

Bantu Complementizers: Forms and Functions

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1 Introduction

- This is a typological study of complementizers in Narrow Bantu languages (so not including Grassfields Bantu).
- We're aiming for (i) diachronic source: where do Bantu complementizers come from? And how does that compare with the cross-linguistic non-Bantu picture?
- And (ii) what are the *functions* of the various complementizers we see? Are there Form-Function correlations that teach us something about complementizers in general?
- Note that we are confining the investigation to **selected finite non-interrogative** embedded clauses.

Takeaways

- Bantu languages instantiate a few of the known complementizer grammaticalization paths.
 - Bantu complementizers can be divided into two distinct classes based on morpho-syntactic form and syntactico-semantic function.
- That this study is concerned solely with selected, finite, noninterrogative clauses.

- Languages from every subfamily of Narrow Bantu were chosen (according to the updated Guthrie codes in Maho 2009). However, Eastern Bantu is somewhat over-represented due to the availability of sources and speakers.

1.1 Say-complementizers

- The appearance of *say*-complementizers is widespread across the world’s languages (cf Hopper and Traugott 1993, 14; Kuteva et al. 2019, 375).
- Accordingly, a large number of Bantu languages employ a form of the verb meaning, or diachronically related to, ‘say.’ In (1a), Kimwani’s (G403) *kamba* is derived from proto-Bantu *-(g)amb ‘word, speak’ (cf, Meeussen 1967, 94). In (1b), Bena’s (G63) *uhutigíla* functions synchronically as a *say*-verb, as does Kisi’s (G67) *kujobha*, in (1c). (Note that, despite the different lexicalizations, these are all Zone G languages.)¹

- (1) a. *Amadi akwijiwa kamba Ali kawa nao nzuruku*
 Amadi knows COMP Ali be with money
 ‘Amadi knows that Ali had money.’ [Kimwani (G403)] (LIDEMO, 2010, 55)
- b. *a-va-anu va-i-pulih-a uhutigíla u-mu-yeesu*
 AUG.2-CL2-person CL2-PRES-hear-FV COMP AUG1-CL1-our.friend
a-taagih-ile
 CL1-die-FV
 ‘People hear that our friend died.’ [Bena (G63)] (Morrison, 2011, 417)
- c. *Lingi na lingi. bha-ka-n’-jobh-el-a kujobha, “Bít-agh-e*
 after_a_while 3PL-CONS-3SG-say-APPL-FV QUOT go-IPFV-SBV
ka-kot-agh-e ku=bhulongolo
 ITIVE-ask-IPFV-SBV 17.LOC=ahead
 ‘After a while they said to him, “Go and ask up ahead...”’ [Kisi (G67)]
 (Nicolle et al., 2018, 13)

- Extending across nearly all subfamilies are derivatives of proto-Bantu *-tì which in many languages has evolved into an element meaning ‘say’ as well as a complementizer (Meeussen, 1967; Güldemann, 2002, 2008),

¹Here and throughout, examples are provided with the glossing as given in the source material.

- (2) a. *u-meenye ukoti Asia a-ka-ku-gan-a?*
 2SG-know.PFV COMP A. 1-NEG-2SG-love-FV
 ‘Do you know that Asia doesn’t love you?’ [Nyakyusa (M31)] (Persohn, 2017, 314)
- b. *ku-bonakala ukuthi uZinhle u-zo-xova ujeqe*
 17S-seem that AUG.1Zinhle 1S-FUT-make AUG.1steamed.bread
 ‘It seems that Zinhle will make steamed bread.’ [Zulu (S42)] (Halpert, 2016, 1)
- c. *mbo-á-boHn-é kutí ø-ci-pepa bu-ryó*
 NEAR.FUT-SM₁-see-PFV.SBJV COMP COP-NP₇-paper NP₁₄-only
ci-bá-mu-dara
 PP₇-NP₂-NP₁-old.man
 ‘She will see that it is just a paper of her husband.’ [Fwe (K402)]
 (Gunnink, 2018, 432)

- There is a variant of the *say*-complementizer strategy noted in Devos and Bostoen (2012): some Bantu languages employ a complementizer which is related to (again, either synchronically or diachronically) to a word meaning ‘do.’²
- This is shown for Shangaci (P312) in (3) with the verb *-ira*, translated variously as ‘do, say, (be) like.’ As reported in Devos and Bostoen (2012), the same polysemy is found in Lunda (L52), Nkore-Kiga (JE13/14), Kirundi (JE62), Kinyarwanda (JE61), and Mongo (C61).

- (3) a. *ki-ao-ir-i <ni-law-e o-mu-ti>*
 SC_{1sg}-PST-QV-PFV <SC_{1pl}-go-SBJV NP₁₇-NP₃-town>
 ‘I said: ‘Let’s go home.’’
- b. *ir-an-i tono mu-mu-thuul-e ontu*
 QV-IMP-PLA thus SC_{2pl}-OC₁-take-SBJV PP₁.DEM_i
 ‘Do it as follows: Take this one...’
- c. *mu-khira o-awe o-sal-a o-ir-a khong’ongoo*
 PP₃-tail PP₃-POSS₁ PP₃-remain-PFV PP₃-QV-PSIT IDEO
 ‘His tail remains *like* a stump.’
 [Shangaci (P312)] (Devos and Bostoen, 2012, 99)

²The data reported here draws heavily on the discussion in Devos and Bostoen (2012). Any errors in reporting and interpreting their data are our own.

- It is likely that there is a single proto-Bantu source for *do*-complementizers in Bantu: *-gìd- (Bastin et al., 2002). As noted in Devos and Bostoen (2012), given the polysemy of *-gìd across Bantu, it may ultimately be possible to list *do*-complementizers as a sub-type of *say*-complementizer.

1.2 *Be*-complementizers

- Many Bantu languages introduce embedded clauses with a form of the copula. In the examples in (4), all the complementizers are *synchronically* multi-functional as infinitival forms of a verb meaning ‘be.’

- (4) a. *wanányámbiíla kúwá wéepo*
 2.PRI.1.tell that 2SG.SUBST
 ‘They tell her/him: You...’ [Makwe (G402)] (Devos, 2008, 419)³
- b. *nihó Núhu a-ka-meny-a kuβá amánche*
 so Noah 3SG-NARR-come.to.know-FV that waters
ya-ayá-tiβok-a mose
 6-NUCL-decrease-FV on.land
 ‘So Noah knew that the waters had subsided from the earth.’ [Ikoma (JE45)] (Roth, 2018, 94)
- c. *ndafumana ukuba mandifunde isiXhosa*
 I.found that I-must-study Xhosa
 ‘I found that I must study isiXhosa.’ [Xhosa (S41)] (du Plessis, 1989, 44)

- The majority of *be*-complementizers are derived from proto-Bantu *-bá ‘be, become’ (Guthrie, 1970a, 17); (Meeussen, 1967, 86).
- Still, there are some languages, particularly those in Zone E, which appear to have independently developed complementizers from other forms of the copula. Digo (E73) and Kigiryama (E72a) both use *kukala* ‘be’, derived from proto-Bantu *-yìkad ‘dwell, be’ (Guthrie, 1970b, 179). It is likely that *kana*, found in a few disparate languages like Kamba (E55) *-kàd ‘dwell, be’ (Guthrie, 1970a, 258). (See also Shona (S10), Dembetembe 1976.)

- (5) a. *Ndipho atu a-chi-many-a kukala iye ndi=ye*
 then 2-people 3PL-CONS-know-FV COMP 3SG COP=1.REF
a-ri-ye-hend-a mambo higo
 3SG-PST-1.REL-do-FV 6.things 6.DEM_{NP}

³Many examples in Devos (2008) involve the copula *kúwa* following by the similative *kama* ‘like, as.’

‘then people knew that it was her who did those things.’ [Digo (E73)]
(Nicolle, 2014, 55)

b. *yuyu ŋmanamuče were walagiza kukala a-so-zikp-e*
that woman AUX instructed COMP 1SM-NEG-bury.PASS-SBJV
‘The woman had instructed that she should not be buried.’ [Kigiryama
(E72a)] (Lax, 1996, 273)

c. *aisye kana nūkūka ūmūnθi*
he.say.PAST that he.come.PRES tomorrow
‘He said that he’s coming tomorrow.’ [Kamba (E55)] (Myers, 1975, 186)

- Beyond the copular elements above, Bantu languages also use the morpheme *n(i)*, which frequently serves both a copular and complementizer function.
- In Ibembe (D54) in (6a), *ni* appears with an invariant class 8 form of the relative pronoun *-bo* (and thus also falls under the pronominal category of complementizer, discussed in ??). In Tshiluba (L31) in (6b), *ne* is the cognate form.

(6) a. *Aachi a-le-ngany-a nibo Mswakeecha a-le mu-lwaala*
Aachi 1SM-PRES-think-FV COMP Mswakeecha 1SM-COP 1AGR-sick
‘Aachi thinks that Mswakeecha is sick.’ [Ibembe (D54)]

b. *Kalombo mu-sw-e ne Mujinga a-y-e ku Tshinsansa*
Kalombo 1SM-want-FV COMP Mujinga 1SM-go-SBJV to Kinshasa
‘Kalombo wants Mujinga to go to Kinshasa.’ [Tshiluba (L31)]

- Across Bantu, “[as] proclitic or prefix, [ni] has a number of functions easily relatable to the copula” (Nurse, 2008, 53).
- A final point worth noting is that, unlike *say*-complementizers, which may appear in inflected (sometimes fossilized) forms, *be*-complementizers in Bantu strongly—if not exclusively—favor an infinitival or otherwise uninflected form.⁴

⁴There are some exceptions, though the inflected forms are difficult to parse. For instance, Cuwabo (P34) has developed an interrogative subordinator *akala* ‘if’ from *okála* ‘be, stay, live’, shown in (i). (Cuwabo also has a non-interrogative *wílá*, which is a *say*- or *do*-complementizer.)

(i) *ddi-á-véd-e ddi-ón-é akala ni-naa-ilá-ókaana mikálélo dhi-íná*
1SG-IT-search-SBJ 1SG-see-SBJ if 1PL-FUT.DJ-AUX-15.have.PL 4.way.of.life 4-other
‘I will go and see if I can have another way of life.’ [Cuwabo (P34)] (Guérois, 2015, 351)

The origin of the *a-* prefix in *akala* is unclear—possibly either Class 1 or Class 2 agreement. Similarly, Kinyarwanda (JD61) also has a fossilized inflected form *niiba* ‘if’ consisting of *ni* and *-ba* (with class 9 subject agreement) (Givón and Kimenyi, 1974). Note that both of these exceptions involve interrogative complementizers; see ??.

1.3 Deictic complementizers

- Bantu languages contain a diverse range of complementizers related to deixis. We divide up the class class of deictic complementizers into three distinct subclasses: demonstrative, manner, and pronominal deixis.

1.3.1 Demonstrative complementizers

- Like English, multiple Bantu languages employ a complementizer that elsewhere has (or had) a demonstrative function. All languages in Zone JD have as a complementizer a form of *(y)(ú)kó*, which is a class 15 form of the distal demonstrative.

- (7) a. *Mugisho a-lá:-waz-a ku Murhula a-li Bujumbura.*
 Mugisha 1SM-PRES-think-FV COMP Murhulla 1SM-COP- Bujumbura
 ‘Mugisho thinks that Murhula is in Bujumbura.’ [Mashi (JD53)] Aron Finholt (p.c.)
- b. *y-a-vuz-e ko Maria y-a-ri u-mu-nyeshuri*
 1-RPAST-say-ASP that Mary 1-FPAST-be A-1-student
 ‘He said that Mary was a student.’ [Kirundi (JD63)] (Sabimana, 1986, 200)

- Lega’s (D25) complementizer is derived from the proximal demonstrative *-nɔ* with class 14 marking.

- (8) *ámúndε bóɔ ékwendá ko Zaíle*
 3S.1S.tell.PST that 3S.PR-go to Zaire
 ‘S/he told me that s/he is going to Zaire.’ [Lega (D25)] (Botne, 1995, 214)

- Note that demonstrative complementizers always appear in an (invariant) inflected form, which does not appear to be predictable. In our study, we have found demonstrative complementizers formed from Class 6, 8, 11, 15, and 17.

1.3.2 Manner deictics

- Included among the deictic complementizers are manner deictics. In Eton, *nâ* introduces selected embedded clauses as well as anaphorically describes a manner.

- (9) a. *à-Ltɛ L-kàd H b-òd nâ H-bó-zù-L*
 i-pr INF-tell LT 2-person CMP SB-II-come-SB
 ‘He tells the men to come.’ [Eton (A71)] (de Velde, 2008, 351)

- b. *mò-LtÉ kòm nâ*
 1SG-PR INF-do thus
 ‘I do it this way.’

[Eton (A71)] (de Velde, 2008, 170)

- As observed originally in Guthrie (1970b, 105) (and argued for explicitly in Güldemann 2002, 2008), this is probably a relevant derivative function of proto-Bantu **-tì* ‘that, namely.’
- The manner deictic use persists in many languages. For instance, in Nyala East it is clear that *-chi*, derived from **-tì*, has the distribution of a manner deictic outside of embedding contexts; it is not a speech verb.

- (10) a. *o-mw-aana a-chi*
 1AUG-1NC-child 1SM-DEM
 ‘a child like this’ [Nyala East (JE32f)]
- b. *Masika a-paar-a a-chi Wekesa ka-chi-a Nairobi*
 Masika 1SM-think-FV 1AGR-COMP Wekesa 1SM-go-FV Nairobi
 ‘Masika thinks that Wekesa went to Nairobi.’ [Nyala East (JE32f)]
 (Gluckman, 2023).

- Note that *-chi* in Nyala East is an agreeing complementizer; it obligatorily co-varies with the local higher subject (cf, Carstens and Diercks 2013; den Dikken and O’Neill 2020).

1.3.3 Pronominal complementizers

- A number of Bantu languages have developed complementizers from ostensibly pronominal sources, a pattern that is well-attested outside of Bantu languages (Diesel and Breunese, 2020). This is argued to be true of the complementizers *ngo* and *mbo*, found throughout Bantu languages.⁵

⁵Both are also found prevalently in Grassfields Bantu. It is worth noting that the Kinyarwanda (JD62) complementizer *ngo* is plausibly a demonstrative, or has a demonstrative-like function. In combination with the distal demonstrative, it can be used to refer to a previously mentioned or familiar individual.

- (i) *ng’uwo ararekereje nk’umujura, abantu akabagwizamo abagambanyi.*
 ngo=uwo a-ra-rekereje nka=umujura abantu a-ka-ba-gwiza=mo abagambanyi
 GLOSSES

‘He is like a thief, and he calls them traitors.’ [Kinyarwanda (JD62)] Imigani (Proverbs) 23:28

- (11) a. *Mary ya-inubwa ngo abana ba-tah-e kare*
 Mary 1SM-resent COMP 2NC.children 2NC-get.home-SBJV early
 ‘Mary resents it that the children get home early.’ [Kinyarwanda (JD61)]
 (Rugege, 1984, 38)
- b. *Masika a-paar-a mbo Wekesa ka-chi-e*
 Masika 1SM-think-FV COMP Wekesa 1SM-go-FV
 ‘Masika thinks that Wekesa left.’ [Nyala East (JE32f)]
- c. *naye abandi ba-kob-a mbu o-Bunyala bu-a-ikang-a*
 but AUG-2-other 2S-say-FV COMP AUG-Bunyala(14) 14S-PST-reach-FV
o-ku Nammanve
 AUG-17.LOC Nammanve(9)
 ‘But others says that the Bunyala reached Nammanve.’ [Ruuli (JE106)]
 (Sørensen and Witzlack-Makarevich, 2020, 94)
- d. *básanga mbɔ basúwa bãosíl’ǒkenda*
 2SM.claim that boats 2SM.left
 ‘They claim that the boats have left.’⁶ [Mongo (C61)] (Rop, 1958, 126)

- Botne (1995) shows that these forms are historically related to (emphatic) pronouns. Note that, since they derive from pronouns, pronominal complementizers are often “agreeing,” in that they co-vary with the subject of the embedding verb.
- Compare the “discourse markers,” which can be used to introduced any kind of embedded clause (and are preceded by the “particle” *a*), with the pronominal forms in Table 1. An example of the discourse particle use is shown in (12).

Direct discourse markers			Personal pronouns	
	Singular	Plural	Singular	Plural
1	<i>a mi</i>	<i>a nso</i>	<i>mi</i>	<i>so</i>
2	<i>a we</i>	<i>a nyo</i>	<i>we</i>	<i>nyo</i>
3	<i>a nde</i>	<i>a mbo</i>	<i>nde</i>	<i>bo</i>

Table 1: Ntomba-Inongo (C65) (Botne, 1995, 209)

⁶In original, *Ze beweren, dat de boten vertrokken zijn.*

- (12) *bayoye batepela, a mbo: ntaba inkuma isolota*
 3P-come-PST 3SP-say-FV PRT 3P 10-goats 10-all 10-PRF-run.off
 ‘They came and said: all the goats have run off.’ [Ntomba-Inongo) (C65)]
 (Gilliard, 1928, 69), cited in (Botne, 1995, 208)

- We see a slightly different state of affairs in Chokwe, Luchazi, Lunda, and Luvale, as reported in Kawasha (2006, 2007). In these languages, an agreeing complementizer is formed by taking the stem *ngu-* (for Chokwe, Luchazi, and Luvale) or *n-* (for Lunda) and adding the personal possessive form.
- Thus, the complementizer for a 1st singular subject of the main verb in Chokwe is *ngwami*, composed of *ngu-* and *ami* 1SG.POSS ‘my.’ For a 1st plural subject it is *ngwetu*, where *etu* is 1PL.POSS ‘our’. In Chokwe and Luvale in (13), *enyi* is the possessive pronominal form ‘his/her’ in this case referencing the Class 1 subject ‘he.’

- (13) a. *ka-na-amb-e ngwenyi mw-anga h-a-fw-a*
 SA1-TAM-say-FV COMP1 1-chief TAM-SA1-die-FV
 ‘He said that the chief is dead.’ [Chokwe (K11)]
- b. *∅-na-tu-lwez-e ngwenyi na-ngu-land-a*
 SA1-TAM-OM1PL-tell-FV COMP1 SA1-FUT-buy-FV
 ‘He told us (that), “I will buy”.’ [Luvale (K14)]
 (Kawasha, 2007, 182)

2 Crosslinguistic patterns

3 Some background

- Cross-linguistically, complementizers are grammaticalized from a few disparate sources (see Kuteva et al. 2019).
- (14) a. nouns such as ‘thing’, ‘fact’ or ‘place’
 b. **demonstrative**, interrogative and relative **pronouns**
 c. dative, allative and locative case markers or prepositions
 d. **SAY verbs**
 e. similative verbs meaning ‘resemble’ or ‘be like’

f. **similative manner adverbials and deictics**

adapted from Chappell (2008, 3)

- Bantu languages instantiate at least three (or four) of these patterns (bolded).
- It is worth noting which patterns do not appear to exist:
 - Case marking → though this is because Bantu languages just don’t do case.
 - Nouns such as ‘thing,’ ‘fact,’ or ‘place.’ → It’s unclear why this seem to be absent.

4 Functions of Bantu complementizers

4.1 Speaker confidence (“Evidentiality”)

- Many sources that document Bantu language complementizers mention “evidentiality” (see in particular Botne 1995, 2020), with the caveat that the term “evidentiality” covers a lot of ground.
- Rather than evidentiality *per se*, Bantu complementizers more often reflect an individual’s—often the speaker’s—commitment to the embedded proposition (cf, Gluckman 2023).⁷
- For example, in Kihara (2017), Kikuyu’s (E51) complementizer *atĩ* is argued to have evidential properties as a dubitative marker (in some contexts). The speaker is “non-committal about the relayed information, rendering the information unreliable” (Kihara, 2017, 114). In this way, *atĩ* is distinct from the quotatives *atĩrĩ* and *atĩrĩrĩ*.

(15) *ndĩ-ra-igu-ir-e* *atĩ nĩ ma-ra-cok-ir-e* *ka-ao*
 1SG-RCPST-hear-PFV-FV DUB AM 2-RCPST-return-PFV-FV 16-theirs
 ‘I heard that they returned to their home.’ [Gĩkũyũ (E51)] (Kihara, 2017, 114)

⁷The idea of speaker-commitment is tightly intertwined with hearsay evidentiality: speakers are less committed to information that is reported as second-hand. However, for any given language, it must be determined whether evidentiality is an implicature, or whether it is built into the meaning. In Kinyamulenge (JD61a), for instance, *ngo* really just indicates doubt on the part of the speaker, and the explanations given typically stem from the fact that the speaker only heard about the embedded proposition from someone else. Thus, the “evidentiality” is not hard-wired into the meaning of the complementizer.

- In Givón and Kimenyi’s (1974) study of Kinyarwanda’s (JD61) complementizer system, they note a three-way contrast between *kò*, *ngo* and *kongo* (arguably bimorphemic). Similar to Gĩkũyũ above, the pronominal complementizer *ngo* gives rise to a reading of speaker-doubt, contrasting with the more neutral *kó*.

- (16) a. *ya-m-bgiye ko u-a-koraga cyaana*
 he-PAST-me-tell that you-PAST-work-HAB hard
 ‘He told me that you worked hard.’
- b. *ya-m-bgiye ngo u-a-koraga cyaana*
 he-PAST-me-tell ngo you-PAST-work-HAB hard
 ‘He told me that you worked hard’ (but I personally doubt it).’ [Kinyarwanda (JD61)] (Givón and Kimenyi, 1974, 96)

- We also find instances where certain complementizers give rise to stronger, rather than weaker, speaker-commitment (e.g., direct evidentiality).
- In Kamba (E55), Myers (1975) reports that the *be*-complementizer *kana* often invokes a strong sense commitment on the part of the speaker. Thus, in (17), “the speaker believes that the promise will be kept” (Myers, 1975, 190).

- (17) *aisye kana nũkĩka ũmũn̄thi*
 he.said that he.comes today
 ‘He said that he is coming today.’ [Kamba (E55)] (Myers, 1975, 190)

- A similar contrast is reported again in Givón and Kimenyi (1974), noting that the demonstrative complementizer *kó* correlates with stronger speaker belief. For example, with the negative factive *kubeeka* ‘to lie,’ with *kó* (as opposed to *ngo*) in (18), the speaker’s commitment to “the belief ‘John didn’t come’ is the **weakest**” (Givón and Kimenyi, 1974, 102, emphasis in original).

- (18) *ya-mu-beešye ko Yohani yaaže*
 1SM-1OM-lie.PERF COMP John come.PERF
 ‘She lied to him that John came.’ [Kinyarwanda (JD61)] (Givón and Kimenyi, 1974, 102)

- Thus, with *ko*, the speaker is more committed to the truth of the embedded clause—even contradicting the lexical semantics of the embedding predicate.

- A similar example is reported in Finholt and Gluckman (pear). In Swahili (G42), the *be*-complementizer *kuwa* contrasts with the *say*-complementizer *kwamba* under verbs of epistemic possibility. When the speaker is relatively sure of the outcome, *kuwa* is better (19); otherwise *kwamba* is preferred (20).

- (19) We're watching Tanzania play in a football [soccer] match. There are five minutes left to play, and Tanzania is up by three.

i-na-onekan-a kuwa/#kwamba Tanzania i-ta-shinda
 9SM-PRES-seem-FV COMP/COMP 9Tanzania 9SM-FUT-win-FV

'It seems like Tanzania will win.'

- (20) We're watching Tanzania play in a football [soccer] match. It's halftime, and Tanzanian is up one to nil.

i-na-onekan-a kwamba/#kuwa Tanzania i-ta-shinda
 15SM-PRES-seem-FV COMP/COMP 9Tanzania 9SM-FUT-win

'It seems like Tanzania will win'

- We find both weak and strong “evidential” readings associated with complementizer choice.
- Interestingly, there are correlations between the lexical source of the complementizer and the associated evidential reading. Weak readings only ever arise in the presence of *say*-complementizers, manner deictics, and pronominal complementizers.
- Strong readings only ever arise in the presence of *be*-complementizers and demonstratives.⁸
- Note that this does not entail that all complementizers have an evidential meaning component; the observation is simply that when such a meaning arises (in embedded clauses), the lexical source of complementizer is predictable.

⁸There is an interesting wrinkle here, however. *Be*-complementizers are often used to head embedded polar interrogatives ('if/whether'), which also entail a lack of commitment on the part of an individual. However, polar interrogatives differ in that they reflect *ignorance* rather than *doubt*. As mentioned earlier, we have to put aside embedded interrogatives.

4.2 Information Structure

- Complementizers often interact with the information structure of the embedded clause (cf, Djärv 2019)—with the qualification that it is not entirely clear how much ground the term “information structure” covers in this context.
- In Bantu languages, the clearest instance of such “embedded clause effects” is observed in the presence of *predicate focus*, particular in *situative* clauses: adverbial clauses including reason, temporal, and conditional clauses.
- However, in many Bantu languages, the embedded clause effects are found in selected, finite embedded clauses as well.
- For instance, some complementizers prohibit the predicate focus operator *ni-* found in many Bantu languages (Güldemann, 2003, 2013) (cf ??). In Kisubi (JE21a)⁹, the predicate focus operator is banned in clauses headed by *nkikwo*, but permitted in clauses headed by *ngu*.

- (21) a. *bha-ka-tu-gambira nkikwo tu-liku-bha-tel-era endulu*
 2SM-PST-1PL.OM-tell COMP 1PL.SM-PRES-2OM-make-APPL noise
 ‘They told us that we are making noise to them.’
- b. *bha-ka-tu-gambira ngu ni-tu-bha-tel-era endulu*
 2SM-PST-1PL.OM-tell COMP FOC-1PL.SM-2OM-make-APPL noise
 ‘They told us that we are making noise to them.’
- [Kisubi (JE21a)] Cyprian Vumilia p.c.

- In contrast, in Gĩkũyũ, which *only* has *say*-based complementizers (or, arguably, manner deictics), predicate focus is permitted in the embedded clause (barring some other focus element) (Schwarz, 2003).

- (22) *Abdul ne-uy-ir-ε [ate nyina ne-ɔm-irε iβuku mbere ya nyomba]*
 A. SM-say-T-FV that ?.mother DM-see-T-FV 5-book in-front 9-ASS 9.house
 ‘Abdul said that (his) mother saw a/the book in front of the house.’ [Gĩkũyũ (E51)] (Schwarz, 2003, 80)

- In languages with a *conjoint/disjoint* system, disjoint forms of the verb are often banned in certain embedding contexts. It is common to find restrictions inside of nonselected clauses (e.g., relatives and temporal clauses), but we also find that certain selected embedded clause restrict the verbal morphology.

⁹Footnote about classification.

- In Kinyarwanda (JD61) and Kirundi (JD62), under the complementizer *kó*, only conjoint forms are found (Ngoboka and Zeller, 2016; Nshemezimana and Bostoan, 2016). The disjoint form (in this context, marked with *ra-*) is available under *ngo*-clauses.¹⁰

- (23) a. *a-ra-vúg-ye ngo a-ra-som-a*
 1sm-dj-say-pfv that 1sm-dj-read-fv
 ‘He says that he reads.’ [Kinyarwanda (JD61)] (Ngoboka and Zeller, 2016, 366)
- b. *a-vúg-ye kó a-som-a*
 1SM-say-PFV that 1SM-read-FV
 ‘He says that he reads.’ [Kinyarwanda (JD61)] (Ngoboka and Zeller, 2016, 365)

- While it widely debated about the function of conjoint/disjoint alternation (it is likely to have multiple functions across languages), it is reasonably thought to be connected with predicate (internal) focus:
 - Disjoint forms are found when predicate is in focus,
 - conjoint forms are found elsewhere (Van der Wal, 2016).
- Interestingly, the same dichotomy described for evidentiality above holds here. Only selected embedded clauses headed by *be*-copmplementizers and demonstratives block focus operators in the embedded clause.
- Clauses headed by *say*-complementizers, manner deictics, and pronouns generally have no effect on the information structure—specifically predicate focus—in the embedded clause.¹¹

4.3 Agreement

- It is well-known that a relatively large number of Bantu languages have so-called *agreeing complementizers*. These are complementizers which exhibit morphological

¹⁰Note that the main-clause verb is also affected. This pattern replicates in other languages, but the correlations between complementizer and main-clause morphology are less systematic, so we exclude them from the discussion here.

¹¹Van der Wal (2014) makes a similar claim with respect to *situative* clauses; she is largely concerned with nonselected adverbial clauses.

concordance with an element in the matrix clause, almost always the embedding subject,¹² like Lubukusu’s well-discussed *-li*.

(24) *ba-ba-ndu ba-bol-el-a Alfredi ba-li a-kha-khil-e*
 2-2-people 2S-said-AP-FV 1Alfred 2-that 1S-FUT-conquer
 ‘The people told Alfred that he will win.’ [Lubukusu (JE31c)] (Diercks, 2013, 358)

- The same division arises again: the only complementizers that permit co-variation are *say*-complementizers, manner deictics, and pronouns.
- *Be*-complementizers and demonstratives never exhibit co-variation.

5 Summarizing the dichotomy

	<i>say-comps</i>	<i>manner</i>	<i>pronouns</i>	<i>be-comps</i>	<i>demonstratives</i>
Can show agreement	✓	✓	✓	✗	✗
Can restrict focus in emb. clause	✗	✗	✗	✓	✓
Possible “evidential” reading	weak	weak	weak	strong	strong

- *Perspectival complementizers* (*say*-complementizers, manner deictics, pronominals): these complementizers anchor the embedded clause relative to an *individual*.
 - Weaker commitment, no effect on predicate focus, agreement.
- *Situational complementizers* (*be*-complementizers, demonstratives): these complementizers anchor the embedded clause to a *situation*.
 - Stronger commitment, effect on predicate focus, no agreement.

¹²(Gluckman, 2023) reports that certain speakers of Nyala East (JE32f) permit an implicit subject to control the agreement of the complementizer *-chi*, though he notes that this is the exception, not the rule.

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Appendices

5.1 Minor categories

5.1.1 Similitive complementizers

A final type of complementizer that occurs across Bantu languages (as well as crosslinguistically; Kuteva et al. 2019) involves words and particles that are classified as *similitives* meaning ‘like’ or ‘as.’ Commonly, these are derivatives of **-ɪgà* (Guthrie, 1970b, 243), like in Ruuli (JE103). The Kinyamulenge (JD61a) form *nkaaho* is likely from *nka* plus the locative demonstrative *aho*. As shown in (26b), *nka* still functions as a similitive marker.

- (25) a. *a-baana a-iz-a ku-bon-a nga ba-ku-ikiriz-a*
 AUG-child(2) 2SG.S-AUX-FV INF-see-FV COMP 2S-2SG.O-believe-FV
 ‘You will see the children believe you.’ [Ruuli (JE103)] (Sørensen and Witzlack-Makarevich, 2020, 94)
- (26) a. *Bill y-a-som-ye nkaaho uRwanda gw-a-tsind-ye*
 Bill 1SM-PAST-read-PERF COMP uRwanda 3SM-PAST-win-PERF
Tanzania
 Tanzania
 ‘Bill read that Rwanda beat Tanzania.’
- b. *umwaana wachu a-ra-sa nka Mary*
 1NC.child our 1SM-PRES-look like Mary
 ‘Our child looks like Mary.’

[Kinyamulenge (JD61a)]

Similitive complementizers are not restricted to forms of *nga*. In Logoori (JE41), *sia* serves a similitive function.¹³ In Eton (A71), *(à)né* is glossed as ‘like.’ This is distinct from the complementizer *nâ* which, according to de Velde (2008, 350) derives from “the demonstrative manner pro-adverbial” (see ??).

¹³The form *sia* /sʲa/ is likely related to JD *gusa* to be like, seen in (26b). We have been unable to identify a historical source for this lexical item.

- (27) a. *e-ror-ek-a sia Sira ni mu-rwaye*
 9SM-see-AC-FV like Sira COP 1AGR-sick
 ‘It seems like Sira is sick.’
 b. *Sira a-faan-a vuza sia ive*
 Sira 1SM-appear-FV just like you
 ‘Sira looks just like you.’

[Logoori (JE41)]

- (28) *à-Lté L-wógdàrà né mà-ndím m-é-Lté L-sín*
 I-PR INF-feel like 6-water VI-PR INF-be.cold
 ‘He feels how cold the water is.’ [Eton (A71)] (de Velde, 2008, 354)

Ultimately, it is possible that similitive complementizers should be viewed as a subtype of deictic complementizer.

5.1.2 Linkers

Another complementation strategy that should be mentioned involves building a complementizer out of one of the categories mentioned above, plus an inflected form of the general Bantu linker, *-a* (also called the connective, or associative; see van de Velde 2013). The linker is used across Bantu in almost all nominal dependencies (e.g., possession), and always inflects with the class features of the head noun. Complementizers using a linker are exemplified with Swahili (G42) and Tshiluba (L31) below.

- (29) a. *Hamisi a-li-ni-ambia (ya) kwamba a-na-penda kusoma*
 Hamisi 1SM-PAST-1SG.OM-tell LNK COMP 1SM-PRES-like INF.read
 ‘Hamisi told me that he likes to read.’ [Swahili (G42)] adapted from
 Mpiranya (2015, 220)
 b. *Kalombo mu-vuluke (bwa)ne Mujinga u-di*
 Kalombo 1AGR-remember.PAST LNK.COMP Mujinga 1AGR-COP
u-saama
 1AGR-sick
 ‘Kalombo told me that Mujinga was sick.’ [Tshiluba (L31)]

In (29a), the linker is inflect with Class 9 morphology (*y-*). In Tshiluba in (??), it appears with Class 14 morphology (*bu-*). The data are representative of the cross-Bantu pattern in that the linkers, when they are possible with complementizers, are always optional. It is unknown whether they also contribute a meaning distinction.

5.1.3 Null complementizers

Not all finite embedded clauses require an overt complementizer. In many cases, the complementizer can be omitted, with no discernable meaning difference. (*Ámbo* is an evidential particle in (30a).)

- (30) a. *ámεpαgile (bónɔ) ámbo éndile ko Pangé*
 3S-think-REC that EV 3S-go-REC to Pangé
 ‘S/he_i thought that s/he_j had gone to Pangé (but it is doubtful).’ [Lega (D25)] (Botne, 1995, 204)
- b. *mũ-timia a-kũ-ĩtĩk-ĩt-i-e (atĩ) mũ-thuri*
 NC₁-woman SC₁-CR.PST-believe-PERF-TRNS-FV COMP NC₁-man
nĩ-a-∅-iy-ir-e N-gũkũ
 FOC-SC₁-CR.PST-steal-COMPL-FV NC₉-chicken
 ‘The woman believed (today) (that) the man stole the chicken.’ [Gĩkũyũ (E51)] (Englebretson, 2015, 150)

In some cases however, the null complementizer serves a function. Myers (1975) reports that there is an interpretive distinction between overt *kana* and \emptyset in Kamba (E55). According to Myers (p. 190), “*kana* is used when the complement is a statement of fact, no introducer is used when the complement represents an intention of a possible, but not certain, event.” Thus, she provides the following contrast. (Note that the distinction is independent of Mood in the embedded clause.)

- (31) a. *maisye kana nĩ mūtamanu*
 said COMP COP stupid
 ‘They said that he was stupid.’
- b. *amanyĩsya maisye ∅ maimũmanyĩya ñngĩ*
 teachers said COMP teach NEG
 ‘The teachers said that they would not teach anymore.’ [Kamba (E55)] (Myers, 1975, 190)

Very little documentary work addresses whether null complementizers are possible in a given language—though see Edelsten et al. (2022, §3.10).¹⁴ Nonetheless, in at least some languages, all finite, declarative embedded clauses must be headed by an overt complementizer. For instance, as reported in Masatu (2015, 8) for Suba-Simbiti (JE431) “Both

¹⁴Edelsten et al. (2022) ultimately suggest that optionally expressed complementizers are more likely in East African Bantu languages. Thus, outside of East Africa, Bantu languages are more likely to have embedded clauses with obligatorily overt complementizers.

direct and indirect speech is marked with the complementizer *igha* ‘that’. This complementizer appears with almost every occurrence of direct or indirect speech, and it seems to be extremely ungrammatical to omit it.”