

Towards a typology of complementizers in Bantu languages

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See <http://bitly.ws/IbGg> for handout with more examples and discussion

Cross-linguistically, complementizers (heading finite non-interrogative clauses) show considerable variation in how they are grammaticalized (Kuteva et al., 2019)

This diversity ultimately informs our analytic picture: complementizers are “recruited,” shifting from lexical to functional categories, but often retaining some of their lexical properties.

The goal today is to provide a typological overview of the more common patterns found in Bantu languages, with the goal towards understanding their synchronic behavior. As I'll show, Bantu languages display a broad range of complementizers, varying in both form and in function. The main patterns include,

- *Say*-complementizers
- *Be*-complementizers
- (Three kinds of) deictic complementizers

However, when we look at the (morphological, syntactic, and semantic) behavior of the complementizers in Bantu languages, we find that there are two broad “kinds,” cross-cutting the diachronic source. This project is a first step at understanding (i) the sources of complementizers, and (ii) how that affects their synchronic function.

For this study, data was drawn from every family of Bantu languages (according to Maho's (2009) updated Guthrie codes), though East African languages are over-represented in the language sample. (Grassfields Bantu were excluded from the study.)

Note that we are only concerned with **finite non-interrogative selected embedded clauses**. This is primarily to keep the scope of the study manageable.

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1. Say-complementizers

The appearance of *say*-complementizers is widespread across the world's languages (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 Bantu languages, *say*-complementizers appear to have arisen independently in a number of languages, as evidenced by the different lexical sources for *say*-complementizers. Compare languages from Zone G: the following are *synchronically* multifunctional as complementizers as well as infinitival verb forms meaning 'say.'

- *kwamba* (-*amba* 'say') Kimwani (G402) (LIDEMO, 2010)
- *uhutigila* (-*tiga* 'say') Bena (G63) (Morrison, 2011)
- *kujobha* (-*jobha* 'say') Kisi (G67) (Nicolle et al., 2018)

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).

- (1) a. ʊ-meenye ʊkutɪ Asia a-ka-kʊ-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. mbo-á-bo_Hn-é kutí ∅-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)

Note that *say*-complementizers can appear in a various inflected forms. In the examples above, the complementizers are all identical to infinitival verb forms with the class 15 (infinitival) morphology. However, *say*-complementizers can show (fossilized) person/number agreement as well. I'll return to this point later.

2. Be-complementizers

Many Bantu languages introduce embedded clauses with a form of the copula. In the examples in (2), all the complementizers are, again, *synchronically* multifunctional as infinitival forms of a verb meaning ‘be(come)’

- (2) a. 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)
- b. 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 Zone E, which appear to have independently developed complementizers from other forms: proto-Bantu **-y}kad* ‘dwell, be’ and **-kad* ‘dwell, be’ (Guthrie, 1970a).

- (3) 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}
 ‘then people knew that it was her who did those things.’ [Digo (E73)]
 (Nicolle, 2014, 55)
- b. aisye **kana** nũkũka ũmũnthi
 he.say.PAST **that** he.come.PRES tomorrow
 ‘He said that he’s coming tomorrow.’ [Kamba (E55)] (Myers, 1975, 186)

Bantu languages also sometimes use the morpheme $n(i)$ as a complementizer. Across Bantu, “[ni] has a number of functions easily related to the copula” (Nurse, 2008, 53).

- (4) 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 Mswakecha 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)]

I note that *be*-complementizers should be considered distinct from **similatives** like '(be) like, resemble.' The copular complementizers are not historically or synchronically relatable to simulative elements.

And indeed, there are simulative complementizers (typically a form of *nga*) found in a number of languages—even those which have *be*-complementizers. See Appendix.

3. Deictic complementizers

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

3a. Demonstratives

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 derived from a Class 15 form of the distal demonstrative.

- (5) 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 (JD62)] (Sabimana, 1986, 200)

While there is a preference for distal demonstratives, proximal demonstratives are found as well. Lega's (D25) complementizer is derived from the proximal demonstrative *-no* with Class 14 marking (Botne, 1995).

- (6) ámbúndε **bóno** ékwendá ko Zaíε
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, and the inflection does not appear to be predictable. In this study, we have found demonstrative complementizers formed from Class 6, 8, 14, 15/17.

3b. Manner deictics

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

- (7) a. à-Lté 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. m̀è-Lté k̀òm **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 was the original function of proto-Bantu **-tì* ‘that, namely’ (which subsequently became a speech verb in many languages). But the manner deictic use persists in many languages, like Nyala East (JE32f).

- (8) a. 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, 2023a).
- b. o-mw-aana a-chi
 1AUG-1NC-child 1SM-DEM
 ‘a child like this’ [Nyala East (JE32f)]

3c. Pronominal complementizers

Some languages have developed complementizers from ostensibly pronominal sources, (cf, Diessel and Breunese 2020 for non-Bantu patterns). This is argued in Botne (1995) to be true of the complementizers *ngo* and *mbo*, found throughout Bantu languages.

- (9) 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. 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 (JE103)] (Sørensen and Witzlack-Makarevich, 2020, 94)

Botne (1995) shows that *ngo* and *mbo* are historically related to (emphatic) pronouns: *ngo* with fossilized 3rd singular (Class 1) and *mbo* with fossilized 3rd plural (Class 2).

Note that, by definition, pronominal forms are always inflected with person/number marking, which can show co-variation with the embedding subject (Botne, 1995; Kawasha, 2006, 2007). I'll return to this later.

Lastly, since demonstrative forms and pronominal forms are both usually traced back to the general deictic element *-o*, it is not always clear if there is a distinction between “true” demonstratives and “true” pronouns.

Summarizing, we find robust cross-linguistic patterns of,

- *say*-complementizers
- *be*-complementizers
- Deictic complementizers
 - ▶ demonstrative
 - ▶ manner deictic
 - ▶ pronominal

I emphasize that there are other strategies (e.g., similatives and null complementizers), though they are less robustly attested—or at least reported. See Appendix.

I'll turn now to variation in form and function of the Bantu complementizers. There are a number of ways that we see crosslinguistic variation in complementizer systems—both across and within languages. We'll focus here are three behaviors.

- Agreement
- Effect on information structure
- (Pragmatic) “evidential” uses

Based on these factors, what we find is that there are two groups of complementizers:

- *say*-complementizers
- manner deictics
- pronouns

- *be*-complementizers
- demonstratives

1. Agreement

Productive agreeing complementizers are robustly found in Bantu languages: many complementizers reflect the class features of the subject of the embedding verb.

$$(10) \quad [\underbrace{DP_{\phi} \dots V}_{\text{AGR}_{\phi}\text{-C}} [\text{AGR}_{\phi}\text{-C} \dots]]$$

Productive agreement on complementizers is found only with say-complementizers, manner deictics, and pronouns (see in particular Kawasha 2006, 2007 for the latter).

(11) **Say-complementizer**

kalulɔ a-linkw-amul-a kɔ-m-manyaaani gw-ake a-linkɔ-ti [...]
 hare(1) 1-NARR-answer-FV 17-1-friend 1POSS.SG 1-NARR-say

‘Hare answered to his friend: ...’ [Nyakyusa (M31)] (Persohn, 2017, 312)

(12) **Manner deictic**

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, 2023a)

(13) **Pronominal complementizer**

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)] (Kawasha, 2007, 182)

On the other hand, agreement (i.e., co-variation) is never found on *be*-complementizers and demonstratives.

Note that *be*-complementizer (and arguably demonstratives) never even show *fossilized* personal agreement—though, again, *say*-complementizers, manner deictics, and pronouns do.

2. Information structure

In many (selected) embedded clauses, certain information structure configurations are blocked (Kiparsky and Kiparsky, 1971; Hooper and Thompson, 1973). In Bantu languages, this occurs frequently with **predicate-centered focus** (Gluckman, 2023b).

(14) [... [C ... (*_{FOC-})V ...]]

Across Bantu, when a finite selected non-interrogative embedded clause disallows embedded predicate focus, the clause is headed by either a *be*-complementizer or a demonstrative.

In Kinyamulenge (JD61a), both the demonstrative *kó* bar disjoint verb forms (which are widely thought to be associated with predicate focus; Ngoboka and Zeller 2016). On the other hand, the pronominal *ngo* do not affect the embedded clause.

- (15) a. a-a-vug-ye *kó* a-(*ra)-rwar-ye
 1SM-PAST-say-PERF COMP 1SM-FOC-be.sick-PERF
 'S/he told me that s/he's sick.'
- b. a-a-vug-ye *ngo* a-*(ra)-rwar-ye
 1SM-PAST-say-PERF COMP 1SM-FOC-be.sick-PERF
 'S/he told me that s/he's sick.'

The same is found (in Kinyamulenge) with *kubha* and *-ti*: the former bars predicate-focus, the latter does not.

3. “Evidentiality”

Many sources that document Bantu language complementizers mention “evidentiality” (see in particular Botne 1995, 2020). Rather than evidentiality *per se*, Bantu complementizers more often reflect an individual’s—often the speaker’s—*commitment* to the truth of embedded proposition (cf, Gluckman and Bowler 2016; Gluckman 2023a).

Some complementizers indicate “weak” commitment, where the truth is in doubt somehow. And some indicate “strong” commitment, where the truth is somehow emphasized.

(16) [... [C_{weak/strong} ...]]

Say-complementizers, manner deictics, and pronouns correlate with weak commitment, while *be*-complementizers and demonstratives correlate with strong commitment.

In Kihara (2017), Gĩkũyũ's (E51) complementizer *atĩ* is argued to have a “weakening” effect: it is a dubitative marker. The speaker is “non-committal about the relayed information, rendering the information unreliable” (Kihara, 2017, 114).

- (17) 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)

Similar “weak” judgments are also reported for manner deictic and pronominal complementizers.

In contrast, *be*-complementizers and demonstratives often give rise to “strong” commitment. 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 (18), “the speaker believes that the promise will be kept” (Myers, 1975, 190).

- (18) aisye *kana* nũkkã ãmũnthi
he.said *that* he.comes today
'He said that he is coming today.' [Kamba (E55)] (Myers, 1975, 190)

Summarizing,

	<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

Cross-linguistically, complementizers are grammaticalized from a few disparate sources (Kuteva et al., 2019).

- (19)
- 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)

It is clear that Bantu languages exhibit a number of these well-attested strategies. At the same time, it is also clear that the distinct strategies appear to share some commonalities that the list above cannot capture.

As we've seen above, based on the synchronic behavior of the various classes of complementizers, it should ultimately be possible to say something about their synchronic function from a theoretical perspective.

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- Botne, R. (1995). The pronominal origin of an evidential. *Diachronica*, 12(2):201–221.
- Botne, R. (2020). Evidentiality in African languages. In Lee, C. and Park, J., editors, *Between Evidentials and Modals*, pages 460–501. Brill.
- Chappell, H. (2008). Variation in the grammaticalization of complementizers from verba dicendi in Sinitic languages. *Linguistic Typology*, 12(1):1–50.
- de Velde, M. V. (2008). *A Grammar of Eton*. Mouton de Gruyter.
- Diessel, H. and Breunese, M. (2020). A typology of demonstrative clause linkers. In Næss, Å., Margetts, A., and Treis, Y., editors, *Demonstratives in Discourse*, pages 305–341. Language Science Press, Berlin.
- du Plessis, J. A. (1989). Distribution of the complementizer *ukuba* in the Xhosa sentence. *South African Journal of African Languages*, 9(2):43–51.
- Edelsten, P., Gibson, H., Guérois, R., Mapunda, G., Marten, L., and Taji, J. (2022). Morphosyntactic variation in Bantu: Focus on East Africa. *Journal of the Linguistic Association of Eastern Africa*, 1(1).
- Englebretson, R., editor (2015). *A Basic Sketch Grammar of Gikũyũ*. Rice Working Papers in Linguistics vol. 6, Special Issue.
- Gluckman, J. (2023a). Perspectival domains in nouns and clauses. *Natural Language & Linguistic Theory*, 41:159–2023.
- Gluckman, J. (2023b). Predicate focus in embedded clauses in Kisubi. handout/slides from the BaSIS Focus Workshop.
- Gluckman, J. and Bowler, M. (2016). Expletive agreement, evidentiality, and modality in Logooli. In *Proceedings of SALT 26*, Austin, TX.

- Güldemann, T. (2002). When 'say' is not say. In Güldemann, T. and von Roncador, M., editors, *Reported Discourse: A meeting ground for different linguistic domains*, pages 253–288. John Benjamins, Amsterdam/Philadelphia.
- Güldemann, T. (2008). *Quotative Indexes in African Languages: A Synchronic and Diachronic Survey*, volume 34 of *Empirical Approaches to Language Typology*. Mouton de Gruyter.
- Gunnink, H. (2018). *A Bantu language of Zambia and Namibia*. PhD thesis, University of Ghent.
- Guthrie, M. (1970a). *Comparative Bantu*, volume 3. Gregg International Publishers, England.
- Guthrie, M. (1970b). *Comparative Bantu*, volume 4. Gregg International Publishers, England.
- Hooper, J. B. and Thompson, S. A. (1973). On the Applicability of Root Transformations. *Linguistic Inquiry*, 4(4):465–497.
- Hopper, P. and Traugott, E. C. (1993). *Grammaticalization*. Cambridge University Press, Cambridge.
- Kawasha, B. (2006). The structure of complement clauses in Lunda. *Studies in African Linguistics*, 35(1):1–32.
- Kawasha, B. (2007). Subject-agreeing complementizers and their functions in Chokwe, Luchazi, Lunda, and Luvale. In Payne, D. and na, J. P., editors, *Selected proceedings of the 37th annual conference on African linguistics*, pages 180–190.
- Kihara, P. (2017). A functional analysis of atĩ and its variants atĩrĩrĩ and atĩrĩ as complementisers and discourse markers in Gĩkũyũ. *The University of Nairobi Journal of Language and Linguistics*, 6:102–127.
- Kiparsky, P. and Kiparsky, C. (1971). Fact. In Steinberg, D. and Jakobovits, L., editors, *Semantics: an interdisciplinary reader in philosophy, linguistics, and psychology*. Cambridge.

- Kuteva, T., Heine, B., Hong, B., Long, H., Narrog, H., and Rhee, S. (2019). *World lexicon of grammaticalization, Second edition*. Cambridge University Press, Cambridge.
- LIDEMO (2010). *Mwani: Grammatical sketch*. SIL Moçambique.
- Maho, J. F. (2009). NUGL Online: The online version of the New Updated Guthrie List, a referential classification of the Bantu languages. Online at https://brill.com/fileasset/downloads_products/35125_Bantu-New-updated-Guthrie-List.pdf.
- Masatu, A. S. (2015). *Suba-Simbiti Narrative Discourse*. SIL International.
- Meeussen, A. E. (1967). Bantu grammatical reconstructions. *Africana Linguistica*, 3:79–121.
- Morrison, M. E. (2011). *A Reference Grammar of Bena*. PhD thesis, Rice University.
- Myers, A. (1975). Complementizer choice in selected Eastern Bantu languages. In *Proceedings of the Sixth Conferences on African Linguistics*, pages 184–193. OSU Working Papers in Linguistics 20.
- Ngoboka, J. P. and Zeller, J. (2016). The conjoint/disjoint alternation in Kinyarwanda. In van der Wal, J. and Hyman, L. M., editors, *The Conjoint/Disjoint Alternation in Bantu*, pages 350–389. De Gruyter/Moulton.
- Nicolle, S. (2014). Digo narrative discourse. *SIL Language and Culture Documentation and Description* 26.
- Nicolle, S., Balfour, B., Friesen, B., Toews, N., and Workman, J. (2018). Selected narrative discourse features in Kisi, a Bantu language of Tanzania. *CanIL Electronic Working Papers*, 4.
- Nurse, D. (2008). *Tense and Aspect in Bantu*. Oxford University Press.
- Persohn, B. (2017). *The Verb in Nyakusa: A focus on tense, aspect and modality*. Contemporary African Linguistics 2. Language Science Press, Berlin.

- Roth, T. (2018). *Aspect in Ikoma and Ngoreme: a comparison and analysis of two Western Serengeti Bantu languages*. PhD thesis, University of Helsinki.
- Rugege, G. (1984). *A study of Kinyarwanda complementation*. PhD thesis, University of Illinois Urbana-Champaign.
- Sabimana, F. (1986). *The relational structure of the Kirundi verb*. PhD thesis, Indiana University.
- Sørensen, M.-L. L. and Witzlack-Makarevich, A. (2020). Clausal complementation in Ruuli (Bantu, JE103). *Studies in African Linguistics*, 49(1):84–110.

A1. Similatives. A final type of complementizer that occurs across Bantu languages (as well as cross-linguistically; Kuteva et al. 2019) involves words and particles that are classified as *similatives* meaning ‘like’ or ‘as.’ Commonly, these are derivatives of **-ngà* (Guthrie, 1970b, 243), like in Ruuli (JE103). The Kinyamulenge (JD61a) form *nkaaho* is likely from *nka* plus the locative demonstrative *aho*. As shown in (??), *nka* still functions as a similative marker.

- (20) a. a-baana a-iz-a ku-bon-a nga
 AUG-child(2) 2SG.S-AUX-FV INF-see-FV COMP
 ba-ku-ikiriz-a
 2S-2SG.O-believe-FV
 ‘You will see the children believe you.’ [Ruuli (JE103)] (Sørensen and Witzlack-Makarevich, 2020, 94)

- (21) 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.’ [Kinyamulenge (JD61a)]

A2. 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 (22a).)

- (22) a. ámeɾpagile (bónɔ) ámbo éndile ko Pangé
 3S-think-REC that EV 3S-go-REC to Pangí
 ‘S/he_i thought that s/he_j had gone to Pangí (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.)

- (23) a. maisye kana nĩ mĩtamanu
 said COMP COP stupid
 ‘They said that he was stupid.’
- b. amanyĩsya maisye \emptyset maimũmanyĩya ãngĩ
 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). 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 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.”

A3a. Agreement

- Perspectival complementizers morphologically reflect a relationship with a (syntactic or discourse given) individual.
- Situational complementizers only morphological reflect a relationship with a relevant situation.

A3b. Embedded focus

- Situational complementizers deictically reference a (syntactic or discourse given) situation, and so interact with embedded clause predicate focus.
- Perspectival complementizers do not reference a situation, and so have no affect on predicate focus.

A3c. “Evidentiality”

- Perspectival complementizers can be used to reference an individual other than the speaker as the source of information, leading to the implicature that the speaker is less sure.
- Situational complementizers can be used to reference a situation that the speaker is aware of, i.e., by being a witness to, leading to the implicature that the speaker is more sure.