á féjáu mara a mpu:nga áji:le.
a-ni-svi-tiv-i a feijao mara a mpunga a-j-ile
NEG-1SG.SM-8OM-know-NEG A beans but A 3.rice 1SM-eat-PFV.DJ
‘I don’t know about the beans, but the rice she DID eat.’
[dislocation, Changana]
- (48) (A mother told her daughters to wash the dishes. When she arrives at home she asks: Did they wash the dishes? Someone else answers:)
*Maparatu nikatidzivi, kambe sipuni vakuwute.*²³
ma-paratu ni-ka-ti-dziv-i kambe si-puni va-kuwul-ile
6-dish 1SG.SM-NEG-know-NEG but 7-spoon 2SM-wash-PFV
‘I don’t know about the plates, but the spoons they washed.’
[dislocation, Cicopi]

23 Tone and length indication missing.

Predicate doubling

In predicate doubling, the same predicate occurs twice, once inflected and once non-finite (typically an infinitive in class 15). There are different subtypes (see Güldemann and Fiedler 2022), including topic doubling and *in-situ* doubling (with either an infinitive or a nominalisation in class 14). Note that topic doubling is simply the topicalisation of an infinitive (see also under dislocation), and topic doubling is also used with the interpretations of a contrastive topic, intensification, and depreciation.

Predicate doubling is not possible at all in Tunen and Gusii,²⁴ and therefore is not found for truth expression. For Teke, predicate doubling is not felicitous in a verum context:

- (49) (He did not return the money?)
#Ndé me mi-pará kí-bvúúrá ká-bvúur-i.
 1.PRO 1SG.PRO 4-money INF-return 1SM.PST-return-PST
 Int. 'He DID return me the money.' [topic doubling, Teke]

For Changaná we do not have data on predicate doubling in verum contexts.

The other languages in our sample all show (some type of) predicate doubling in verum contexts.

- (50) (Someone is doubting whether the teachers danced.)
Kûíná (arímû) í baííntré!
 kû-ina a-rimû ni ba-in-ire
 15-dance 2-teacher FOC 2SM-dance-PFV
 'The teachers/they DID dance!' [topic doubling, Kĩitharaka]
- (51) (Mother doubts whether I have eaten.)
Yéég' ó-ku-rya n-áá-ry-a.
 yes AUG-15-eat-FV 1SM-N.PST-eat-FV
 'Yes, I have truly eaten.' [topic doubling, Rukiga]
- (52) (Father told us to sweep when he left; now he comes back and we are sitting watching tv; he says 'Why are you lazy watching tv and haven't swept?')
Ukupyaaagila ko tupyaaagiile!
 u-ku-pyagila ko tu-pyagil-ile
 AUG-15-sweep 15.PRO 1PL.SM-sweep-PFV
 'We DID sweep!' [topic doubling, Kinyakyusa]

²⁴ We differ here from Güldemann and Fiedler (2022), who consider the availability of V-Aux constructions in Gusii as a type of predicate doubling. The first author's Gusii consultants rejected predicate doubling of the kind formed by the combination of the same predicate in finite and nonfinite form.

- (53) (Have you eaten a snake?!)
Yeemwe n-aa-ra-rii-ye bu-ry-e.
 yeemwe N-á-ra-ri-ye bu-ri-e
 DP 1SG.SM-REM.PST-DJ-eat-PFV 14-eat-SBJV
 ‘Sure, I’ve really eaten (it)!’ [nominalisation doubling, Kirundi]
- (54) (You think I don’t run.)
Kwíiruka ndíiruka.
 ku-íiruka N-ra-íiruk-a
 15-run 1SG.SM-DJ-run-FV
 ‘I DO run!’ [topic doubling, Kirundi]
- Compare to the use of predicate doubling as contrastive topics, with focus on the object:
- (55) (In a restaurant, when asked what you want to order.)
(U)kuryá, ndya inyama, kunywá nywa ifanta.
 u-ku-ryá N-rí-a i-nyama ku-nywá N-nyó-a i-fanta
 AUG-15-eat 1SG.SM-eat-FV AUG-10.meat 15-drink 1SG.SM-drink-FV AUG-9.fanta
 ‘For eating, I eat meat, for drinking, I drink Fanta.’ [topic doubling, Kirundi]
- (56) (Don’t you know how to swim?)
Orámpeléla, kináárampeléla.
 o-rampelela ki-naa-rampelel-a
 15-swim 1SG.SM-PRS.DJ-SWim-FV
 ‘I DO know how to swim.’ [topic doubling, Makuwa]
- (57) (You are not eating the cake that I bought. It’ll go bad.)
Kudya há:dyá.
 ku-dya hi-a-dy-a
 15-eat 1PL.SM-DJ-eat-FV
 ‘We ARE eating (it).’ [topic doubling, Cicopi]

Object marking doubling

Object marking doubling (OM-doubling) refers to the situation when the object marker occurs in the same domain as the coreferent object NP, specifically in languages where such a configuration is normally disallowed.

Tunen and Teke do not have object markers (a general property of Northwestern Bantu languages), and therefore cannot have this strategy.

For Gusii and Kĩtharaka, we do not have the relevant data.

Although object marking in Rukiga requires further detailed investigation (cf. Asimwe to appear), we know that object doubling is generally not accepted, but seems that the occurrence of the object marker and the NP is allowed in a verum context in this language:

- (58) *Daani yáázyózy' esaati.*
 Daani y-áá-zí-ozya e-saati
 1.Dan 1SM-N.PST-10OM-wash AUG-10.shirt
 'Dan CERTAINLY washed the shirts.' [doubling object marking, Rukiga]
- (59) (In doubt whether we greeted the visitors.)
Tukábáramusy' ábagenyi.
 Tu-ka-ba-ramusya a-ba-genyi
 1PL.SM-F.PST-2OM-greet AUG-2-visitor
 'We DID greet the visitors.' [doubling object marking, Rukiga]
- (60) (The promise was made; it is not a rumour, the government will build the Maziba bridge.)
Gávument' eryárwómbek' órutindó rwa Maziba.
 gávumenti e-rya-ru-ombeka o-ru-tindo ru-a Maziba
 9.government 9SM-FUT-11OM-build-FV AUG-11-bridge 11-CONN Maziba
 'It is TRUE that the government will build the Maziba bridge.'
 [doubling object marking, Rukiga]

OM-doubling is not applicable for Kinyakyusa and Makhuwa due to the languages allowing object doubling in general.

For Kirundi and Chagana, we do not have the relevant data.

The data for Cicopi object marking are unclear at this point, as it is not entirely clear what factors determine doubling. We have one example in a polarity context (but lacking tone marking), where the lengthening on the verb suggests the object-marked object is in a different domain, but further study is required to draw conclusions.

- (61) (Did you greet your mother, when you arrived?)
I:na, nimulosi:le ma:me.²⁵
 ina ni-mu-los-ile mame
 yes 1SG.SM-1OM-greet-PFV 1.mother
 'Yes, I greeted her, mother.' [object marking, Cicopi]

²⁵ Tone indication missing.

Combination of strategies

Strategies may be combined, as in the examples below.

- (62) (Masiko didn't write the letter.)
Ni vyó, ikeéte yaráryanditse.
ni bi-ó i-keéte a-á-ra-ri-andik-ye
 COP 8-PRO 5-letter 1SM-PST-DJ-5OM-WRITE-PFV
 'It's true, she DID write the letter.'
 [periphrasis+dislocation+disjoint, Kirundi]
- (63) (I doubt whether Kate swept the house)
Kate e-n-ju ku y-aa-gi-kondoor-a!
 1.Kate AUG-9-house DM 1SM-N.PST-9OM-SWEEP-FV
 'I am certain that Kate swept the house.' / 'She DID sweep the house.'
 [particle+dislocation, Rukiga]
- (64) ('Have you eaten a snake?')
Yeemwe naarariye burye.
 yeemwe N-á-ra-ri-ye bu-ri-e
 DP 1SG.SM-REM.PST-DJ-eat-PFV 14-eat-SBJV
 'Sure, I've really eaten (it)! (I'm not joking)'
 [in-situ doubling+disjoint, Kirundi]

Cinyungwe enclitic =di

Data come from Crisófia Langa da Câmara, with gratitude. (NB: Cinyungwe is not tonal.)

- (65) A: He didn't arrive.
 B: *Ndikukuza, afikadi!*
 (ndi-ku-ku-wuz-a) a-fik-a=di
 1SG.SM-PRS-2SG.OM-say-FV 1SM-arrive-FV=VERUM
 'I'm telling you, he DID arrive!'
- (66) (You hear that a colleague usually goes to a bar and sings there. You are sceptical and decide to go and find out. You enter, hear her sing, and say:)
Mwaaná-yí a-ni-yimb-á=di!
 1.child-1.DEM.PROX 1SM-PRS-sing-FV=VERUM
 'She can really sing (and surprisingly good too)!'

- (67) (We are going far, becoming tired.)
- A: *Ti-m-fik-a* *lini?*
 1PL.SM-PRS-arrive-FV when
 ‘When will we arrive?’ (Are we there yet?)
- B: *Ku-fika*, *t-a-fik-a(=di)*.
 15-arrive 1PL.SM-PST-arrive-FV=VERUM
 ‘To arrive we arrived.’ [predicate doubling + =di]
- A: *Aah*, *t-a-fik-a=di*.
 yes 1PL.SM-PST-arrive-FV=VERUM
 ‘Indeed I see we have indeed arrived.’
- (68) A: *W-a-dy-a?*
 2SG.SM-PST-eat-FV
 ‘Have you eaten?’
- B: *Nd-a-dy-a(=#di)*.
 1SG.SM-PST-eat-FV=VERUM
 ‘I have eaten.’
- (69) Context 1: #I do not know what you did. Did you write?
 Context 2: #Did you write or did you not write?
 Context 3: I don’t believe that you wrote!
Nd-a-nemb-a=di.
 1SG.SM-PST-write-FV=VERUM
 ‘I DID write!’
- (70) Context 1: #I have no clue what s/he does in her free time. Does s/he sing?
 Context 2: I am not convinced that s/he can sing. They told me s/he can.
 Have you ever heard them singing?
A-niy-imb-a=di.
 1SM-PRS-sing-FV=VERUM
 ‘S/he can really sing!’ (The speaker is confirming, they heard them singing, were a witness.)

References

- All data unless otherwise indicated are from fieldwork conducted by the authors and other members of the BaSIS research project. These databases will be available (expected 2024) through The Language Archive (with the exception of the Makhuwa data collected before 2019).
- Asimwe, Allen, and Jenneke van der Wal. Database on information structure in Rukiga.
 - Kanampiu, Patrick, and Jenneke van der Wal. Database on information structure in Kĩtharaka.

- Kerr, Elisabeth J. Database on information structure in Tunen.
 - Li, Zhen. Database on information structure in Teke-Kukuya.
 - Lusekelo, Amani, Simon Msovela, and Jenneke van der Wal. Database on information structure in Kinyakyusa.
 - Nhantumbo, Nelsa, and Jenneke van der Wal. Database on information structure in Cicopi.
 - Nshemezimana, Ernest, and Jenneke van der Wal. Database on information structure in Kirundi.
 - Van der Wal, Jenneke. Database on information structure in Makhuwa.
- Abels, Klaus & Peter Muriungi. 2008. The focus marker in Kĩtharaka: Syntax and semantics. *Lingua* 118(5). 687–731.
- Asiimwe, Allen. to appear. On the expression of mirativity in Rukiga. *Studies In African Linguistics* (Special issue ‘Mirativity and evidentiality in Bantu’, edited by Hannah Gibson and Jenneke van der Wal).
- Asiimwe, Allen & Jenneke van der Wal. 2021. The multifunctionality of -o in Rukiga: Pronoun, contrastive topic, and mirative marker. *Nordic Journal of African Studies* 30(1). 26.
- Asiimwe, Allen & Jenneke van der Wal. ms. The expression of information structure in Rukiga. In Jenneke van der Wal (ed.), *The expression of information structure in Bantu*. Berlin: Language Science Press.
- Assmann, Muriel, Daniel Büring, Izabela Jordanoska & Max Prüller. 2023. Towards a theory of morphosyntactic focus marking. *Natural Language & Linguistic Theory* 41. 1349–1396.
- Bastin, Yvonne, André Coupez, Evariste Mumba & Thilo C. Schadeberg. 2002. *Bantu lexical reconstructions 3/Reconstructions lexicales bantoues 3*. Tervuren: Royal Museum for Central Africa. <http://www.africamuseum.be/collections/browsecollections/humansciences/blr>.
- Bloom Ström, Eva-Marie & Jochen Zeller. 2023. Verum focus in Nguni. *Zeitschrift für Sprachwissenschaft* 42(3). 493–524. <https://doi.org/10.1515/zfs-2023-2013>.
- Bosire, Kennedy Momanyi & Gladys Kwamboka Machogu. 2013. *Ekegusii-English dictionary with English index*. Nairobi: Ekegusii Encyclopedia Project.
- Buell, Leston. 2006. The Zulu conjoint/disjoint verb alternation: Focus or constituency? *ZAS Papers in Linguistics* 43. 9–30.
- Büring, Daniel. 2015. Unalternative semantics. *Proceedings of SALT* 25. 550–575.
- Büring, Daniel. 2016. Discontinuous foci and unalternative semantics. *Linguistica* 56(1). 67–82.
- Büring, Daniel. 2019. Focus, questions and givenness. In Malte Zimmermann, Klaus von Stechow & V. Edgar Onea (eds.), *Questions in discourse*, 6–44. Leiden & Boston: Brill.
- Cruschina, Silvio. 2021. The greater the contrast, the greater the potential: On the effects of focus in syntax. *Glossa: An Journal of General Linguistics* 6(1). 3.
- Dik, Simon C. 1997. *The theory of functional grammar, part 1: The structure of the clause*. Berlin & New York: Mouton de Gruyter.
- Downing, Laura & Lutz Marten. 2019. Clausal morphosyntax and information structure. In Mark Van de Velde, Koen Bostoen, Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 2nd edn., 270–307. London & New York: Routledge.
- Dugast, Idelette. 1971. *Grammaire du Tunen*. Paris: Éd. Klincksieck.
- Féry, Caroline. 2020. Grammatical reflexes of information structure in Germanic languages. In Michael Travis Putnam & Richard Page (eds.), *The Cambridge handbook of Germanic linguistics*, 661–685. Cambridge: Cambridge University Press.
- Fiedler, Ines, Katharina Hartmann, Brigitte Reineke, Anne Schwarz & Malte Zimmermann. 2010. Subject focus in West African languages. In Malte Zimmermann & Caroline Féry (eds.), *Information structure from different perspectives*, 234–257. Oxford: Oxford University Press.
- Goodhue, Dan. 2022. All focus is contrastive: On polarity (verum) focus, answer focus, contrastive focus and givenness. *Journal of Semantics* 39. 117–158.

- Güldemann, Tom. 2003. Present progressive vis-à-vis predication focus in Bantu: A verbal category between semantics and pragmatics. *Studies in Language* 27. 323–360.
- Güldemann, Tom. 2009. *Predicate-centered focus types: A sample-based typological study in African languages*. Application for project B7 in the Collaborative Research Center (Sonderforschungsbereich / SFB 632) 'Information Structure'. Potsdam University, Humboldt University of Berlin, Free University of Berlin.
- Güldemann, Tom. 2016. Maximal backgrounding = focus without (necessary) focus encoding. *Studies in Language* 40(3). 551–590.
- Güldemann, Tom & Ines Fiedler. 2022. Predicate partition for predicate-centred focus and Meeussen's Proto-Bantu "advance verb construction". In Koen Bostoen, Gilles-Maurice de Schryver, Rozenn Guérois & Sara Pacchiarotti (eds.), *On reconstructing Proto-Bantu grammar*, 537–580. Berlin: Language Science Press.
- Guthrie, Malcolm. 1948. *The classification of the Bantu languages*. London: International African Institute.
- Gutzmann, Daniel, Katharina Hartmann & Lisa Matthewson. 2020. Verum focus is verum, not focus: Cross-linguistic evidence. *Glossa: An Journal of General Linguistics* 5(1). 51.
- Gutzmann, Daniel & Elena Castroviejo-Miró. 2011. The dimensions of verum. In Olivier Bonami & Patricia Cabredo-Hofherr (eds.), *Empirical issues in syntax and semantics*, vol. 8, 143–165. <http://www.cssp.cnrs.fr/eiss8>.
- Hammarström, Harald. 2019. An inventory of Bantu languages. In Mark Van de Velde, Koen Bostoen, Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 2nd edn., 17–78. London & New York: Routledge.
- Hammarström, Harald, Robert Forkel, Martin Haspelmath & Sebastian Bank. 2022. *Glottolog* 4.7. Leipzig: Max Planck Institute for Evolutionary Anthropology. Available at: <http://glottolog.org> (accessed 17 03 2023).
- Höhle, Tilman N. 1988. VERUM-Fokus [mit Vorwort und Nachwort dazu]. In *Sprache und Pragmatik* (Arbeitsberichte 5), 1–7. Lund: Germanistisches Institut der Universität Lund.
- Höhle, Tilman N. 1992. Über Verum-Fokus im Deutschen. In Joachim Jacobs (ed.), *Informationsstruktur und Grammatik*, 112–141. Opladen: Westdeutscher Verlag.
- Hyman, Larry M. & John R. Watters. 1984. Auxiliary focus. *Studies In African Linguistics* 15(3). 233–273.
- Jacob, Peggy. 2010. On the obligatoriness of focus marking: Evidence from Tar B'arma. In Ines Fiedler & Anne Schwarz (eds.), *The expression of information structure: A documentation of its diversity across Africa*, 117–144. Amsterdam: John Benjamins.
- Jerro, Kyle & Jenneke van der Wal. 2022. *Contrastive topic and predicate doubling in Bantu*. Prague, Czechia: Poster Presented Online.
- Kanampiu, Patrick & Jenneke van der Wal. ms. The expression of information structure in Kĩĩtharaka. In Jenneke van der Wal (ed.), *The expression of information structure in Bantu*. Berlin: Language Science Press.
- Lambrecht, Knud. 1994. *Information structure and sentence form: Topic, focus and the mental representations of discourse referents*. Cambridge: Cambridge University Press.
- Lippard, Hannah, Justine Sikuku, Crisófia Langa da Câmara, Rose Letsholo, Madelyn Colantes, Kang (Franco) Liu & Michael Diercks. to appear. Emphatic interpretations of object marking in Bantu languages. *Studies In African Linguistics* (Special issue 'Mirativity and evidentiality in Bantu', edited by Hannah Gibson & Jenneke van der Wal).
- Lohnstein, Horst. 2016. Verum focus. In Caroline Féry & Shinishiro Ishihara (eds.), *The Oxford handbook of information structure*, 290–313. Oxford: Oxford University Press.
- Lusekelo, Amani, Jenneke van der Wal & Simon, Msovela. ms. The expression of information structure in Kinyakyusa. In Jenneke van der Wal (ed.), *The expression of information structure in Bantu*. Berlin: Language Science Press.

- Matthewson, Lisa. 2021. Verum in Gitksan. *Canadian Journal of Linguistics/Revue Canadienne de Linguistique* 66(1). 60–90.
- Matthewson, Lisa & Jennifer Glougie. 2018. Justification and truth: Evidence from languages of the world. In Stephen Stich, Masaharu Mizumoto & Eric McCready (eds.), *Epistemology for the rest of the world*, 149–186. Oxford: Oxford University Press.
- Meeussen, Achille E. 1967. Bantu grammatical reconstructions. *Africana Linguistica* 3(1). 79–121.
- Morimoto, Yukiko. 2017. The Kikuyu focus marker *nĩ*: Formal and functional similarities. In Jenneke van der Wal & Larry M. Hyman (eds.), *The conjoint/disjoint alternation in Bantu*, 147–174. Berlin & Boston: De Gruyter Mouton.
- Moro, George. 2017. *lingtypology: Easy mapping for Linguistic Typology*. <https://CRAN.R-project.org/package=lingtypology>.
- Mous, Maarten. 1997. The position of the object in Tunen. In Rose-Marie Déchaine & Vincent Manfredi (eds.), *Object positions in Benue-Kwa*, 123–137. The Hague: Holland Academic Graphics.
- Nhantumbo, Nelsa & Jenneke van der Wal. ms. The expression of information structure in Cicopi. In Jenneke van der Wal (ed.), *The expression of information structure in Bantu*. Berlin: Language Science Press.
- Nshemezimana, Ernest & Jenneke van der Wal. ms. The expression of information structure in Kirundi. In Jenneke van der Wal (ed.), *The expression of information structure in Bantu*. Berlin: Language Science Press.
- Nshemezimana, Ernest & Koen Bostoen. 2017. The conjoint/disjoint alternation in Kirundi (JD62): A case for its abolition. In Jenneke van der Wal & Larry M. Hyman (eds.), *The conjoint/disjoint alternation in Bantu*, 390–425. Berlin & Boston: De Gruyter.
- Repp, Sophie. 2009. *Negation in gapping*. Oxford: Oxford University Press.
- Repp, Sophie. 2013. Common ground management: Modal particles, illocutionary negation and VERUM. In Daniel Gutzmann & Hans-Martin Gärtner (eds.), *Expressives and beyond. Explorations of conventional non-truth-conditional meaning*, 231–274. Leiden: Brill.
- Roberts, Craige. 1996. Information structure in discourse. Towards an integrated formal theory of pragmatics. In Yae-Hak Yoon & Andreas Kathol (eds.), *Papers in semantics* (OSUWPL 49), 91–136. Columbus, OH: The Ohio State University.
- Rochemont, Michael. 2016. Givenness. In Caroline Féry & Sinichiro Ishihara (eds.), *The Oxford handbook of information structure*, 41–63. Oxford: Oxford University Press.
- Romero, Maribel & Chunghye Han. 2004. On negative yes/no questions. *Linguistics and Philosophy* 27. 609–658.
- Rooth, Mats. 1985. *Association with focus*. PhD dissertation. UMass Amherst.
- Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1. 75–116.
- Sasse, Hans-Jürgen. 1987. The thematic/categorial distinction revisited. *Linguistics* 25. 511–580.
- Sasse, Hans-Jürgen. 1996. *Thematicity* (Arbeitspapiere 27). Cologne: Institut für Sprachwissenschaft der Universität zu Köln.
- Schwarz, Florian. 2003. Focus marking in Kikuyu. *ZAS Papers in Linguistics* 30. 41–118.
- Schwarz, Florian. 2007. Ex-situ focus marking in Kikuyu. In Enoch O. Aboh, Katharina Hartman & Malte Zimmermann (eds.), *Focus strategies in African languages*, 139–159. Berlin & New York: Mouton de Gruyter.
- Schwarzschild, Roger. 1999. GIVENness, AvoidF and other constraints on the placement of accent. *Natural Language Semantics* 7(2). 141–177.
- Sikuku, Justine, Michael Diercks & Michael Marlo. 2018. Pragmatic effects of clitic doubling: Two kinds of object markers in Lubukusu. *Linguistic Variation* 18(2). 359–429.

- Sikuku, Justine & Michael Diercks. 2021. Object marking in Lubukusu: Information structure in the verb phrase. In Akinbiyi Akinlabi, Lee Bickmore, Michael Cahill, Michael Diercks, Laura J. Downing, James Essegbey, Katie Franich, Laura McPherson & Sharon Rose (eds.), *Celebrating 50 years of ACAL: Selected papers from the 50th Annual Conference on African Linguistics*, 305–330. Berlin: Language Science Press.
- Sikuku, Justine & Michael Diercks. ms. *Object marking in Lubukusu*. Berlin: Language Science Press.
- Skopeteas, Stavros, Ines Fiedler, Sam Hellmuth, Anne Schwarz, Ruben Stoel, Gisbert Fanselow, Caroline Féry & Manfred Krifka. 2006. *Questionnaire on information structure (QUIS): Reference manual*. Potsdam: Universitätsverlag Potsdam. http://www.sfb632.uni-potsdam.de/downloads/quis/ref_manual.pdf.
- Szendrői, Kriszta. 2003. A stress-based approach to the syntax of Hungarian focus. *The Linguistic Review* 20(1). 37–78.
- Van der Wal, Jenneke. 2009. *Word order and information structure in Makhuwa-Enahara*. Utrecht: LOT.
- Van der Wal, Jenneke. 2011. Focus excluding alternatives: Conjoint/disjoint marking in Makhuwa. *Lingua* 121(11). 1734–1750.
- Van der Wal, Jenneke. 2015. Bantu syntax. In *Oxford handbook topics in linguistics*. (online edn, Oxford Academic, 5 Dec. 2014). Available at: <https://doi-org.ezproxy.leidenuniv.nl/10.1093/oxfordhb/9780199935345.013.50>.
- Van der Wal, Jenneke. 2021. *The BaSIS basics of information structure*. <https://scholarlypublications.universiteitleiden.nl/handle/1887/3608096>.
- Van der Wal, Jenneke (ed.). ms. *The expression of information structure in Bantu*. Berlin: Language Science Press.
- Van der Wal, Jenneke & Allen Asiiimwe. 2020. The residue of the conjoint/disjoint alternation in Rukiga. *Studies In African Linguistics* 49(1). 43–59.
- Van der Wal, Jenneke & Larry Hyman (eds.). 2017. *The conjoint/disjoint alternation in Bantu*. Berlin & Boston: De Gruyter Mouton.
- Van der Wal, Jenneke & Kyle Jerro. 2022. Concessive and intensive meaning in Bantu predicate doubling. Paper presented at Bantu9, University of Malawi, June 2022.
- Wagner, Michael. 2006. Givenness and locality. *Proceedings of SALT* 16. 295–312.
- Wagner, Michael. 2012. Focus and givenness: A unified approach. In Ivona Kučerová & Ad Neeleman (eds.), *Contrasts and positions in information structure*, 102–147. Cambridge: Cambridge University Press.
- Zimmermann, Malte. 2016. Predicate focus. In Caroline Féry & Shinichiro Ishihara (eds.), *The Oxford handbook of information structure*, 314–335. Oxford: Oxford University Press.
- Zimmermann, Malte & Daniel Hole. 2008. Predicate focus, verum focus, verb focus: Similarities and differences. Paper presented at the workshop on predicate focus, Potsdam University & SFB 632, 14–15 Nov 2008.
- Zubizarreta, Maria Luisa. 1998. *Prosody, focus and word order*. Cambridge, MA: MIT Press.