Quotatives in Guinean and Liberian Kpelle: A study of parallel Bible corpora and non-biblical texts

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Abstract. In this paper, I explore the use of reported speech constructions in the Bible translations into Guinean and Liberian Kpelle, the two closely related varieties of Kpelle macrolanguage (Mande, West Africa), as well as in a small corpus of non-Biblical texts in these varieties. In both Guinean and Liberian Kpelle, quotative items introducing reported speech are multifunctional morphological amalgams consisting of pronominals fused with the verb *ké* 'say'. Despite the morphological similarity of quotatives in Guinean and Liberian Kpelle, their syntactic behavior is different in the two varieties. First, quotatives have more functions in Guinean Kpelle than in Liberian Kpelle: they can appear as complementizers and markers of volition and purpose in the former variety, but not in the latter one. Second, in Guinean Kpelle, quotatives tend to function as quotative predicators, while in Liberian Kpelle, they usually appear as quotative markers co-occurring with speech verbs. Furthermore, in Guinean Kpelle, the pronominal addressees co-occurring with quotative predicators are often semantically empty. Non-predicative quotatives also co-occur with empty addressees in Guinean Kpelle, presumably inheriting this feature from quotative predicators. Finally, a surprising asymmetry was discovered and proved similar across the two varieties. In both Guinean and Liberian Kpelle, the marking of addressees in the matrix expression is different for the speech verb *ɓó* 'say' and quotative predicators. While quotative predicators are more likely to license pronominal than lexical addressees, the speech verb tends to co-occur with zero or lexical addressees. The tendencies observed in the Bible translations proved to be the same in non-Biblical texts suggesting that the Bible translations adequately represent the syntax of reported speech constructions in Guinean and Liberian Kpelle.

Keywords: quotatives, parallel corpora, minor languages, Mande, Bible translations, portmanteau.

Цитативные показатели в гвинейском и либерийском кпелле (на материале параллельных переводов Библии и небиблейских текстов)

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Аннотация. В статье на материале параллельных переводов Библии, а также небольшого корпуса небиблейских текстов исследуются цитативные показатели в гвинейском и либерийском кпелле (семья манде). Несмотря на морфологическое сходство, цитативы имеют различное синтаксическое распределение в текстах на рассматриваемых языках. Более того, обнаруженные различия характерны как для переводов Библии, так и для небиблейских текстов, из чего можно заключить, что данные переводы Библии адекватно передают синтаксис цитативных конструкций и могут быть использованы как источник языковых данных.

Ключевые слова: цитативы, параллельные корпуса, малые языки, манде, переводы Библии, портманто.

1. Introduction

1.1. The Bible as a source of linguistic data

When writing a grammar, it is desirable to base one's analytic conclusions and illustrative examples on natural texts, on a par with elicited examples. However, field linguists are not always in a position to collect large corpora of spontaneous texts that would be representative of various linguistic phenomena and suitable for a convincing quantitative analysis. A possible source of natural texts is the published literature in a target

language, e.g. fiction. Still, it is often the case that minor languages mainly function orally, and the only published source available for a given language is a translation of the Bible [Heider et al. 2011: 54].

While Bible texts are now often used to create parallel corpora [Wälchli 2007; Wälchli, Cysouw 2012; Christodouloupoulos, Steedman 2015], their place is still somewhat controversial in field linguistics. Some linguists explicitly note that Bible texts do not exhibit any significant grammatical differences from the natural spontaneous texts and can be used for analysis [Heider et al. 2011; Khachaturyan 2015: 7], while others see Bible translations as unreliable and not fully representative since they may use archaic language, they are stylistically marked and they may contain calques or errors, cf. [Wälchli 2007: 131]. Still, it is an empirical question whether and how Bible translations differ from the natural texts in a given language. This issue is related to a more general question whether field linguists can use the Bible translations as a source of data for language documentation and ultimately for reference grammars.

In this paper, I address both questions by analyzing parallel Bible translations in the Guinean and Liberian varieties of the Kpelle macrolanguage (ISO code: kpe; Mande, West Africa). These varieties are in an almost unique situation, since full Bible translations including the Old and New Testament are available for both of them, and both of these translations are available online. This gives an opportunity to carry out a fine-grained quantitative study of the two very closely related lects spoken outside of Europe. In this study, I compare Bible translations with non-Biblical texts collected by myself in the Republic of Guinea in 2008– 2014, as well as a short story in Liberian Kpelle taken from a published source [Sankawulo 1963]. I provide a case study of reported speech constructions, and particularly quotative indexes, i.e. linguistic expressions introducing reported discourse [Güldemann 2008].

Reported speech constructions are good candidates for exploring the reliability of Bible texts for the following reasons:

(a) they show strong language-internal and crosslinguistic variation in African languages;

(b) they are quite frequent in both colloquial and religious texts;

(c) one might expect that if Bible translations differ from other texts, the divergence is likely to be found in the domain of syntax.

1.2. Background on quotative indexes in Africa and in Mande

Typically, a reported speech construction consists of two parts: a quotative index and a quote. Quotative indexes are linguistic expressions introducing reported discourse, i.e. a quote [Güldemann 2008; Idiatov 2010]. This terminology is exemplified with (1) from English.

(1)   *He said to me* [QUOTATIVE INDEX]: *"Please, come!"*[QUOTE]

A quotative index encodes a discourse or a cognitive event, hence it typically includes information on the source (speaker) and the addressee (if relevant); it also contains a certain linguistic item with predicative semantics, broadly labelled here as a QUOTATIVE.

Various types of quotatives have been identified based on their morphosyntactic properties. Thus, QUOTATIVE VERBS are lexical items with full-fledged verbal morphology, e.g. English *say*. QUOTATIVE PREDICATORS typically behave as defective verbs in that they carry predicative meaning but are not marked for TAM. Finally, QUOTATIVE MARKERS are grammaticalized items that co-occur with quotative verbs within a single quotative index. Quotative markers tend to function either as complementizers, or, when the relation between the quote and the quotative index is not of complementation but of clause linking, as quotative clause linking markers [Idiatov 2010], although the difference between these two subtypes is not always clear and is not crucial for the present study.

In Mande family, as in many other African languages, quotatives are multifunctional elements ranging from verbs to grammaticalized quotative markers. Diachronically, they tend to develop from predicative to non-predicative uses [Heine, Kuteva 2002; Idiatov 2010: 850].

For example, in Kakabe (Mokole, Mande), there is the *kó* marker that can be used either as a quotative predicator, also labelled a "defective verb", or as a quotative marker co-occurring with another quotative [Nikitina, Vydrina 2020]. Unlike regular speech verbs, *kó* can appear

without any auxiliary-like element, yet it behaves like a verb in licensing arguments, e.g. a subject (2). Example (2) thus illustrates the use of *kó* as a quotative predicator.

KAKABE (MOKOLE)

(2) *à*   ***kó***   *ňdè*   *kánpátán* *bélé*   *ǹ*   *bòlò*
     3SG say   1SG.LG   wing   be.NEG   1SG   hand

'He said: I don't have wings'. [Nikitina, Vydrina 2020: 136]

When used as a quotative marker, *kó* does not co-occur with an overt subject (3), while lexical verbs do not generally allow subjects to be omitted in Kakabe. As a quotative marker, it can also freely combine with other quotatives, e.g. the speech verb *fɔ́* 'say' as in (4), or *kó* itself (5).

KAKABE (MOKOLE)

(3) ***kó***   *ì*   *níí*   *bààbà*   *kìlì*
     QU   2SG   SUBJ.2SG   father   call

'[He] said: Call your father!'

(4) *ì*   *náà*   *fɔ́*   *à*   *yèn*   ***kó***   *ǹ*   *báb*
     2SG SUBJ.3SG say   3SG   BEN   QU   1SG   PFV.OF

     básè   *sɔ̀tɔ̀n*
     medicine.ART   get

'You should tell him: I have found the medicine'.

(5) *àn*   ***kó***   *à*   *mà*   ***kó***   *jàbɛ́t*   *lè*
     3PL say   3SG   to   QU   diabetis   FOC

'They told her that it was diabetes'. [Nikitina, Vydrina 2020: 137]

In some other Mande languages, e.g. Kpelle, Mende, Loko, Bandi (Southwestern Mande) and Tura (Southern Mande), quotatives are morphological amalgams, or portmanteau morphemes, inflecting for person and number and making up pronominal-like suppletive paradigms [Idiatov 2010; Konoshenko 2013]. Historically, these markers originate from generic speech or action/change of state verbs fused with subject pronouns. Despite this morphological difference, the syntactic functions of such quotatives are quite close to those in Kakabe: they can function as quotative predicators or as quotative clause-linking markers, cf. (6)–(7) from Tura.

TURA (SOUTHERN MANDE)

(6) ***wò*** *báäɛ̌* *tő=ȍ* *tő* *kwí̋=ä̋*
 3PL.QU person all=SUBJ become white_person=PP

 'They say that everybody must become like whites'. [Idiatov 2010: 839]

(7) *ä̋* *nú-ú* *ké* *ä̋* *à* *gélä* *wó*
 1SG.I_b come\PFV-PFV CLM 1SG.SUBJ 3SG.NON‹SBJ› request do

 má *ȅ* *ń́=ɓä̀* *wɛ́ɛ́ɛ́* *fàìbòò*
 1SG.QU 3SG.SUBJ 1SG.NON‹SBJ›=POSS money change

 'I came to ask him to change my money'. [Bearth 1971: 433]

When operating as quotative markers, fused quotatives have person-number agreement, usually (but not necessarily) with the subject of the matrix clause (7). In (8), the quotative marker *má* agrees with the pronoun *ń́* functioning as a postposition complement. This property of fused quotative markers is a typologically rare phenomenon found in Mande [Idiatov 2010: 860].

TURA (SOUTHERN MANDE)

(8) *ȅ* *ń́* *gí́* ***má*** *ɛ̋* *wòò-ó* *pé*
 3SG.I_b 1SG.NON<SBJ> PP 1SG.QU 3SG.I_a speech=FOC say

 yȅ-á *lä̋ä̀,* *ȅ* *tȍ-ó* *à* *tä̀…*
 NMLZ=PP TM 3SG.I_c stay\COND-COND 3SG.NON‹SBJ› PP

 'I think (lit.: 'It is in me') that if she keeps her promise ⟨everything will be fine⟩…' [Idiatov 2010: 848]

1.3. Guinean and Liberian Kpelle: background and data

Guinean Kpelle (ISO code: gkp) and Liberian Kpelle (ISO code: xpe) are local varieties of the Kpelle macrolanguage (Southwestern Mande) spoken by more than one million people in Southeastern Guinea and Northern Liberia in West Africa. The present description is based on my fieldwork materials collected for Guinean Kpelle between 2008 and 2022, on published sources on Liberian Kpelle, mainly [Westermann,

Melzian 1930] and [Leidenfrost, McKay 2007], as well as on the available Bible translations.

The Guinean Kpelle Bible is accessible online. Most likely translated from Louis Segond French Bible, it was published recently by the Protestant Bible society in Conakry with no publication date indicated.

The Liberian Kpelle Bible, translated from English and published in 2014 by the Bible Society in Liberia, is also accessible online.

The Bible translations were first downloaded and automatically transformed into an Excel database by Alexander Piperski. I then manually annotated and analysed the first 12 chapters of the Genesis (Old Testament) and the first 4 chapters of the Gospel of Jean (New Testament) of both Guinean and Liberian Bible translations. Both Guinean and Liberian Bible translations were later fully annotated via automatic algorithms developed by myself for each dialect and implemented in Python by Alexander Ryaposov. The automatic annotations were then partly checked manually. Although the automatically annotated Bible data do contain some noise, it is unlikely to have significantly affected the final result. The algorithm is described in more detail in *Section 3*.

The oral texts in Guinean Kpelle were collected from four native speakers in Nzérékoré in 2009–2014. The texts include three folk stories, one text explaining the burial traditions of Kpelle, and one story of an unpleasant personal experience.

Finally, the Bible translation in Liberian Kpelle is compared to a short story in Liberian Kpelle published by Kpelle Literacy center in Liberia (1963).

The paper is organized as follows. In *Section 2*, I provide a qualitative description of quotative indexes in Guinean and Liberian Kpelle, based on the available sources and own field data. In *Section 3*, I present the results of a quantitative study of quotative indexes as appearing in the Biblical vs. non-Biblical texts. *Section 4* concludes the paper.

I demonstrate that, although quotatives have similar morphology, they pattern quite differently in Guinean vs. Liberian Kpelle texts. First, they have non-identical functions in the two varieties and, more importantly, the markers are distributed asymmetrically across the same functions. Second, quotatives have different patterns of licensing addressees in Guinean

and Liberian Kpelle. Crucially, these properties are similar for Biblical vs. non-Biblical texts, suggesting that Bible translations are representative sources of linguistic data, at least in this particular case.

2. Quotatives in Guinean and Liberian Kpelle

From the morphological point of view, in both Guinean and Liberian Kpelle, quotatives are morphological amalgams consisting of pronominals fused with the verb *kɛ́* 'say' and forming suppletive paradigms, also cf. [Idiatov 2010].

Sources on Liberian Kpelle provide different variants of the fused forms, presumably because they represent different local varieties. D. Westermann and H. Melzian worked with a speaker of the Northen variant of Liberian Kpelle which is rather close to Guinean Kpelle, while the sketch in [Leidenfrost, McKay 2007] and the Bible translation are based on the Southern Liberian Kpelle. *Table 1* presents the paradigms of quotatives in Guinean Kpelle based on my field data and the Liberian forms as given in [Westermann, Melzian 1930: 22] and in the Bible.

Table 1. Quotatives in Guinean and Liberian Kpelle

	1SG	**2SG**	**3SG**	**1EXCL.PL**	**1INCL.PL**	**2PL**	**3PL**
GKpelle	*gɛ̂*	*yɛ̂*	*yɛ̀*	*kúô*	*gùo*	*kâa*	*dìɛ*
LKpelle (WM)	*ŋɛ*	*yɛ́~biɛ*	*yɛ̀~nyɛ̀*	*kwiɛ*		*kɛ*	*diɛ*
LKpelle (Bible)	*ńyɛɛ*	*íyɛ̀ɛ~yɛ̂ɛ*	*nyɛ̀ɛ*	*ˀkûa* [1]		*kâa*	*dîyɛɛ*

In both Guinean and Liberian Kpelle, quotatives can license lexical addressees, i.e. addressees encoded by full noun phrases, introduced

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[1] As the 1PL form is not attested in the Liberian Kpelle Bible translation, it has been reconstructed based on analogical considerations.

by the locative markers *ɓà* (Guinean Kpelle) or *mà* (Liberian Kpelle) 'on'. Pronominal addressees are encoded by morphological amalgams consisting of pronominals historically fused with the markers *ɓà* (Guinean Kpelle) or *mà* (Liberian Kpelle).

Table 2. Pronominal addressees in Guinean and Liberian Kpelle

	1SG	**2SG**	**3SG**	**1EXCL.PL**	**1INCL.PL**	**2PL**	**3PL**
GKpelle	*mâa~mîi*	*yê*	*mà*	*kúô*	*gùô*	*kâa*	*dìê*
LKpelle	*mâ~mî*	*yê~yâ*	*m̀a*	*kûa*		*kâa*	*dîa*

Examples below are represented in the orthography of the source. Although the Liberian Kpelle Bible was originally translated from English and the Guinean Kpelle Bible translation was done from French, in this paper, the Bible excerpts from both Kpelle varieties are translated into English following the New Revised Standard Version.

2.1. Quotative predicators

In both Guinean and Liberian Kpelle, quotatives can function as quotative predicators appearing with no auxiliary-like markers, cf. (9)–(10).

GUINEAN KPELLE, quotative predicator
(9) *Nu* **yɛ** *mạ:* *"Ɗáą́ ə́ woo mɛn…"*
     man 3SG.QU 3SG.on 1SG.PRF 2SG voice hear
     'He said, "I heard the sound of you …"' [Genesis 3:10]

LIBERIAN KPELLE, quotative predicator
(10) *Nalôŋ* **ǹyɛɛ** *ma-i,* *"Ɗá í-woo mɛni…"*
      man 3SG.QU 3SG.on-BND 1SG.PRF 2SG-voice hear
      'He said, "I heard the sound of you …"' [Genesis 3:10][2]

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[2] In both Guinean and Liberian Kpelle, quotative indexes can have an optional final -*i* marker glossed here as a boundary marker BND. It is also attested in other

Both in Guinean and Liberian Kpelle, quotative predicators, similarly to speech verbs, license arguments and obligatorily agree with lexical subjects in person and number as further demonstrated for Guinean Kpelle below in (11)–(12). In (11), the subject is in 3sG, while in (12), it is in 3PL as reflected in the form of the quotative predicator.

GUINEAN KPELLE, quotative predicator

(11) *zèɲégòlogoloí* **yè** *mà:* *"Pɔ́lɔ̀ káa pâ-i*
DEF\monster   3sG.QU 3sG.on mud   COP   come-INF

kɔ́-i *mà"*
beat-INF 3sG.on

'And the monster said: it will be covered by mud'. [2014_BL_47]

(12) *nèápèlɛɛ* **dìɛ** *mà-í:* *"Kwà zèɣe*
DEF\child.PL 3PL.QU 3sG.on-BND 1PL.EXCL.COND 3sG\take\L

kwǎ *màawâa"*
1PL.EXCL.IRR 3sG.wash\L

'The children said: If we take it, we wash it'. [2014_BL_48]

As noted above, quotatives functioning as quotative predicators are not overtly marked for TAM, and they are mainly used in perfective contexts. In other TAM meanings, the fully marked TAM construction is used with the verb *kɛ́* 'say' in Guinean Kpelle (13), but not in Liberian Kpelle where the speech verb *ɓó* 'say' may be used (14).

GUINEAN KPELLE

(13) *nwulu-i* *ŋɛi* *ŋí* **kɛ** *yɛ́:* *"Hvó ma*
DEF\tree-REL this 1sG say\L 2sG.on 2sG.NEG DEF\fruit

ta *mɨ̰i",* *yáá* *da* *mɨ̰i?*
some eat\L   2sG.PRF 3sG\some eat

'Have you eaten from the tree of which I commanded you not to eat?' [Genesis 3:11]

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polypredicative constructions, and it does not appear to add any specific properties to the quotative indexes analysed in this paper. Hence it is excluded from the discussion.

LIBERIAN KPELLE

(14) *ŋ̀úri-i*   *ŋá*   ***mɔ̀***   *yâ*   *a*   *gɛɛ*
     DEF\tree-REL   1SG   3SG\say\L   2SG.on with   3SG\say.STAT

     ífe   *m̀á*   *da*   *mii,*   *ɓa*   *da*   *mii?*
     2SG.NEG   DEF\fruit   some   eat   2SG.PRF   some   eat

     'Have you eaten from the tree of which I commanded you not
     to eat?' [Genesis 3:11]

Interestingly, in both Guinean and Liberian Kpelle, constructions with
full *kɛ́* 'say' verb are used to introduce a name in a Habitual construction
(15)–(16); note a similar function for the Kakabe quotative *kó* (17).

GUINEAN KPELLE

(15) *Nwun*   *mąąɓo-mun*   *Yálá*   *ə*   *naakwɛlan-mo,*   *gaa*
     DEF\man   save-person   God   3SG   3SG\promise-make 3SG\COP

     pa-i   *pa-i;*   *yii*   *da*   ***kɛ***   *mą:*   *Kristə.*
     come-INF   come-INF   that   3PL.HAB   say\L   3SG.on   Christ

     '⟨I know that⟩ Messiah is coming (who is called Christ)'. [John 4:25]

LIBERIAN KPELLE

(16) *m̀asâya*   *a*   *pâ-i*   *(nyii* *da*   ***kɛ̂***   *ma*   *Kôrai)*
     DEF\Messie   3SG.PRS come-INF   that   3PL.HAB   say\L   3SG.on   Christ

     '⟨I know that⟩ Messiah is coming (who is called Christ)'. [John 4:25]

KAKABE

(17) *déɲɛ̀*   *wo*   *tɔ́ɔ*   *le*   ***kó***   *Báaben*
     child.ART   that   name   FOC   QU   Baaben

     'The name of that child was Baaben'. [Vydrina 2021: 11]

2.2. Quotative markers and other functions

Both in Guinean and Liberian Kpelle, quotatives may function
as clause linking markers co-occurring with full speech predicates, most
often represented by the transitive speech verb *ɓó* 'say' (18)–(19). It typ-
ically appears in the form of *mo* encoding a 3SG object that refers to the
quote, i.e. literally '(s)he said this'. Furthermore, since the speech verb

ɓó 'say' is fully marked for TAM, it carries the low grammatical replacive tone glossed as L, a regular marker of the Aorist form often used in reported speech constructions.

An outstanding property of quotative markers in Guinean Kpelle is that they can license addressees (18), a point that is further discussed in *Section 3.2* below.

GUINEAN KPELLE, quotative marker

(18) *Nąąlɔwai, Yai-Laa ə   mo   nɛɛnu   ɓa,   yɛ*
    then   Yahweh   3SG 3SG\say\L woman   on   3SG.QU

    mą: "Nɛɛnu! Lə   mɛnị   ɓa ɔ́   yili kɛ   tii?"
    3SG.on   woman   what thing\L on 2SG this do   like_this

    'Then the Lord God said to the woman, "What is this that you have done?"' [Genesis 3:13]

LIBERIAN KPELLE, quotative marker

(19) *Nya   ɓe   Yâwɛɛ   è   mò   Eberaŋ ma*
    3SG.AUT FOC Yahweh 3SG 3SG\say\L Abram   on

    ǹyɛɛ-i,   "Kula í-lɔi-i   su"
    3SG.QU-BND   go_out 2SG-country-DEF   in

    'Now the Lord said to Abram, "Go from your country"'. [Genesis 12:1]

In Guinean Kpelle, quotatives also appear as complementizers after predicates of cognition (20). In Liberian Kpelle, the *a gɛɛ* construction is used instead (21).

GUINEAN KPELLE, complementizer

(20) *Yálá   ə   gaa,   yɛ   yili   lɛlɛ-ɛ-i.*
    God   3SG   3SG\see\L 3SG.QU that be_beautiful-STAT-PRED

    'And God saw that it was good'. [Genesis 1:10]

LIBERIAN KPELLE, *a gɛɛ* construction [3]

(21) *Nya   ɓe   è   gàa   a   gɛɛ*
    3SG.AUT FOC 3SG 3SG\see\L with   3SG\say.STAT

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[3] In both Kpelle varieties, there is a prepositional verbal construction where a stative 3SG form of the verb introduced by the preposition *a* 'with' modifies the main

dí-lɛlɛ-ê-i
PL-be_beautiful-STAT-PRED

'And God saw that it was good'. [Genesis 1:10]

When functioning as complementizers in Guinean Kpelle, quotatives usually, but not necessarily, agree in person and number with the subject of the matrix clause (20). In (22), the 1SG quotative *gé* agrees not with the subject, but with the 1SG possessor — cf. (8) from Tura, a typologically unusual property of agreeing complementizers in Mande as discussed by [Idiatov 2010: 860].

GUINEAN KPELLE, complementizer

(22) *Gílí   kaa ju   **gé**   diɛ   ɔ́   lɛlɛ-ɛ-i*
     1SG\mind   COP 3SG\in 1SG.QU 3PL.on 2SG   be_beautiful-STAT-PRED

'I know well that you are a woman beautiful in appearance…' [Genesis 12:11]

A further striking property of quotative markers in Guinean Kpelle is that they often appear with overt addressees even when used as complementizers, e.g., with the marker *diɛ* in (22), cf. *Section 3.2*.

Finally, quotatives can function as volitional predicates or optative markers in Guinean Kpelle as in (23), where the optative meaning is expressed by the 1SG quotative *gé*, literally meaning 'I wish that…'. In Liberian Kpelle, the verb *tɔɔ* 'put' has been grammaticalized in this function (24).

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predicate. In example (i) from Liberian Kpelle Bible translation, the verb *kpóma* 'be sterile' modifies *ké* 'be'.

(i) Serai è   kɛ̀   a   gbóma-a
    Sarai 3SG be\L with   3SG\be_sterile-STAT

'Now Sarai was barren'. [Genesis 11:30]

I assume that in quotative contexts (21), at least historically, *a gɛɛ* could be interpreted as the preposition *a* with the 3SG stative form of the verb *ké* 'say' grammaticalized as a complementizer in Liberian, but not in Guinean Kpelle. My glossing of (21) follows this interpretation.

GUINEAN KPELLE, volitional predicate / optative marker

(23) *Yálá   yɛ   nwɔnɔ diɛ: "**Gɛ́** lɔi   ə   kala*
     God   3SG.QU   again   3PL.on   1SG.QU   earth   3SG.SUBJ   grass

     ɓɔn-ŋaa   kulɔ"
     sprout-PL   go_out

     'Then God said, "Let the earth bring forth grass"'. [Genesis 1:11]

LIBERIAN KPELLE

(24) *Ɣâla   è   mɔ̀   ǹyɛɛi,   "**Tɔɔ** kala*
     God   3SG   3SG\say\L   3SG.QU   put   grass

     é   kúla   ǹɔi-i   ma"
     3SG.SUBJ   go_out   DEF\earth-DEF   on

     'Then God said, "Let the earth bring forth grass"'. [Genesis 1:11]

The functions of quotatives in Guinean and Liberian Kpelle as attested in the Bible translations are summarized in *Table 3*.

Table 3. The functions of quotatives in Kpelle varieties

	Guinean Kpelle	**Liberian Kpelle**
Quotative predicator	+	+
Quotative marker with speech verbs	+	+
Complementizer with mental verbs	+	−
Volition & purpose marker	+	−

Overall, quotatives have more functions in Guinean Kpelle than in Liberian Kpelle, apparently due to the broader distribution of constructions with the original lexical verb *kɛ́* 'say' in Guinean Kpelle. As noted in *Section 2.1*, the verb *kɛ́* 'say', though still preserved in non-perfective contexts in Guinean Kpelle, corresponds to the *ɓó* 'say' in Liberian texts.

Crucially, if we compare the distribution of Guinean and Liberian Kpelle quotatives across the first two functions, i.e. quotative predicators and quotative markers after speech verbs, we see that this distribution is asymmetric in the two varieties. This point is further discussed in *Section 3*.

3. Quotative indexes in Guinean and Liberian Kpelle Bible translations and in non-Biblical sources

In this section, I compare the distribution of quotatives in the parallel Bible translations into Guinean and Liberian Kpelle, as well as in non-Biblical texts.

The search results for the Bible presented in this section are based on the automatically annotated parallel Guinean and Liberian Kpelle Bible translations available online, cf. *Section 1.3*. The automatic annotation only recognized quotatives appearing as quotative predicators and as quotative markers accompanying other speech predicates, i.e. only the first two functions in *Table 3*. To simplify the rather complex search algorithms that involved various graphic variants of quotatives and addressee forms, we only searched for quotative indexes containing third person quotatives (3sg or 3pl), although this limitation was unlikely to significantly affect our results.

First, the algorithm searched for quotative markers in the texts, second, it marked the construction type. Whenever a quotative was preceded by a specific speech predicate (Guinean Kpelle: *ɓo* 'say', *pulu pənə* / *ŋɑ́ɑ́ pənə* 'answer', *mɑ́ɑ́ni kɛ* 'ask'; Liberian Kpelle: *ɓo* 'say', *su too* 'answer', *marê kɛ́* 'ask', including other graphic and morphological variants),[4] the quotative was interpreted as a quotative marker. If not, it was interpreted as a quotative predicator independently introducing reported speech in a given utterance. This means that in some cases, a quotative could be wrongly interpreted as a quotative predicator while following a lexical speech predicator not recognized by the algorithm. Hence, the real number of quotative predicators may be lower in the data than suggested by our algorithm. Still, it is the relative distribution of quotatives

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[4] Both Guinean and Liberian Kpelle Bible translations are not fully orthographically consistent. For this reason, several orthographic variants were searched by the algorithm, e.g. for *marê* 'question' in Liberian Kpelle: *m̀are* / *mare* / *marê* / *màrê*. The morphological variants included the verb *ɓó* 'speak' with or without the 3sg object pronoun: *ɓo* speak ~ *mo* 3sg\speak.

that is crucial for the present study. As I show below, this distribution is different in the Guinean and Liberian Kpelle Bible translations even though they were annotated by similar algorithms.

The marking of addressees after quotatives and speech verbs was also automatically annotated, cf. *Section 3.2* for some results.

Overall, 4872 and 4755 quotative indexes, respectively, were annotated in Guinean and Liberian Kpelle Bible translations as shown in *Table 4*. In this paper, I represent the statistics for the Old and New Testament separately, since a pilot analysis based on a small manually annotated corpus showed a different distribution of quotatives in the Genesis (Old Testament) and the Gospel of John (New Testament) in Guinean Kpelle.

Table 4. Quotative contexts in Guinean and Liberian Bible translations

	Guinean Kpelle	**Liberian Kpelle**
Old Testament	3214	3249
New Testament	1658	1506
Total	4872	4755

I also analysed 52 quotative indexes from non-Biblical stories in Guinean Kpelle, and 17 quotative indexes in a Liberian Kpelle short story.

3.1. Type of quotative

The most striking difference between Guinean and Liberian Kpelle texts is that in Guinean Kpelle, quotatives tend to be used as quotative predicators, whereas in Liberian Kpelle, they predominantly function as quotative markers accompanying other speech predicates. Crucially, this holds both for non-Biblical texts and for Bible translations. *Table 5* represents the distribution of quotatives in non-Biblical texts.

Although the total numbers are quite low, this asymmetry is statistically very significant according to Fisher's exact probability test (two-tailed $p < 0.001$).

Table 5. Quotative predicators and quotative markers in non-Biblical texts

	Guinean Kpelle	Liberian Kpelle
Quotative predicator	49 (94.2 %)	2 (11.8 %)
Quotative marker	3 (5.8 %)	15 (88.2 %)
Total	52 (100 %)	17 (100 %)

In parallel Bible translations, the same asymmetry holds, so constructions with a quotative predicator in Guinean Kpelle correspond to those with a quotative marker and a full speech verb in Liberian Kpelle, cf. (23)–(24). The distribution of quotatives across the two functions in the Old and the New Testaments is represented in *Table 6*.

Table 6. Quotative predicators and quotative markers in Bible translations

	Guinean Kpelle		Liberian Kpelle	
	Old Test.	New Test.	Old Test.	New Test.
Quotative predicator	2640 (82.1 %)	959 (57.8 %)	960 (29.5 %)	533 (35.4 %)
Quotative marker	574 (17.9 %)	699 (42.2 %)	2289 (70.5 %)	973 (64.6 %)
Total	3214 (100 %)	1658 (100 %)	3249 (100 %)	1506 (100 %)

Table 6 suggests that quotatives tend to independently introduce reported speech in Guinean Kpelle thus functioning as quotative predicators, while they are more often used with other speech predicates, i.e. as quotative markers, in Liberian Kpelle. This asymmetry is further illustrated in (25)–(26) below.

GUINEAN KPELLE, quotative predicator

(25) *Laban yɛ   mạ: "Néé   kaa   mu"*
      Laban   3SG.QU   3SG.on   1SG\hand   COP   3SG\under

    'Laban said, "Good!"' [Genesis 30:34]

LIBERIAN KPELLE, quotative marker

(26) *Nya*   *ɓe*   *Laɓaŋ*   *è*   *mò*   *ma*   **ǹyɛɛi,**
      3SG.AUT   FOC   Laban   3SG   3SG\say\L   3SG.on   3SG.QU

      "Ǹêlɛ-ɛ-i"
      3SG\be_good-STAT-PRED

      'Laban said, "Good!"' [Genesis 30:34]

Another asymmetry is also visible in *Table 6:* in the Guinean Kpelle Bible, the proportion of quotative markers is much higher in the New Testament (42.2 %) than in the Old Testament (17.9 %). A possible explanation of this difference may be found in the distribution of speech predicates in the translations.

In both Guinean and Liberian texts, the majority of quotatives annotated as quotative markers, i.e. following another speech predicate, co-occur with the verb *ɓó* 'say'. However, other speech predicates also were attested, e.g. *mąąni kɛ* 'ask' (Guinean Kpelle), *marê kɛ́* 'ask' (Liberian Kpelle) as shown in (27)–(28).

GUINEAN KPELLE, quotative marker

(27) *Mika*   *ə*   *mąąni*   *kɛ,*   **yɛ**   *mą:*   *"Ɔ́*   *həgə*
      Micah   3SG   question   make\L   3SG.QU   3SG.on   2SG   leave

      mį   *pələ?"*
      where   towards

      'Micah said to him, "From where do you come?"' [Judges 17:9]

LIBERIAN KPELLE, quotative marker

(28) *Maka*   *è*   *marê*   *kɛ̀*   **ǹyɛɛ**   *m̀a-i,*
      Micah   3SG   question   make\L   3SG.QU   3SG.on-BND

      "Mí   *ɓé*   *ya*   *kulâ-i*   *naa-i?"*
      where   FOC   2SG.HAB   go_out-INF   DEF\there-DEF

      'Micah said to him, "From where do you come?"' [Judges 17:9]

The proportion of constructions with speech verbs other than *ɓó* 'say', such as the predicates *pulu pənə* / *ŋąą pənə* 'answer', *mąąni kɛ* 'ask' (Guinean Kpelle), and *su too* 'answer', *marê kɛ́* 'ask' (Liberian Kpelle) is higher in the New Testament in Guinean Kpelle accounting for 36.9 % of all constructions with speech verbs, cf. *Table 7*.

Table 7. Speech verbs in Bible translations

| | Guinean Kpelle | | Liberian Kpelle | |
	Old Test.	New Test.	Old Test.	New Test.
ɓó 'say'	431 (75 %)	441 (63.1 %)	1976 (86.3 %)	754 (77.5 %)
other predicates	143 (25 %)	258 (36.9 %)	313 (13.7 %)	219 (22.5 %)
Total	567 (100 %)	699 (100 %)	2168 (100 %)	973 (100 %)

To check whether this asymmetry may be influenced by the source text of the Guinean Kpelle translation, i.e. the French Bible, I calculated the item per million (ipm) frequency of the symbolic sequences "répond" and "demand", roughly corresponding to the forms of the French verbs *répondre* 'answer' and *demander* 'ask', in Louis Segond's version of the Old and the New Testament, which is likely to be the source of the Guinean Kpelle translation. I also checked the frequency of the sequence "dit" corresponding to the verb *dire* 'say' for control. It cannot be directly compared to the frequencies of the other two sequences, since it only represents a subset of forms (3sg Présent, 3sg Passé Simple, Participe Passé), but its frequencies in the Old and New Testament are still comparable. The results are represented in *Table 8*.

Table 8. The frequency of speech verbs in Louis Segond

	Word count	"répond"	"demand"	"dit"
Old Testament	441586	617 ipm: 1387.2	149 ipm: 337.42	2450 ipm: 5548.18
New Testament	173217	322 ipm: 1868.94	159 ipm: 917.92	965 ipm: 5571.05

Table 8 shows that the ipm frequencies for the verb *dire* are roughly the same in the Old and the New Testament of Louis Segond, being 5548.18 and 5571.05, respectively. However, the other two verbs are much more frequent in the New Testament than in the Old Testament, cf. 1387.2 (Old Testament) vs. 1868.94 (New Testament) for "répond", and 337.42 (Old Testament) vs. 917.92 (New Testament) for "demand".

Hence, I would argue that the higher use of quotatives with specific speech predicates in Guinean Kpelle translation of the New Testament shown in *Table 7* may be influenced by the French source text, since the verbs *demander* 'ask' and *répondre* 'answer' are more frequent in the New Testament of Louis Segond. This asymmetry, in turn, accounts for a higher proportion of quotative markers as opposed to quotative predicators in the New Testament translation in Guinean Kpelle (*Table 6*).

3.2. The expression of addressees

As demonstrated in *Section 2*, in both Guinean and Liberian Kpelle, there are two main types of quotative indexes: with a quotative predicator or with a speech verb (most often *ɓó* 'say') followed by a quotative marker. Both quotative predicators and the verb *ɓó* 'say' can license addressees introduced by the markers *ɓà* (Guinean Kpelle) or *mà* (Liberian Kpelle). [5] Thus, in (29) below from Guinean Kpelle, the quotative predicator is accompanied by an anaphoric addressee, and in (30) the addressee is lexical.

GUINEAN KPELLE, quotative predicator with anaphoric addressee
(29) *Moisə* *yɛ*   *mą*:   "*Yai-Laa* *woo*   *ka*"
      Moses   3SG.QU   3SG.on   God   speech   COP
      'Moses said, "Thus says the Lord"'. [Exodus 11:4]

GUINEAN KPELLE, quotative predicator with lexical addressee
(30) *Yai-Laa* *yɛ*   *Moisə* *ɓa*:   "*Pənə* *ɔ́*   *yɛɛ*"
      God   3SG.QU Moses   on   return   2SG   go_down
      'The Lord said to him, "Go down"'. [Exodus 19:24]

While quotative predicators and speech verbs have different frequencies in Guinean and Liberian Kpelle (cf. *Section 3.1*), there is a striking asymmetry that concerns the expression of addressees in those constructions and, crucially, it holds *both* for Guinean and Liberian texts.

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[5] Other speech predicates annotated in this study do not license syntactic addressees, hence they are not discussed here.

In both Guinean and Liberian Kpelle, the speech verb *ɓó* 'say' tends to have either a zero, or a lexical addressee, while quotative predicators are more likely to license pronominal addressees than speech verbs. [6] *Table 9* presents some statistics from the Old Testament. Unfortunately, the contexts containing zero addressees after quotative predicators are hard to process automatically and even manually, since they are often subject to different interpretations. Hence, the figures provided by our algorithm were largely unreliable and I excluded them.

Table 9. Addressees used after speech verbs and quotative predicators

	Addressee	**Zero**	**Pronominal**	**Lexical**
Speech verb *ɓó* 'say'	Guinean Kpelle	148	54	182
	Liberian Kpelle	723	407	724
Quotative predicators	Guinean Kpelle		1454	908
	Liberian Kpelle		455	47

Table 9 suggests that in both Guinean and Liberian Kpelle, the verb *ɓó* 'say' is used with zero or lexical addressees more often than with pronominal addressees. In contrast, pronominal addressees are more common for quotative predicators than lexical addressees, with no reliable figures available for zero addressees. So far, I have no clear explanation for this asymmetry.

Despite this general tendency, there is another phenomenon specific to Guinean Kpelle. In this variety, as opposed to Liberian Kpelle, pronominal addressees are often semantically empty or "wrong". Some examples from the Genesis are given in *Table 10*, where the quotative predicate in Guinean Kpelle has the 3PL pronominal addressee *diɛ* even when there was no physical addressee created by God yet. In Liberian Kpelle, quite logically, the pronominal addressee *dîa* only appears after God has created a man and a woman [Genesis 1:29]. Also, note that all quotative indexes used in Guinean Kpelle feature a quotative predicator, while the

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[6] Only 3rd person pronominal addressees were considered in this study.

Liberian Kpelle translation employs a speech verb with a quotative marker, thus illustrating the asymmetry discussed in *Section 3.1*.

Table 10. Addressees in quotative indexes [Genesis]

New Revised Standard Bible	Guinean Kpelle	Liberian Kpelle
God called the dry land Earth, and the waters that were gathered together he called Seas. And God saw that it was good. [Genesis 1:10]		
Then God said ⟨"Let the earth put forth vegetation…"⟩ [Genesis 1:11]	*Yálá* (God) *yɛ* (3SG.QU) *nwɔnɔ* (again) *diɛ* (3PL.on):…	*Ɣâla* (God) *è* (3sg) *mò* (3SG\say\L) *ǹyɛɛ-i* (3SG.QU-BND)*:*
And God said, ⟨"Let there be lights in the dome of the sky…"⟩ [Genesis 1:14]	*Yálá yɛ nwɔnɔ **diɛ**…*	*Ɣâla è mò ǹyɛɛ…*
And God said, ⟨"Let there be lights in the dome of the sky…"⟩ [Genesis 1:20]	*Yálá yɛ nwɔnɔ **diɛ**…*	*Ɣâla è ŋɔ́nɔ mò ǹyɛɛ…*
Then God said, ⟨"Let us make humankind in our image…"⟩ [Genesis 1:26]	*Yálá yɛ nwɔnɔ **diɛ**…*	*Nya ɓe Ɣâla è nâa mò ǹyɛɛ…*
So God created humankind in his image, in the image of God he created them; male and female he created them. [Genesis 1:27]		
God said, ⟨"See, I have given you every plant yielding seed…"⟩ [Genesis 1:29]	*Yálá yɛ nwɔnɔ **diɛ**…*	*Ɣâla è mò **dîa** ǹyɛɛi…*

Similar examples of "empty" or "wrong" addressees are found in non-Biblical texts in Guinean Kpelle. In (11) above, the monster is talking to a group of children, but the addressee is formally 3SG. In (31) below, the speaker is talking to himself, but there is an overt 3SG addressee.

GUINEAN KPELLE, empty addressee

(31) **gé**   **mà**   **ŋà**   **hèle**   *Biankouma*
       1SG.QU   3SG.on   1SG.COND   arrive\L   Biankouma

      kpìnî-i, ⟨…⟩   *mínɛ*   *ɓé*   *gáa*   *pâi*   *yìí*   *nàa*?
      darkness-LOC   where   FOC   1SG\COP   come-INF   sleep.INF   there

'I was telling myself, if I arrive at Biankouma in darkness, where shall I sleep?' [2014_JAT_11]

The most striking difference between Liberian and Guinean Kpelle texts has been attested for non-predicative quotatives, i.e. quotative markers. In Liberian Kpelle, quotative markers rarely license an addressee, especially when used with *ɓó* 'say', cf. (19), (24). In Guinean Kpelle, quotative markers strongly tend to co-occur with an overt pronominal addressee, cf. (18). Moreover, they can license an overt addressee even when used with predicates of cognition (32), cf. also (22) above, or volition/purpose markers (33) where no addressee is logically possible. This tendency holds for the Bible as well as for other texts, although there may be some speaker variation.

GUINEAN KPELLE, complementizer with an addressee

(32) *nὲápὲlɛɛ*   *dìéŋ,*   *dĭ*   *gɔ̀lɔ́ŋ,*   *dĭ*   *gàa*   *kὲá*
      DEF\child.PL   3PL.CNTR   3PL   3SG\know   3PL   3SG\see   now

      dìɛ   ***mà-í***   *zὲɲégòlogolo-í*   *àá*   *ŋwòó*   *màapéne*
      3PL.QU   3SG.on-BND   DEF\monster-DEF   3SG.PRF   3SG\voice   change

      'And the children, they understood that the monster had changed his voice'. [2014_BL_45]

GUINEAN KPELLE, purpose marker with an addressee

(33) *kú*   *kpài*   *yáli,*   ***kúo***   ***mà***
      1PL.EXCL   corn   break   1PL.EXCL.QU   3SG.on

      kú   *káa*   *pâ-i*   *ɲìlî-i*
      1PL.EXCL   COP   come-INF   3SG\cook-INF

      'We have harvested corn so that we cook it'. [2014_BL_84]

The presence of overt pronominal addressees may well be a typologically uncommon property of quotative markers in Guinean Kpelle. Quotatives tend to extend their functions from quotative predicators to quotative markers [Heine, Kuteva 2002; Idiatov 2010: 850], and as I showed above, "empty" pronominal addressees are typical even for quotative predicators in Guinean Kpelle. Therefore, as a tentative hypothesis, I would argue that the use of "empty" addressees is likely to have been transferred from quotative predicators to quotative markers in the course of their grammaticalization in Guinean Kpelle.

4. Discussion and conclusions

In this paper, I have demonstrated that, despite the morphological similarity of quotatives in Guinean and Liberian Kpelle, their syntactic behavior is different in the two varieties.

First, quotatives have more functions in Guinean Kpelle than in Liberian Kpelle: they can appear as complementizers and markers of volition and purpose in the former variety, but not in the latter one.

Second, even the two functions that are common across the two varieties, i.e. quotative predicators and quotative markers accompanying speech verbs, are asymmetrically distributed in Guinean vs. Liberian texts. In Guinean Kpelle, quotatives tend to function as quotative predicators, while in Liberian Kpelle, they usually accompany speech verbs.

Third, in Guinean Kpelle, the pronominal addressees co-occurring with quotative predicators are often semantically empty. Non-predicative quotatives also co-occur with empty addressees in Guinean Kpelle, presumably inheriting this feature from quotative predicators that are claimed to be diachronically primary in literature. In Liberian Kpelle, quotative markers rarely license an addressee, and this property may correlate with their semantically more motivated use in the matrix clauses.

I also discovered a surprising asymmetry, similar across the two varieties. In both Guinean and Liberian Kpelle, the marking of addressees in the matrix expression is different for the speech verb *ɓó* 'say' and for quotative predicators. While quotative predicators are more likely to license pronominal rather than lexical addressees, the speech verb tends to co-occur with zero or lexical addressees. The formal and semantic patterning of addressees in Guinean and Liberian Kpelle quotative indexes needs future research.

Crucially, the differences observed in the Kpelle translations are unlikely to be influenced by the source languages, i.e. French for Guinean Kpelle and English for Liberian Kpelle, since these Indo-European languages have no similar distinction between quotative verbs, quotative predicators and quotative markers. It may still be the case that the

marking of addressees was to some extent influenced by the source texts, and checking this is still a task for the future.

Overall, the tendencies observed in the Bible translations proved to be the same as in non-Biblical texts suggesting that the Bible translations adequately represent the syntax of quotative indexes and, more broadly, reported speech constructions in Guinean and Liberian Kpelle. This study thus raises an argument against a common claim that Bible translations cannot be used as a source of reliable data on minor languages.

Abbreviations

1, 2, 3 — 1, 2, 3 person; I_{a,b,c} — subject pronominal of series I$_a$, I$_b$, I$_c$; ART — referential article; AUT — autonomous form of pronoun; BEN — benefactive; BND — clause boundary marker; CLM — clause linking marker; CNTR — contrastive pronoun; COND — conditional; COP — copula; DEF — definiteness marker; EXCL — exclusive; FOC — focus marker; HAB — habitual; INCL — inclusive; INF — infinitive; IRR — irrealis; L — grammatical low tone; LG — long form of personal pronoun; LOC — locative; NEG — negation; NMLZ — nominalizer; NON‹…› — non-…; OF — operator focus; PFV.OF — perfective with operator (auxiliary) focus; PL — plural; POSS — possessive; PP — postposition; PRED — predicative; PRF — perfect; PRS — present; QU — quotative; REL — relative; SBJ — subject; SG — singular; STAT — stative; SUBJ — subjunctive; TM — terminal marker; WM — Westermann, Melzian.

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