AFRIKA UND ÜBERSEE

VOLUME 96 Published on 16. December 2023

Trilingual Journal of African Languages and Cultures

Revue trilingue des langues et cultures africaines

Dreisprachige Zeitschrift für afrikanische Sprachen und Kulturen

Edited by the Abteilung für Afrikanistik und Äthiopistik
at Universität Hamburg

CONTENT

AFRIKA UND ÜBERSEE

VOLUME 96 Published on 16. December 2023

Trilingual Journal of African Languages and Cultures

Revue trilingue des langues et cultures africaines

Dreisprachige Zeitschrift für afrikanische Sprachen und Kulturen

Edited by the Abteilung für Afrikanistik und Äthiopistik
at Universität Hamburg

Imprint

Editing institution
Abteilung für Afrikanistik und Äthiopistik at Universität Hamburg

All correspondence concerning editorial matters should be sent to

Universität Hamburg
Asien-Afrika-Institut
Abt. für Afrikanistik und Äthiopistik
Edmund-Siemers-Allee 1 / Flügel Ost
20146 Hamburg
Germany

E-Mail: afrikaunduebersee@uni-hamburg.de

Volume DOI 10.15460/auue.2023.96.1
Journal DOI 10.15460/auue
ISSN 0002-0427
eISSN 2749-0971

Technical hosting
Hamburg University Press
Publishing house of the Hamburg State and University Library
(Staats- und Universitätsbibliothek Hamburg)
Von-Melle-Park 3
20146 Hamburg
Germany

Published with the support of
Deutsche Forschungsgemeinschaft (DFG, German Research Foundation)

CONTENT

Dependent clauses with the conjunction *kụ̀* 'and' in Dinka: Clause chaining in a non-SOV language

Torben Andersen

Aalborg University
torben@hum.aau.dk

Abstract:
Dinka, a Western Nilotic language, has a construction in which a clause with dependent syntactic status is combined with a preceding clause of any type by means of the conjunction *kụ̀* 'and', which is also used for coordinating both noun phrases and independent clauses. Dependent *kụ̀*-clauses, which all have the same syntactic structure, do not express any particular semantic function and normally have fewer markers of tense, aspect and mood than the clause with which they are combined. But they are interpreted as having the same semantic function and generally also the same tense, aspect and mood as that clause.

Keywords: Dinka, Western Nilotic, conjunction, clause chaining, cosubordination

1 Introduction

This article explores an aspect of the syntax of Dinka, a Western Nilotic language spoken in South Sudan.[1] The purpose is to demonstrate that Dinka has a construction in which a clause with dependent syntactic status is combined with a preceding clause of any type by means of the conjunction *kụ̀* 'and', which is also used for coordinating both noun phrases and independent clauses. Dependent *kụ̀*-clauses, which all have the same syntactic structure, do not express any particular illocutionary force and inter-propositional semantic function (cf. Mann & Thompson 1987) and normally have fewer markers of tense, aspect and mood than the clause with which they are combined. But they are interpreted as having the same illocutionary force

1 I wish to thank my principal Dinka informants Isaac Maker, Kuyok Abol Kuyok, David Daniel Marial and Peter Gum Panther for their assistance. In addition, I wish to thank an anonymous reviewer for helpful comments on an earlier version of this article.

DOI 10.15460/auue.2023.96.1.327

or semantic function and generally also the same tense, aspect and mood as that clause. Depending on the preceding clause, a dependent *kụ̈*-clause like (1) could be interpreted as, for instance, 'and she cooked meat', 'and she used to cook meat', 'and is she cooking meat?', 'and if she cooks meat', 'and because she cooks meat', 'and so that she cooks meat', or 'and who is cooking meat'.

(1) *kụ̈* *ṭɛ̀ɛɛl* *rɪ̈ɪŋ*
and cook.3SG meat.SG

Thus, a sentence that includes a dependent *kụ̈*-clause may be said to be an instance of clause chaining of the initial-consecutive type (Longacre 1990, Longacre 2007, Dooley 2010), and the dependent *kụ̈*-clause itself may be said to be an instance of cosubordination (Olson 1981, Foley & Van Valin 1984, Van Valin & Lapolla 1997, Van Valin 2021), which contrasts with both coordination and subordination. However, a discussion of these notions is beyond the scope of the present article.

The article is organized as follows. Section 2 is a brief presentation of clause structure in Dinka, with a major distinction between NP-initial (and verb-second) clauses, verb-initial clauses, and particle-initial clauses. Section 3 is an introduction to tense, aspect and mood (TAM) in this language. Section 4 is a brief overview of the ways in which the conjunction *kụ̈* 'and' is used. Section 5 briefly describes the structure of dependent *kụ̈*-clauses, which are verb-initial, with respect to the form of the finite verb and the ways subjects are expressed. Section 6 shows (i) that the clause on which a dependent *kụ̈*-clause is dependent, i.e., the preceding clause, can be of any type, (ii) that the *kụ̈*-clause gets its illocutionary force and/or its semantic function from that clause, and (iii) that *kụ̈*-clauses are not necessarily semantically consecutive, that is, that they do not necessarily indicate the chronological order of events, but may also describe a simultaneous event or state. Section 7 illustrates that a dependent *kụ̈*-clause typically has fewer markers of tense, aspect and mood than the preceding clause on which it is dependent, but that it is to be interpreted as having the same tense, aspect and mood as that clause. Section 8 concludes the article.

The variety of Dinka dealt with here is the Agar dialect. The transcription uses IPA symbols. The Agar dialect has a ternary vowel length contrast between short (V), long (VV) and overlong (VVV), a

DOI 10.15460/auue.2023.96.1.327

binary phonation contrast in the vowel between modal voice quality (V) and breathy voice quality (V̤), and a ternary tonal contrast in the vowels between low (V̀), high (V́) and falling (V̂) (Andersen 1987). The phonation and tone diacritics are placed on the first of a sequence of vowel symbols.

The data on which this article is based were collected in South Sudan and Sudan during several periods between 1981 and 2009. Most of my text corpus was collected in Khartoum between 1988 and 1995. All of it is oral material, which contains the following genres: narrative, oral history, interview, personal history, song, and marriage negotiation.

Examples from my text corpus are marked by "(t.)" after the English translation. Other examples come from elicitation. When an example is a complex sentence, it is divided into clauses, which are ordered with numbers rather than letters. Some constituents consisting of more than one word are enclosed in brackets in the interlinear translation.

2 Clausal constituent structure

In terms of their initial constituent, apart from an initial conjunction, clauses are either NP-initial (and verb-second), verb-initial, or particle-initial (Andersen 2019). With few exceptions, the order of clausal constituents after the finite verb is strictly fixed (Andersen 2007, 2019). Syntactically, a verb stem is either intransitive, transitive, ditransitive or copulative. The morphology of verbs consists of a derivational stratum and an inflectional stratum. In the derivational stratum, derived verb stems such as antipassive, applicative, causative and centrifugal are formed from verbal roots. In the inflectional stratum, verb stems (whether underived or derived) may be inflected for e.g. subject.

2.1 NP-initial clauses

NP-initial clauses are declarative and begin with an NP in the nominative case, which is the citation form and which is morphologically unmarked. This NP is a clause-internal topic, as illustrated by the three propositionally synonymous clauses in (2). This topic NP may be, among others, a subject (2a), an object (2b) or an adjunct (2c).

DOI 10.15460/auue.2023.96.1.327

(2) a. *màrjàal* *à=t̪àt* *màbò̱or* *è̱* *lé̱c.*
Marial.SG D.SG=beat Mabor.SG [PREP stick.SG]
'Marial is beating Mabor with the stick.'

b. *màbò̱or* *à=t̪ɛ́ɛt* *márjàal*
Mabor.SG D.SG=beat.NST Marial.SG.GEN
è̱ *lé̱c.*
[PREP stick.SG]

c. *lé̱c* *à=t̪ɛ́ɛt* *márjàal* *màbò̱or.*
stick.SG D.SG=beat.NST Marial.SG.GEN Mabor.SG

NP-initial clauses conform to the clause schema in (3) with ten slots in which the constituents occur if they are present (Andersen 2019).

(3) 1. Topic, expressed as a noun phrase in the morphologically unmarked nominative case. This noun phrase may be zero if third person.
2. Proclitic declarative marker, sg. *à=*, pl. *àa=* or *áa=*. As indicated in (5) below, other minor constituents may also occur between the topic and the finite verb.
3. Finite verb.
4. Subject, expressed as a noun phrase in the genitive case; this is glossed as genitive (GEN) only if the genitive case does not syncretize with the nominative case for the relevant noun phrase.
5. Plural marker *kè* ~ *ké* of a plural non-subject topic.
6. Expressed as a noun phrase in the nominative case: (i) the object of a transitive verb, or (ii) the first object of a ditransitive verb (either a patient or a beneficiary), or (iii) a body-part noun externally possessed by an intransitive or copulative subject.
7. One or more non-finite verbs.
8. A body-part noun externally possessed by the first or only object, in the nominative case.
9. Expressed as a noun phrase in the nominative case: either (i) the second object of a ditransitive verb (either a patient or a beneficiary) or (ii) a copula complement.
10. One or more adjuncts.

DOI 10.15460/auue.2023.96.1.327

The topic slot (3.1) may be empty, but in that case a third person pronominal element is implied as a covert topic, i.e. a topic expressed by zero. It is followed in position (3.2) by a declarative marker, which agrees with the topic for number, even when the topic is covert. Position (3.3) always contains a finite verb, which may be inflected for subject if the topic is object. If the subject, the object of a transitive verb, or an adjunct are not selected for the topic position, they occur in positions (3.4), (3.6) and (3.10), respectively. The finite verb may be an auxiliary, and in that case the main verb occurs in position (3.7) in non-finite form, optionally together with one or more additional auxiliary verbs in non-finite form preceding the semantically main verb. The second object of a ditransitive verb or the complement of a copulative verb occurs in position (3.9), and cannot be topicalized. A body-part noun externally possessed by an intransitive or copulative subject occurs in position (3.6), and a body-part noun externally possessed by a first or only object occurs in position (3.8). A plural non-subject topic is optionally cross-referenced by the plural marker *kè* ~ *ké* in position (3.5).

The finite verb has an inflectionally unmarked form if the topic is subject, as in (4a). The declarative marker is a proclitic and therefore not part of the inflection of the verb, and it may be separated from the verb, cf. (5) and (12.2) below. By contrast, the finite verb has an inflectionally marked form if the topic is not subject. Before a nominal subject the finite verb has a form glossed as NST (for "having a non-subject topic"), as in (4c). Here the topic *màkɛ̰̀er* 'Maker' is an adjunct, since in postverbal position this participant would be expressed as the prepositional phrase *(n)ɛ̰̀ màkɛ̰̀er*. A pronominal subject is expressed in the finite verb if the topic is object, as in (4b), where the topic *tìim* 'tree' is object. But a pronominal subject is expressed by a free pronoun if the topic is an adjunct (unless the subject is unspecified), and in that case the finite verb has the NST form. An unspecified subject, which is glossed as UNSP and translated as passive, is expressed in the finite verb whether the topic is an object or an adjunct.

(4) a. *djɑ̰̀ar* *áa=cɛ̰̀n* *pɪ̰̈iw.*
woman.PL D.PL=not_have water.PL
'The women have no water.' (t.)

DOI 10.15460/auue.2023.96.1.327

b. *tìim* *à=jép-kṳ̀.*
tree.SG D.SG=cut-1PL
'We are cutting the tree.'

c. *màkɛ̤̂er* *à=bɛ̤́ɛɛr* *márjàal.*
Maker.SG D.SG=be_tall.NST Marial.SG.GEN
'Marial is taller than Maker.'

In addition to the declarative marker, other minor constituents may occur in preverbal position, where they may co-occur with each other and with the declarative particle (Andersen 2016). In this way there are six slots before the finite verb, as shown in (5).

(5) 1. Topic.
2. Assertive particle *k=*.
3. Declarative marker, sg. *à=*, pl. *àa=* or *áa=*.
4. Past tense particle *ɛ̤̀*.
5. Pronominal cross-reference of the topic.
6. Negation *cɛ̤̀* or irrealis marker *d(j)ɛ̤̀*.

The assertive proclitic *k=*, which weakly emphasizes the truth value of a clause with the declarative marker, occurs in position (5.2) between the topic and the declarative marker. The past tense particle *ɛ̤̀* occurs in position (5.4), but fuses with a preceding declarative marker. In the presence of the past tense particle, the topic is cross-referenced pronominally in position (5.5), but with 3SG being zero. The negation *cɛ̤̀* or the irrealis marker *d(j)ɛ̤̀* occurs in position (5.6) immediately before the finite verb.

2.2 Verb-initial clauses

Verb-initial clauses conform to clause schema (3), except that they lack the first two slots. Examples of such clauses are questions (6a), orders (6b), sequential clauses beginning with the sequential auxiliary verb *góo*, which have a declarative function (6c)[2], relative clauses (6d), and temporal or conditional clauses with the conjunction *nàa* 'when, if' (6e) or *tɛ̤̀* 'when, if' (6f). The relative clause in (6d) is verb-initial since it begins with the auxiliary verb *cɛ̤́*. That this is a

2 That the sequential auxiliary verb is indeed a verb is shown by the fact that it is inflected like a verb, cf. Andersen (2007: 93).

DOI 10.15460/auue.2023.96.1.327

verb is evidenced by the facts that it takes the position of a finite verb and that it is inflected like a verb, as shown in Andersen (2007: 93).

(6) a. *nɛ̈ɛ̈k* *t̪ɔ̈ɔ̈k?*
kill.3SG goat.SG
'Is he killing a goat?'

b. *mwɔ́ɔc* *à* *t̪òk* *ɛ̈* *màcér!*
give.2SG [1SG mouth.SG] PREP tobacco.SG
'Give my mouth tobacco!' (t.)

c. *góo* *márjàal* *mèt̪* *t̪âat.*
SEQ Marial.SG.GEN child.SG beat.NF
'Then Marial beat the child.'

d. *ɟɔ́ŋ* *cɛ́* *mèt̪* *câam*
dog.SG.CS1 [PF child.SG eat.NF]
'the dog which has bitten the child'

e. *nàa* *bɔ́* *àɟít̪, […].*
if come chicken.SG.GEN
'If a chicken comes, […].' (t.)

f. *tɛ̈* *t̪úuŋ* *kéek* *rɔ̈ot̪, […].*
if eliminate.NST 3PL.GEN hippopotamus.PL
'If they eliminate the hippopotami, […].' (t.)

In a verb-initial clause the subject is always overtly expressed, but a third person object or adjunct may be covert. If there is no covert constituent, a pronominal subject is expressed in the verb, as in (6a–b). A nominal subject, on the other hand, is preceded by the inflectionally unmarked form of the verb, as in (6c–e). If there is a covert object or a covert adjunct, the finite verb (whether a lexical verb or an auxiliary) has the NST form before a subject NP. This is seen in the question (7a) and in the relative clause in (7b), where the object is covert. It is also seen in the question (8) and in the purposive clause (9.2), where there is a covert adjunct with instrumental meaning. Inside the relative clause in (7b) the object, which is coreferential with the head *kɛ́* 'thing', is covert in the sense of being zero.

DOI 10.15460/auue.2023.96.1.327

(7) a. *méɛɛn* *tùik?*
hate.NST woman.SG
'Does the woman hate him?'

b. *kɛ́* *céɛm* *mi̱ìi̱t*
thing.SG.CS1 [eat.NST child.PL]
'what children eat'

(8) *cí̱i* *ŋá* *tò̱oŋ* *kwêem?*
PF.NST who.GEN pot.SG break.NF
'Who has broken the pot with it?'

(9) 1. *àn* *à=gó̱oor* *è̱* *páal*
1SG D.SG=search.AP [PREP knife.SG]
'I want a knife'

2. *báan* *àɲi̱t* *téeem* *ró̱l.*
FUT.NST.1SG.GEN chicken.SG cut.NF throat.SG
'in order to slaughter a chicken with it.'

In clauses with a covert adjunct a pronominal subject is not expressed in the verb (unless it is an unspecified subject), but is expressed by a free pronoun after the NST form of the verb, as in (9.2), where the phonological word *báan* is a contraction of the future auxiliary verb *bi̱íi* (FUT.NST) and the subject *ɥéɛn* (1SG.GEN). Some types of adverbial clauses always require the NST form of the verb (except when the subject is unspecified), for instance clauses beginning with the conjunction *tè̱* 'when, if' as in (6f); so such clauses behave like clauses in which there is a covert adjunct.

2.3 Particle-initial clauses

Particle-initial clauses also conform to clause schema (3), except that instead of the first two slots they begin with a particle which is followed by an NP before the finite verb. This NP may have the same grammatical relations to the verb as the preverbal NP of a NP-initial clause, being either a subject, an object, or an adjunct. Examples of particle-initial clauses are main clauses beginning with the particle *kɛ̀* 'then', which are declarative but have no declarative marker (10.2); adverbial clauses beginning with the conjunctive particle *(k)ɛ́* 'while' (11.2); and adverbial clauses in which the particle *cɛ̀*

DOI 10.15460/auue.2023.96.1.327

'not' occurs after the conjunction *náa* ~ *nàa* 'when, if' (12.1). The negation *cɛ̣̈* is not an auxiliary verb since it cannot be inflected. As seen in (10.2), a 3SG pronominal preverbal NP is zero, while other pronominal preverbal NPs have the short shape CV, like *ɰò* 'we' in (12.1). In NP-initial clauses, by contrast, pronominal preverbal NPs have a longer form ending in a consonant (except that third person pronouns normally are zero in that position). The auxiliary verb *cɪ̰̈ɪ̈* in (11.1) expresses an unspecified subject (translated as passive), and therefore it does not have the NST form.

(10) 1. *wä̰n* *jö̰ok* *jéen* *tɪ̈ɪk* *bàaaj*
when find.NST 3SG.GEN woman.SG home.LOC
é *tö̰k,*
[3SG one]
'When he found the woman alone in the house,'[3]

2. *kɛ̣̈* *ʈjɛ́ɛc* *ɛ̣̀* *pɪ̰̈ɪ̈w.*
then ask.AP [PREP water.PL]
'then he asked for water.' (t.)

(11) 1. *rɔ́w* *à=cɪ̰̈ɪ̈* *nɔ̰̈ɔk*
hippopotamus.SG D.SG=PF.UNSP kill.NF
tôooc
swamp.LOC
'A hippopotamus has been killed in the swamp'

2. *kɛ̰́̈* *kɔ̀c* *má̰̈j.*
while person.PL fish.AP.H
'while people were fishing.' (t.)

(12) 1. *náa* *cɛ̣̈* *ɰò* *ʈjáj*
if NEG 1PL separate.H
'If we don't separate,'

2. *kɛ̣̈* *ràaan* *tö̰k* *à=cɛ̣̈*
then [person.SG.CS2 one] D.SG=NEG

3 The phrase *é tö̰k* is what yields the meaning of 'alone'.

DOI 10.15460/auue.2023.96.1.327

bɛ́ɛr *lɑ̀j.*
take_along.NST animal.SG.GEN
'an animal cannot attack one person.'

If there is more than one preverbal particle, the preverbal NP occurs after the first of them, as in the question (13), where *tìik* 'woman' occurs between the past tense particle *ɛ̀* and the negation particle *cɛ̀*. The past tense marker *ɛ̀* is not an auxiliary verb since it cannot be inflected.

(13) *ɛ̀* *tìik* *cɛ̀* *ṭàal* *mjɛ̀ɛṭ?*
PST woman.SG NEG cook food.SG
'Was the woman not cooking food?'

3 Tense, aspect and mood (TAM)

As will be illustrated in section 7, a dependent *kù*-clause normally has fewer markers of tense, aspect and mood than the clause on which it is dependent. The purpose of the present section, therefore, is to overview the structural elements of the tense-aspect-mood (TAM) system of the Agar dialect of Dinka. This overview is not intended as an exhaustive description of the semantics of the TAM markers.

3.1 Introduction to TAM

In Dinka, verbs are not inflected for tense, aspect or mood (TAM). But all of these semantic categories are to some extent expressed by means of auxiliary verbs or particles, so they have to be recognized as belonging to the grammar of Dinka. The inventory of such words with a tense, aspect or mood function in the Agar dialect of Dinka is shown in Table 1. It consists of four primary auxiliary verbs (Andersen 2007), shown in their inflectionally unmarked form, and three particles (Andersen 2016). These TAM words are discussed in the following subsections, with underlining in the interlinear translation.

DOI 10.15460/auue.2023.96.1.327

Table 1. Words with tense, aspect or mood function in the Agar dialect of Dinka

Word class	Form	Label
Auxiliary verbs	*cɛ̱́* ~ *cɪ̱́*	Perfect (PF)
	kɛ̱̂ec ~ *kɪ̱̂ic*	Negative perfect (NEG.PF)
	bɛ̱́	Future (FUT)
	èe or *jèe*	Habitual (HAB)
Particles	sg. *à*, pl. *áa* or *àa*	Declarative (D)
	ɛ̱̀ or *ɛ̱́*	Backgrounded past tense (PST)
	djɛ̱̀ ~ *dɛ̱̀*	Irrealis (IRR)

3.2 The perfect auxiliary verbs *cɛ̱́* (PF) and *kɛ̱̂ec* (NEG.PF)

The perfect auxiliary verb *cɛ̱́* ~ *cɪ̱́* (PF) and its negative counterpart *kɛ̱̂ec* ~ *kɪ̱̂ic* (NEG.PF) often or mostly have perfect meaning. In (14) *cɛ̱́* thus indicates that the (present or past) situation denoted by the proposition is the result of a prior event. This is perhaps most clearly seen in 'while'-clauses (14b) and relative clauses (14c). In (14b) *cɛ̱́ ṭòw* means 'he has/had died', indicating a state which results from the event of dying.

(14) a. *ɯɻ̱̂ak=k-wà* *áa=cɛ̱̀* *ḍ̱wɔ̱́ok*
cow.PL.CS2=PL-1PL D.PL=PF.3SG return.APPL.NF
ɯɻ̱̀ò.[4]
1PL
'He has returned our cows to us.' (t.)

b. *kɪ̱̀* *dɔ̱̂ɔŋ* *àdwɛ̀ɛr* *kɛ̱́* *cɛ̱́* *ṭòw.*
and remain Aduer.SG [while PF die.NF]
'and Aduer remained, while dead.' (t.)

c. *nòoon* *cɪ̱̂ɪ̈* *nàaj*
grass.SG.CS1 [PF.UNSP twist.NF]
'twisted grass' (Lit. 'grass which has been twisted') (t.)

4 The finite auxiliary verb *cɛ̱̀* expresses a third person singular subject, while the verb *ḍ̱wɔ̱́ok* 'return' is the main verb with non-finite form.

DOI 10.15460/auue.2023.96.1.327

Some speakers also use *cɛ̱́* as a perfective past tense marker, as in (15).

(15) *kɛ̱̀* *àŋɛ̱̀ɟòooŋ* *àa=cɛ̱́* *bɛ̱̂ɛn* *ɛ̱̀* *wêɛɛj*
then vulture.PL D.PL=PF come.NF [PREP [chyme.SG
ìc.
stomach.SG]]
'then the vultures came to a chyme.' (t.)

Other speakers only use *cɛ̱́* as a perfective past tense marker in combination with another auxiliary verb, especially the non-finite form bɑ̱̀nɛ́, which literally means 'come and do', as in (16.2). The perfect auxiliary verb form *cɛ̱̂i* in (16.2) expresses an unspecified subject.

(16) 1. *wɑ́n* *cɛ̱̂i-nɛ̱̀* *jè* *gâam* *ɛ̱̀*
when PF-UNSP.CT 3SG agree.NF [by
râaan *ɛ́bɑ́n,*
person.SG.GEN all]
'When it was agreed upon by everybody,'

2. *kɔ̀c* *àa=cɛ̱̂i* *bɑ̱̀nɛ́* *kwâaŋ.*
person.PL D.PL=PF.UNSP come_and_do.NF pick.NF
'people were nominated [...].' (t.)

The perfect auxiliary verb *cɛ̱́* does not combine with the negation *cɛ̱̀*. Instead, the negative perfect auxiliary verb *kɛ̱̂ec* is used; that is, the negative counterpart of (17a) is (17b).

(17) a. *tùik* *à=cɛ̱́* *mjɛ̱̀ɛt̪* *t̪áaal.*
woman.SG D.SG=PF food.SG cook.NF
'The woman has cooked food.'

b. *tùik* *à=kɛ̱̂ec* *mjɛ̱̀ɛt̪* *t̪áaal.*
woman.SG D.SG=NEG.PF food.SG cook.NF
'The woman has not cooked food.'

In (18) the negative perfect auxiliary is used in a relative clause.

(18) *kɛ̱̀* *jɛ̱̂ɛn* *à=cɛ̱̀* *bêer-ɛ̱̀* *lâat*
then 2SG D.SG=NEG do_again-UNSP insult.NF

DOI 10.15460/auue.2023.96.1.327

ẹ̀	*ràn*	*kệẹc-ẹ̀*	*gɔ́ɔɔr*	*n̪òm.*
[by	person.SG.CS1	[NEG.PF-UNSP	mark.NF	head.SG]]

‘then you are not insulted again by somebody whose head has not been marked.’ (t.)

3.3 The future auxiliary verb *bẹ́* (FUT)

The future auxiliary verb *bẹ́* (FUT) is used for expressing future tense, as in (19) and (20.1). But it is also used for introducing a purposive (or resultative) clause, as in (20.2).[5]

(19)

lwọ̀ọk	*àa=bị̂i*	*t̪ậaap*	*ŋ̪jạ̀ak.*
case.PL	D.PL=FUT.UNSP	finish.NF	tomorrow

‘The cases will be finalized tomorrow.’ (t.)

(20) 1.

bòolìiit̪	*áa=bà*	*tóooc*
policeman.PL	D.PL=FUT.1SG	send.NF

‘I will send the police’

2.

bị̀ik	*kɔ́c*	*lệɛk.*
FUT.3PL	person.PL	inform.AP.APPL.NF

‘to inform people.’ (t.)

3.4 The habitual auxiliary verb *èe* (HAB)

The habitual auxiliary verb *èe* (HAB), which is homonymous with the copula verb ‘be’, expresses habitual meaning, as in (21). When the habitual auxiliary verb combines with the past tense particle, it expresses ‘habitual in the past’, as in (23) below. After a word ending in a vowel, the habitual auxiliary verb begins with the glide /j/, as in (23a) below.

(21) a.

àrjộooc	*èe*	*mjẹ̀et̪=k-è*	*mụ̂uk.*
coward.SG	D.SG.HAB	child.PL.CS2=PL-3SG	hold.NF

‘A coward feeds his children.’ (a proverb) (t.)

5 In (20.2) the purposive clause refers to the future, but such a clause may also refer to the past.

DOI 10.15460/auue.2023.96.1.327

b. *ée* *màaṭ* *ɛ̣̀* *bâaŋgè?*
HAB.2SG smoke.AP.NF [PREP opium.SG]
Do you smoke opium?' (t.)

3.5 The past tense particle *ɛ̣̀* or *ɛ̣́* (PST)

The past tense particle *ɛ̣̀* or *ɛ̣́* (PST) is not used in event-line clauses in narratives, but it is used in clauses which provide background information in narratives, where it can be characterized as a marker of imperfective past tense. In (22) it occurs in clauses without any auxiliary verb, here fusing with the plural declarative marker into *áa*.

(22) a. *bɛ̣́ɛɛj = k-éen* *áa* *kè* *ʧjɑ̣́aak.*[6]
home.PL.CS2 = PL-3PL D.PL.PST 3PL be_near.REC
'Their homes were near each other.' (t.)

b. *kɔ̂ɔc* *àbɛ̣́ɛk* *áa* *kè* *mɛ̣̂ɛc*
[person.PL.CS1 part.PL] D.PL.PST 3PL tie.AP
ɛ̣̀ *uɻ̣́k* *ɛ̣̀* *lwák* *cɔ̣́ok.*
[PREP cow.PL] [PREP [shrine.SG foot.SG]]
'Some people were herding around the shrine.' (t.)

In (23) the past tense particle combines with the habitual auxiliary verb. In (23a), the past tense form *ɛ̣̀/ɛ̣́* fuses with the singular declarative marker *à* into *ée*.

(23) a. *tôoc* *ée* *jèe* *mɑ̣̀aj*
swamp.SG D.SG.PST HAB spend_dry_season.NF
ké *pɪ̈̀w.*
[COM water.PL]
'The swamp used to remain with water during winter.' (t.)

b. *áa* *kêe* *cáaṭ* *ɛ̣̀páṭ.*
D.PL.PST 3PL.HAB walk.NF just
'They used to walk naked.' (t.)

In (24) the past tense particle combines with the perfect auxiliary verbs.

6 The morpheme *-k* in *bɛ̣́ɛɛj = k-éen* 'their homes' indicates plural possessum, not plural possessor.

DOI 10.15460/auue.2023.96.1.327

(24) a. *kṳ̀* *rɔ̣̀oṭ* *áa* *kè* *cḛ́* *ɖjɛ̀ṭ*
and hippopotamus.PL D.PL.PST 3PL PF bear.AP.NF
àpɛ̂ɛj.
very_much
'And hippopotami had multiplied in great number.' (t.)

b. *jêen* *ée* *kɪ̰̂ic* *dâac* *bɛ̰̂ɛn*
3SG D.SG.PST PF.NEG do_soon.NF come.NF
nɛ̰̀ *wɛ́ɛ̰t* *ɛ̰̀* *méɛc* *ɛ̰̀*
[PREP [word.SG.CS1 [of [be_far.NMLZ.SG.CS1 of
píɲ.
land.SG.GEN]]]]
'He had not turned up early, due to the remoteness of his home.' (t.)

The past tense particle is also used in clauses where it is presupposed that the event described by the verb has taken place, as in (25).

(25) a. *ɛ̰̀* *rɔ́w* *nɑ̰́k*
PST hippopotamus.SG kill.UNSP
tjôow?
place.SG.CS1.which.SG.ESS/ABL
'Where was the hippopotamus killed?' (t.)

b. *mjàar = d-jɛ̰̀* *ée* *ɖjɛ́ɛ̰t* *wɛ̰̀ɛ*
bull.SG.CS2 = SG-1SG D.SG.PST give_birth.UNSP [P3
rɪ̰́ut.
autumn.LOC]
'My male calf was born last autumn.'

The uses of the past tense particle as expressing (i) imperfective past tense and (ii) event presupposition seem to have in common that they mark (part of) the proposition as backgounded.

Event-line clauses in narratives typically begin with either the sequential auxiliary verb *góo* (SEQ), as in (26), or with the word *kɛ̰̀* 'then', as in (27)–(28). A clause with *kɛ̰̀* 'then' is normally preceded by a temporal clause or some other time adjunct which establishes a point in time at which the event of the main clause took place, as in (27)–(28). A *kɛ̰̀*-clause without the declarative marker (with *kɛ̰̀*

DOI 10.15460/auue.2023.96.1.327

counting as a particle) is a statement about a specific past event, as in (27.2). By contrast, a *kḛ̀*-clause with the declarative marker (with *kḛ̀* not counting as a particle) is a statement about a past or non-past habitual situation, as in (28.2) which describes a past habitual situation.

(26) 1. *gòo kwá̰ak jḭ̀iit̪ pɪ̀ɲ.*
SEQ.3SG catch.CF.NF ear.PL ground.ALL
'Then he seized its ears.'

2. *góo àɟwɔ̀ɔɔŋ íc ŋɛ̀ɛɛr.*
SEQ lion.SG stomach.SG.EP collapse.NF
'Then the lion got frightened.' (Lit. 'Then the lion's stomach collapsed') (t.)

(27) 1. *nâa ɰɔ̀n n̪jà̰ak,*
when.be.3SG P4 tomorrow
'The following morning,'

2. *kḛ̀ bá̰ɲ rjḛ̀eel tḛ̀n ḛ̀ lwò̰ok.*
then chief.SG go_early.CP [place.SG.CS1.ALL of case.PL]
'the chief came early to the cases.' (t.)

(28) 1. *nàa má̰j kɔ̀c,*[7]
when fish.AP.H person.PL.GEN
'When people fished,'

2. *kḛ̀ rò̰ot̪ âa kɔ̀c côop.*
then hippopotamus.PL D.PL.HAB person.PL chase.NF
'hippopotami used to chase people.' (t.)

7 It seems that (28.1) is neutral with respect to the distinction between habitual and non-habitual meaning.

DOI 10.15460/auue.2023.96.1.327

3.6 The irrealis particle *djɛ̱̀* ~ *dɛ̱̀* (IRR)

The irrealis particle *djɛ̱̀* (IRR), with the shortened variant *dɛ̱̀*, has counterfactual meaning, as illustrated in (29).

(29) a. *ée* *dɛ̱̀* *cɛ̱́* *t̪òw.*
D.SG.PST IRR PF die.NF
'He would have died.' [but he didn't] (t.)

b. *nàŋ* *ɛ̱́* *kɛ̱̂ɛc* *là* *kôoɲ,*
if PST NEG.PF.1SG go_and_do.NF help.NF
'If I had not helped him,'
ée *dɛ̱̀* *cɛ̱́* *môow.*
D.SG.PST IRR PF drown.MID.NF
'he would have drowned.'

4 Coordination with *kṳ̀* 'and'

The conjunction *kṳ̀* 'and' may conjoin both noun phrases and independent clauses. In addition, it conjoins a dependent clause with the clause on which that clause is syntactically dependent.

Two or more noun phrases may be conjoined by placing the coordinative conjunction *kṳ̀* 'and' between them. In (30) the simple NP *d̪ɔ̱̀ɔ̱k* 'boy' and the complex NP *ɲàn ɛ̱̀ márjàal* 'Marial's daughter' are conjoined so that that they constitute an NP. In (30), this conjoined NP occurs in the preverbal NP position in a clause with the declarative marker, and it is the subject of the verb *bɔ̱́* 'come'.

(30) *d̪ɔ̱̀ɔ̱k* *kṳ̀* *ɲàn* *ɛ̱̀* *márjàal*
[boy.SG and [girl.SG.CS1 of Marial.SG.GEN]]
àa=bɔ̱́.
D.PL=come
'A boy and Marial's daughter are coming.'

The same conjunction may also conjoin independent clauses. In (31)–(32), two declarative clauses with the declarative marker are conjoined in this way.

DOI 10.15460/auue.2023.96.1.327

(31) 1.

pî̤iw	*è̤*	*pwò̤ot*	*âa*	*kɔ̤̂ɔɔc,*
[water.PL.CS1	of	pool.PL]	D.PL.HAB	stand.NF

‘Water in pools remains stagnant,’

2.

kṳ̀	*ká̤k*	*è̤*	*ɲí̤iin*	*âa*
and	[thing.PL.CS1	of	tributary.PL]	D.PL.HAB
ríiŋ	*wí̤iir.*			
run.NF	river.LOC			

‘and tributaries run to the river.’ (t.)

(32) 1.

tjôop	*áa=cè̤*	*pát̤,*
soil.PL	D.PL=NEG	be_good.H

‘The soils are infertile,’

2.

kṳ̀	*áa=lè̤w*	*bì̤ik*	*dâac*
and	D.PL=be_able	[FUT.3PL	do_quickly.NF
jìit.			
erode.NF]			

‘and they are liable to erosion.’ (t.)

The fact that the conjunction *kṳ̀* used for conjoining NPs is also used for conjoining independent clauses seems to make Dinka rather exceptional among African languages. Thus, Welmers (1973: 305) mentions that “in any African language to which I have had sufficient exposure to find out”, the word for ‘and’ used for conjoining NPs cannot be used for joining verbs or sentences. Creissels et al. (2008: 139) make the same generalization:

> “[…] in most African languages, the morpheme used as the equivalent of English *and* in noun phrase coordination (which generally also serves as the comitative adposition ‘with’ [...]) cannot be used for clause coordination. Exceptions to this generalization are only sporadic, and never extend to entire families or areas.”

Some other Western Nilotic languages are like Dinka in that a conjunction meaning ‘and’ can be used for coordination of both clauses and noun phrases. This is the case with Mabaan *ʔɔ́cé* ‘and’, Jumjum *ʔáŋ* ‘and’, Kurmuk *ʔòo* ‘and’, Surkum *ùu* ‘and’, and Regariik *wà* ‘and’. These five languages all belong to the Burun branch of the Western Nilotic family.

DOI 10.15460/auue.2023.96.1.327

The third use of the conjunction *kṳ̀* 'and' is found in clauses which are dependent on a preceding clause, but which are not embedded in that clause. An example of this is seen in (33). Here *kṳ̀* contrasts with the conjunction *ká* 'or', which in the same way is dependent on the preceding clause, as in (34). The structure of dependent *kṳ̀*-clauses is illustrated in the next section, but dependent clauses with 'or' have the same structure as dependent *kṳ̀*-clauses.

(33) *ṯjów* *èe* *kɔ̀c* *pɛ̰̀ɛn*
guinea_worm.SG D.SG.HAB person.PL refuse.APPL.NF
cə̰̀aṯ, *kṳ̀* *nɛ̰̀ɛk* *kɔ̰̀k*
walk.NMLZ.SG and kill.3SG some.PL
'Guinea worm prevents people from walking and kills some' (t.)

(34) *tɛ̰̀* *cə̰́in* *àwwɔ̰̀oc* *lôooj,*
if PF.NST.2SG.GEN mistake.SG do.NF
'If you have made a mistake,'
kɛ̰̀ *jə̰̀in* *à=nɔ̰̀ok,* *ká* *mác* *jə̰̀ […].*
then 2SG D.SG=hang.UNSP or tie.UNSP 2SG
'you are hung or imprisoned […].' (t.)

5 Structure of dependent *kṳ̀*-clauses

This section describes the internal structure of dependent *kṳ̀*-clauses. The relation of such clauses to the clauses on which they are dependent is discussed in sections 6 and 7.

Dependent *kṳ̀*-clauses are mostly verb-initial, but they can also be particle-initial since they may be negative, in which case the particle *cɛ̰̀* 'not' precedes the verb. As in other verb-initial clauses, the subject is always overtly expressed by either a noun phrase or by inflection of the finite verb. Further, as discussed in section 2, the form of the finite verb and the expression of the subject depend on whether or not there is a covert object or adjunct. This is illustrated with textual examples of *kṳ̀*-clauses in (35)–(41). They are translated in such a way that they fit the textual context from which they have been extracted.

DOI 10.15460/auue.2023.96.1.327

As discussed in section 2.2, in the absence of a covert participant, the finite verb has the inflectionally unmarked form before a nominal subject. This is illustrated in (35), where the finite verb is the main verb, and in (36), where the finite verb is an auxiliary. In the (a)-clauses the main verb is intransitive, in the (b)-clauses it is transitive.

(35) a. *kṳ̀ dɔ̤̂ɔŋ àwàn cḙ̂een*
and remain fox.SG.GEN back.ALL
'and the fox remained behind' (t.)

b. *kṳ̀ ṯjḙ̀ec mɛ́ɛɛn cóol*
and ask Mayen.SG Col.SG
'and Mayen asked Col' (t.)

(36) a. *kṳ̀ cḙ́ tòoc pjàaṯ àrḙ̂et*
and PF swamp.SG.GEN be_good.NF very_much
'and the swamp had become very nice' (t.)

b. *kṳ̀ ɟɔ́l àmḭ́ḓ̤òoo rọ̤́ot*
and do_then.H greedy_person.PL self.PL
ṯɔ̤́ɔɔŋ
say_goodbye_to.NF
'and in the end the greedies said good-bye to one another' (t.)

When there is no covert participant, a pronominal subject is expressed in the finite verb, as illustrated in (37), where the finite verb is the only verb and therefore the main verb. The verb is intransitive in (37a), transitive in (37b), and ditransitive in (37c).

(37) a. *kṳ̀ ṯòow*
and die.3SG
'and it died' (t.)

b. *kṳ̀ jọ̤̀ok dít róoor*
and find.3SG bird.SG forest.LOC
'and he found the bird in the forest' (t.)

c. *kṳ̀ nɛ̤́ɛk kè mwɔ̀ɔr ḙ̀*
and kill.APPL.3SG 3PL [bull.SG.CS1 of

DOI 10.15460/auue.2023.96.1.327

wòŋ
cow.SG.GEN]
'and he slew a bull for them' (t.)

If there is a covert object, a nominal subject is preceded by the NST form of the verb (38), while a pronominal subject is expressed in the verb (39) in the same way as when there is no covert object. The clauses in (38)–(39) are analyzed as having an object-topic because the object is zero.

(38) *kṳ̀* *bwɔ́ɔɔt* *ràn* *ṭ̈ïṭ̈*
and follow.NST [person.SG.CS1 be_brown]
'and an Egyptian followed him' (t.)

(39) a. *kṳ̀* *cóop-kṳ̀* *wéj*
and chase.CF-3PL away
'and they chased him away' (t.)

b. *kṳ̀* *ṭ̈já̱k*
and bury.UNSP
'and he was buried' (t.)

If there is a covert adjunct, a nominal subject is preceded by the NST form of the verb (40a), in the same way as when there is a covert object. However, in contrast with a *kṳ̀*-clause with a covert object, in a *kṳ̀*-clause with a covert adjunct a pronominal subject is expressed by a pronoun (in the genitive case), which is also preceded by the NST form of the verb (40b). In (40a–b), the finite verb is the habitual auxiliary verb *jée*, and the main verb is intransitive. The phonological form *jṳ̈ïn* in (40b) is a contraction of *jée* and the 2SG subject *jṳ̈ïn*. In (40a) the covert adjunct refers to a place, which is resumed by the proform *ṭ̈ín* 'in it' in the adjunct slot of the clause. In (40b) the covert adjunct seems to correspond to a prepositional phrase with the general purpose preposition *nɛ̈̀*, and it refers to a language.

(40) a. *kṳ̀* *jée* *dɛ̈ɛ̈ŋ* *twɛ̀ɛŋ* *ṭ̈ín*
and HAB.NST rain.PL rain.NF PRO.ESS/ABL
àpɛ̂ɛj
very_much
'and rains rained heavily there' (t.)

DOI 10.15460/auue.2023.96.1.327

b. *kṳ̀* *jɪ̈̀n* *ɟàam*
and HAB.NST.2SG.GEN speak.NF
'and so that you speak it' (t.)

By using the NST form of the verb, a covert non-subject participant is treated like a topicalized non-subject participant in NP-initial clauses (with the declarative marker) and in particle-initial clauses.

The negation particle *cḛ̀* 'not' may intervene between *kṳ̀* and the finite verb, as in (41). As in other particle-initial clauses, the particle is followed by an NP slot, in which a 3SG pronoun is zero, as in (41b).

(41) a. *kṳ̀* *cḛ̀* *kè* *mɪ̈̀ɪ̱* *tɛ̱̀ɛn* *tó̱k*
and NEG 3PL eat [place.SG.CS2 one.ESS/ABL]
'and they did not eat together' (t.)

b. *kṳ̀* *cḛ̀* *gám* *ɟjɛ̱̂ej*
and NEG accept.H order.NMLZ.SG
'and he did not accept advice' (t.)

After having accounted for the internal structure of dependent *kṳ̀*-clauses in the present section, the next section will show the range of clause types on which *kṳ̀*-clauses can be dependent.

6 Dependence on various types of preceding clauses

The clause on which a *kṳ̀*-clause is dependent, which I call its controller, may be of any type. That is, it may be an independent clause, a subordinate clause, or another dependent *kṳ̀*-clause. This is shown in the following subsections, where the relevant instances of *kṳ̀* are underlined in the interlinear translation.

6.1 Dependence on an independent clause

This subsection shows that an independent clause on which a *kṳ̀*-clause is dependent may have any illocutionary force. That is, the preceding clause may be a statement (declarative), a question (interrogative), or an order (imperative). The dependent *kṳ̀*-clause itself has no marker of illocutionary force, but in each case, it must be interpreted as having the same illocutionary force as the preceding clause, its controller.

DOI 10.15460/auue.2023.96.1.327

6.1.1 Dependence on a declarative clause

As seen in section 2 above, declarative clauses are of three types in Dinka: (i) NP-initial clauses with the declarative marker, (ii) particle-initial clauses beginning with the particle *kɛ̈* 'then' and not including the declarative marker, and (iii) verb-initial clauses beginning with the sequential auxiliary verb, whose inflectionally unmarked form is *góo*, glossed as SEQ.

In (42) the controller is a declarative clause (42.1) with the plural declarative marker, which here fuses with the past tense particle *ɛ̈* into *áa*. The dependent *kù̱*-clause (42.2) has no declarative marker, but must nevertheless also be interpreted as a statement. So the declarative marker as an illocutionary force operator has scope over both its own clause and the following *kù̱*-clause.

(42) 1. *kù̱ rɔ̈ɔ̱ẗ áa kè cɛ́̈*
and hippopotamus.PL D.PL.PST 3PL PF
ɖjɛ̈ẗ àpɛ̂ɛj,
bear.AP.NF very_much
'And hippopotami had multiplied in great number,'

2. *kù̱ cɛ́̈ tòoc pjàaẗ àrɛ̈ɛ̱ẗ.*
and PF swamp.SG.GEN be_good.NF very_much
'and the swamp had become very nice.' (t.)

In (43) the controlling declarative clause (43.2) also includes the declarative marker, here in its singular form *à=*. It begins with the adverb *kɛ̈* 'then' and is preceded by a conditional clause (43.1). Again the dependent *kù̱*-clause (43.3) has no declarative marker, but must be interpreted as an additional statement consequent to (43.1).

(43) 1. *náa uɻɔ́ok,*
if be_angry.2SG
'If you quarrelled,'

2. *kɛ̈ jɪ̈ɪ̈in à=kɪ̈ɪ̈um,*
then 2SG D.SG=punish.UNSP
'you were punished'

3. *kù̱ mác ì̱.*
and catch.UNSP 2SG
'and jailed.' (t.)

DOI 10.15460/auue.2023.96.1.327

The same construction is seen in (44). The *kṳ̀*-clause (44.3) is dependent on a declarative clause (44.2) which begins with the adverb *kḛ̀* 'then'. This declarative clause is preceded by an adverbial subordinate clause (44.1) beginning with the conjunction *náa* 'if', which fuses with the following finite verb *èe* (be.3SG) into *nâa*. The main clause (44.2), the apodosis, expresses the consequence of (44.1), the protasis, and the *kṳ̀*-clause (44.3) must be interpreted as describing an additional consequence and thus as having the same illocutionary force as (44.2).

(44) 1. *nâa* *ràn* *cɛ́ɛm*
if.be.3SG [person.SG.CS1 [eat.NST
rɔ̀w,
hippopotamus.SG.GEN]]
'If somebody is eaten by a hippopotamus,' (Lit. 'If it is a person whom a hippopotamus eats')

2. *kḛ̀* *ràn* *nɔ̀ŋ* *ràaan*
then [person.SG.CS1 [have person.SG]]
à=ljèp *lṵ́k,*
D.SG=open case.SG
'his relative (Lit. 'the person who has the person) will open a case'

3. *kṳ̀* *ŧjḛ̀eec* *àpṵ́uk=d-è.*
and ask.3SG compensation.SG.CS2=SG-3SG
'and ask for his compensation.' (t.)

As stated in section 3.5, *kḛ̀*-clauses with the declarative marker describe a situation which is habitual, as in (43.2) and (44.2). By contrast, as also mentioned in section 3.5, declarative *kḛ̀*-clauses without the declarative marker, are statements about specific past events, as in (45.2), and they are preceded by a time adjunct, as in (45.1). Again the *kṳ̀*-clause in (45.3), must be interpreted as having the same illocutionary force as the main clause (45.2).

(45) 1. *wą́n* *ɯ́eet* *kéek* *tḛ̀*
[when arrive.NST 3PL.GEN place.SG.CS1

DOI 10.15460/auue.2023.96.1.327

mèc,
[be_far.ALL]]
'When they reached a remote place,'

2. *kɛ̤̀ lá̤j rɛ́ɛɛt pwǫ́ow,*
then animal.SG get_torn heart.SG
'the animal's heart broke,'

3. *kṳ̀ t̪òow.*
and die.3SG
'and it died.' (t.)

A *kṳ̀*-clause with declarative interpretation may also be dependent on a sequential clause beginning with the sequential auxiliary verb *góo*, as in (46).

(46) 1. *góo tìik ɲwǫ̂ooc,*
SEQ.NST woman.SG sit.CAUS.NF
'Then the woman seated him'

2. *kṳ̀ mwɔ̀ɔɔc t̪òk ɛ̤̀ pḭ̂iw.*
and give.3SG mouth.SG [PREP water.PL]
'and gave him (Lit. 'his mouth') water.' (t.)

In examples (43)–(46), the subject of the *kṳ̀*-clause is coreferential with the subject of its controller, and as an anaphor it is expressed in the verb. However, although this coreference relation is common in the text corpus used for this study, such coreference is by no means obligatory. Thus, in (42) the subject *tòoc* 'swamp' of the *kṳ̀*-clause is not coreferential with the subject *rǫ̀ot̪* 'hippopotami' of the controlling clause.

6.1.2 Dependence on an interrogative or imperative clause

As mentioned in section 2.2 above, questions and orders are verb-initial; so they have the same structure as dependent *kṳ̀*-clauses (apart from the initial *kṳ̀*). Therefore, if a *kṳ̀*-clause is preceded by an interrogative clause, as in (47)–(48), or an imperative clause, as in (49), then it is indeterminable whether the *kṳ̀*-clause is dependent or independent.[8] In (47.1) the independent clause is a cleft polar question (a yes/no question), in (48.1) a constituent question.

8 Polar questions differ intonationally from orders by having a rising pitch at the end.

DOI 10.15460/auue.2023.96.1.327

(47) 1. *jèe pàŋàaar kèek ɛ́ kè nɑ́k*
be.3SG Panyar.PL 3PL PST 3PL kill.H
rɔ́w,
hippopotamus.SG
'Was it the Panyar who killed the hippopotamus'
2. *kù̱ lìiw à̱twɔ̀ɔj t̪ɪ́n?*
and be_absent Athoi.PL PRO.ESS/ABL
'and were the Athuoi not involved?' (t.)

(48) 1. *ɟɑ́l ŋá,*
leave.H who.SG.GEN
'Who is leaving,'
2. *kù̱ dɔ̰̀ɔŋ ŋá?*
and remain who.SG.GEN
'and who is staying?'

(49) 1. *pɑ́l-kɑ̱̀ kè,*
leave-2PL 3PL
'Leave them,'
2. *kù̱ bɑ̰̂ak lwàŋ ɛ̱̀ n̪jàlíc.*
and come.2PL [shrine.SG.CS1.ALL of God.SG.GEN]
'and come to the Christian church!' (t.)

6.2 Dependence on an adverbial clause

The controller of a dependent *kù̱*-clause may also be an adverbial clause. This is exemplified with temporal/conditional clauses with the conjunction *nàa* 'when, if' and *tɛ̱̀* 'when, if' (section 6.2.1), causal clauses with the conjunction *nɛ̱̀ wɛ̱́ɛt* 'because' and *rìn* 'because' (section 6.2.2), temporal clauses with the conjunctional particle *(k)ɛ̱́* 'while' and the conjunction *à* 'until' (section 6.2.3), and purposive or resultative clauses beginning with the future auxiliary verb *bɛ̱́* (section 6.2.4).

6.2.1 Dependence on an adverbial clause with the conjunction nàa or tɛ̱̀ 'when, if'

In (50) the controller is a conditional clause beginning with the conjunction *nàa* 'when, if' (50.1), and the *kù̱*-clause (50.2) is interpreted

DOI 10.15460/auue.2023.96.1.327

as having the same semantic function, namely that of a condition. The main clause occurs in (50.3) and is followed by another dependent *kṳ̀*-clause in (50.4).

(50) 1. *nàa bɔ́ àɟíṯ,*
if come chicken.SG.GEN
'If a chicken comes'

2. *kṳ̀ gùut,*
and stab.3SG
'and picks it,'

3. *k = à = róoot àwàn ṇòm*
then = D.SG = press.NST fox.SG.GEN head.SG
êe ṯàr,
[PREP.3SG pair_of_buttocks.SG]
'then the fox traps its head in its buttocks'

4. *kṳ̀ kɛ̀ɛt ké jè.*
and flee.3SG [COM 3SG]
'and escapes with it.' (t.)

The *kṳ̀*-clause in (51.2) is dependent on another type of conditional clause, namely one that begins with the conjunction *tɛ̀* 'when, if' (51.1). Like (50.2), the *kṳ̀*-clause in (51.2) adds another condition. Unlike the conjunction *nàa*, the conjunction *tɛ̀* requires its clause to be structured as having a covert adjunct, so its 2SG subject is expressed by the pronoun *jɪ̈ɪ̈n* (2SG.GEN), which fuses with the perfect auxiliary verb *cɪ̈ɪ́* (PF.NST) into *cɪ̈ɪ̈n*. By contrast, the same subject is expressed by the inflection of the verb *nɔ́ŋ* (have.2SG) in the *kṳ̀*-clause.

(51) 1. *tɛ̀ cɪ̈ɪ̈n tíŋ twèeŋ*
if PF.NST.2SG.GEN [woman.SG.CS1 front.ESS/ABL]
ṯjâaak,
marry.NF
'If you have married the first wife'

2. *kṳ̀ nɔ́ŋ uɻɔ̈́k,*
and have.2SG cow.PL
'and have cows,'

DOI 10.15460/auue.2023.96.1.327

3. *kɛ̈* *jɪ̈ɪ̈n* *à=ṯjàak* *tjɛ́ɛŋ* *ṯìi.*
then 2SG D.SG=marry [woman.SG.CS2 DIM]
'you can marry a junior wife.' (t.)

In (50) and in several other examples, the *kṳ̈*-clauses have consecutive meaning in the sense of referring to events that take place subsequent to those of their controllers. However, this is by no means always the case. In (51), for instance, what the *kṳ̈*-clause denotes is not an event but a state, and this state is simultaneous with the state denoted by the controller.[9]

6.2.2 Dependence on an adverbial clause with the conjunction nɛ̈ wɛ̱́ɛt or rìn 'because'

The *kṳ̈*-clause in (52.4) is dependent on the adverbial clause in (52.3), which begins with the complex conjunction *nɛ̈ wɛ̱́ɛt* 'because', and which itself follows the main clause (52.2). The last is a declarative clause which is preceded by a left-dislocated adverbial phrase after the adverb *kɛ̈* 'then'. The *kṳ̈*-clause adds another reason to the reason given in (52.3). A clause beginning with *nɛ̈ wɛ̱́ɛt* 'because' requires the NST form of the finite verb, which is here the habitual auxiliary verb *ée*. It fuses with the genitive third person singular subject pronoun *jéen* into *éen*. By contrast, the finite verb *mòoc* 'shoot' of the *kṳ̈*-clause does not have the NST form, but a form which expresses a third person singular subject. The singular noun *máaw* 'tsetsefly' in (52.1) is here used with collective meaning and therefore translated as plural.

(52) 1. *kɛ̈* *ɥą́an* *dɪ̈ɪ̈t* *máaw* *ké*
then [place.PL.CS1 [be_big.NST tsetsefly.SG PL
ṯɪ̱́n,
PRO.ESS/ABL]]
'Then in places where tsetseflies are abundant,'

2. *pwó̱or* *ɛ̈* *dóm* *èe*
[cultivate.NMLZ.SG.CS1 of field.SG.GEN] D.SG.HAB

9 The difference between simultaneous action and consecutive action is discussed in Stassen (1985: 66–70).

DOI 10.15460/auue.2023.96.1.327

kʊ̱̈ur,
be_small.NF
'cultivation becomes little,'

3. *nɛ̱̈* *wɛ̱̈ɛt* *éen* *kɔ́c*
[PREP word.SG.CS1 HAB.NST.3SG.GEN person.PL
câam,
eat.NF
'because they bite people'
4. *kʊ̱̈* *mòoc* *lɑ̱̈aj.*
and shoot.3SG animal.PL]
'and sting animals.' (t.)

The *kʊ̱̈*-clause in (53.3) is dependent on the reason clause in (52.2), which begins with the conjunction *rìn* 'because'. Again the *kʊ̱̈*-clause adds another reason, as determined by the preceding reason clause. Like the reason clause in (52.3), the reason clause in (53.2) requires the NST form in the finite verb, which is here the perfect auxiliary verb *cɪ̱̈i*. And again, the finite verb of the *kʊ̱̈*-clause, *dɔ̱̈om* 'catch', does not have the NST form, but the inflectionally unmarked form before the subject *kèeec ɛ̱̈ wʊ̱̈un* 'his father's spiritual strength'.

(53) 1. *à=cɛ̱̈n* *ràn* *ɖɑ̱̈l*
D.SG=not_have [person.SG.CS1 despise
lwáŋ *ɛ̱̈* *màkwèer* *ɛ̱̈*
[shrine.SG.CS1 of Makuer.SG.CS1.GEN of
gɔ̀l
Gol.SG.GEN]]
'Nobody disbelieves the shrine of Makuer (son of) Gol'

2. *rìn* *cɪ̱̈i* *wʊ̱̈un* *é*
because PF.NST father.SG.3SG 3SG
bɑ̱̈ar *è,*
leave_as_inheritance.APPL.NF 3SG
'as his father had left him it as an inheritance'

3. *kʊ̱̈* *dɔ̱̈om* *kèeec* *ɛ̱̈*
and catch.AP [be_bitter.NMLZ.SG.CS1 of

DOI 10.15460/auue.2023.96.1.327

wü̱un *ë̱* *jé* *gwö̱op.*
father.SG.3SG] [PREP 3SG body.SG]
'and as his father's spiritual strength empowered him.' (t.)
(Lit. 'and bitterness of his father catches on his body')

6.2.3 Dependence on an adverbial clause with the conjunctive particle kë̱ ~ ë̱ 'while' or the conjunction à 'until'

The *kü̱*-clause in (54.4) is dependent on the temporal clause in (54.3), which begins with the conjunctive particle *ë̱* (~ *kë̱*) 'while' expressing simultaneity. This adverbial clause follows the main clause in (54.2), which itself is preceded by the temporal clause in (54.1). Like its controller in (54.3), the *kü̱*-clause describes an activity which did not take place at the same time as the situation described by the main clause (54.2). The *kü̱*-clause is followed by a temporal clause in (54.5), which expresses the time period over which the state-of-affairs in the preceding three clauses took place. The *kü̱*-clause in (54.4) is an example of one which does not have consecutive meaning since the state-of-affairs which it expresses is simultaneous with that of its controller (54.3).

(54) 1. *nàa* *cë̱* *kwë̱eeŋ* *tö̱ok,*
when PF swear.NMLZ.SG finish.NF
'When swearing had ended,'

2. *kë̱* *kɔ́c* *àa=rë̱ɛɛr*
then person.PL D.PL=stay
'then people stayed separate'

3. *ë̱* *kè* *cë̱* *dë̱ek,*
[while 3PL NEG drink.AP
'without drinking' (Lit. 'while they do not drink')

4. *kü̱* *cë̱* *kè* *mï̱i̱t* *të̱ɛn* *tó̱k,*
and NEG 3PL eat [place.SG.CS2 one.ESS/ABL]
'and eating together' (Lit. 'and they do not eat in one place')

5. *àgú̱t* *të̱* *tö̱ok* *pà̱j*
[until when end.NST [month.PL

DOI 10.15460/auue.2023.96.1.327

kâa *dètém.*
3PL.QUANT six]]]
'until the end of six months.' (t.)

The word sequence *kè cɛ̱̀* in (54.3) is reversed to *cɛ̱̀ kè* in (54.4). This is because the short pronoun *kè* 'they' has to occur after the first of one or more preverbal particles, and while the conjunction *ɛ́* counts as a particle, the conjunction *kù* does not.

The *kù*-clause in (55.3) is controlled by the temporal clause in (55.2), which begins with the conjunction *à* 'until'. This temporal clause is preceded by the main clause in (55.1). Like its controller, the *kù*-clause describes the time limit of the situation denoted by the main clause.

(55) 1. *tɛ̱̀* *dɑ́ɣ* *k=èe*
[place.SG.CS1 other.ESS/ABL] then=D.SG.be
mwɔ̀ɔr *ɛ̱̀* *wòŋ* *èn*
[bull.SG.CS1 of cow.SG.GEN] 3SG
à=lám
D.SG=curse.UNSP
'Sometimes it is a bull which is cursed'

2. *à* *bɛ̱̀* *wɑ̀r* *cwáat* *pìŋ*
until FUT.3SG cowdung.PL throw.CF.NF down.ALL
'until it throws down dungs'

3. *kù* *lɛ̀ɛɛc.*
and urinate.3SG
'and urinates.' (t.)

6.2.4 Dependence on an adverbial clause with the future auxiliary verb bɛ́ (FUT)

The *kù*-clause in (56.3) is controlled by an adverbial clause in (56.2) beginning with the future auxiliary verb *bɛ́*, which is grammaticalized as an expression of purpose or result. Thus, like the *bɛ́*-clause, the *kù*-clause expresses a result of the state expressed by the main clause (56.1).

DOI 10.15460/auue.2023.96.1.327

(56) 1. *kw = àpàac* *ée* *cɛ̣́*
and = floating_swampgrass.SG D.SG.PST PF
uɻɛ̀eet *ɛ̣̀* *bàaaj* *kɔ̰̀w*
arrive.CP.NF [PREP home.SG back.SG]
'and floating swampgrass had come to inhabited area'

2. *bɛ́* *uɻɔ̰̀k* *âa* *ɲwɔ̰̀t̪*
FUT cow.PL.GEN HAB.NF graze.AP.NF
'so that cows pastured'

3. *kù̱* *dɛ̱̀ek-kɛ̱̀* *ɛ̣̀* *wʊ́t* *cɔ́ok.*
and drink.AP-3PL [PREP cattle_camp.SG foot.SG]
'and drank water around the cattle camp.' (t.) (Lit. 'and they drink at the foot of the cattle camp')

6.3 Dependence on a relative clause

A *kù̱*-clause may also be dependent on a relative clause, in which case it is interpreted as having the same function as the relative clause. This situation is exemplified in (57)–(59).

The *kù̱*-clause in (57.2), *kù̱ gɔ̀ɔɔŋ kɔ́c*, which literally means 'and she accommodates people', is dependent on the relative clause in (57.1), *ɛ̣̀ kɔ̀c lôoor ɛ̣̀ dɔ̂ɔl* 'who receives people with laughter', which itself modifies *tíŋ* 'woman'. What is relativized on in (57.1) is the subject, and a relativized subject is not represented in the relative clause. The *kù̱*-clause has a third person subject which is coreferential with the relativized subject in (57.1), and it is represented in the finite verb *gɔ̀ɔɔŋ* 'accomodate', so the *kù̱*-clause does not have the structure of a relative clause. However, using Comrie's (1981: 136) functional definition of the notion relative clause, the *kù̱*-clause (57.2) has the same function as the relative clause in (57.1) in that it restricts the potential range of referents of *tíŋ* 'woman', the head of the relative clause. Moreover, the noun phrase in (57.1) and the *kù̱*-clause in (57.2) form a constituent, in that they together constitute an object-topic of the declarative main clause (57.3), here translated as passive.

(57) 1. *tíŋ* *ɛ̣̀* *kɔ̀c* *lôoor*
[woman.SG.CS1 [HAB person.PL receive.NF

DOI 10.15460/auue.2023.96.1.327

ɛ̱̀ *dɔ̂ɔl*
[PREP laugh.NMLZ.SG]]]
'A woman who receives people with laughter'

2. *kṳ̀* *gɔ̀ɔɔŋ* *kɔ́c,*
and accommodate.3SG person.PL
'and provides for people'

3. *à=jée* *bâaaj* *ŋ̈jâaar* *kṳ̀*
D.SG=HAB.NST home.SG.GEN love.NF and
pàaan=d-è.
in_laws.SG.CS2=SG-3SG
'is liked by people and her in-laws.' (t.)

The relative clause *ṯjɑ́aak ké ɲìn ɛ̱̀ wɑ̀ar* 'which is near the tributary' in (58.3) has a relativized subject and is headed by the noun *tɛ̱̀* 'place'. It is followed by the *kṳ̀*-clause in (58.4), which literally means 'and rains rain very much there'. This clause has a covert adjunct as shown by the fact that the finite habitual auxiliary verb has the NST form *jée* rather than the inflectionally unmarked form *jèe* before the subject *dɛ̱̂ɛŋ* 'rains' of the intransitive main verb *twɛ̀ɛɲ* 'rain'. The covert adjunct has a locative function as shown by the fact that it is resumed by the essive/ablative pro-adverb *ṯɪ́n* 'there' in the same way as a topicalized location adjunct is in an NP-initial clause (Andersen 1991: 282–283, 290). This covert location adjunct is coreferential with the head noun *tɛ̱̀* 'place' of the relative clause; so like the relative clause in (58.3), the *kṳ̀*-clause in (58.4) has the function of restricting the potential range of referents of this noun. Another *kṳ̀*-clause follows in (58.5) with the same function, and the third person singular subject expressed in the verb *nɔ̀ɔŋ* 'have' also anaphorically refers to *tɛ̱̀* 'place'.

(58) 1. *góo* *djɑ̱̀ar* *gâam,*
SEQ.NST woman.PL accept.NF
'Then the women accepted it'

2. *kṳ̀* *ɯɻ́ɔoṯ-kɛ̱̀* *tɛ̱̀* *mèc*
and move.CF-3PL [place.SG.CS1 be_far.ALL]
'and they moved to a remote place,'

DOI 10.15460/auue.2023.96.1.327

3. *tḛ̀* *ṯjá̤ak* *ké* *ɲìn*
place.SG.CS1 [be_near.REC COM tributary.SG.CS1
ḛ̀ *wà̤ar,*
of river.SG.GEN]
'an area which was near the tributary'

4. *kṳ̀* *jée* *dê̤eŋ* *twɛ̀ɛɲ* *ṯí̤n*
and HAB.NST rain.PL rain.NF PRO.ESS/ABL
àpɛ̂ɛj,
very_much
'and in which there were heavy rains' (Lit. 'and rains rain very much there')

5. *kṳ̀* *nɔ̀ɔŋ* *mî̤iṯ* *êe* *câam.*
and have.3SG food.PL.CS1 [HAB.UNSP eat.NF]
'and which had enough food to eat.' (Lit. 'and it has foods which are eaten') (t.)

In (59.1), the noun *kḛ́* 'thing' is modified by a relative clause. This noun semantically instantiates a reason (hence an adjunct) for the main verb *bɛ̰̂ɛn* 'come'. The adjunct status of the constituent which is relativized on is shown by the facts that the finite habitual auxiliary verb has the NST form *ée* before the subject *káac = c-jḛ̀* 'my people' and that the non-finite main verb *bɛ̰̂ɛn* 'come' is intransitive so that the constituent relativized on cannot be an object. The following *kṳ̀*-clause in (59.2), which literally means 'and they die', has the same restrictive function as the preceding relative clause, an interpretation which is supported by the fact that the NP in (59.1) and the *kṳ̀*-clause in (59.2) together constitute the topic of the declarative clause in (59.3). This topic is the object of the main verb *ɲîic* 'know' in the complement clause in (59.4), which itself is the object of the verb *wjḛ̀ec* 'I want' in the main clause in (59.3).

(59) 1. *kḛ́* *ée* *káac = c-jḛ̀*
thing.SG.CS1 [HAB.NST person.PL.CS2.GEN = PL-1SG
lɔ̀ *bɛ̰̂ɛn* *róoor*
go_and_do.NF come.NF bush.LOC]
'The reason why my people come from the bush'

DOI 10.15460/auue.2023.96.1.327

2. *kụ̀* *ṯów-kị̀*
   and die-3PL
   'and die' (Lit. 'and they die')
3. *k = à = wjẹ̀ec*
   AFF = D.SG = want.1SG
   'I want'
4. *bà* *ɲîic.*
   [FUT.1SG know.NF]
   'to know.' (t.)

6.4 Dependence on a dependent *kụ̀*-clause

As seen in (58) in section 6.3 above, a dependent *kụ̀*-clause may be preceded by another dependent *kụ̀*-clause whose function it shares. Other examples of a dependent *kụ̀*-clause being controlled by a dependent *kụ̀*-clause are seen in (60)–(63).

Sentence (60) consists of an independent clause in (60.1) and three following *kụ̀*-clauses. The independent clause is declarative and starts with the sequential auxiliary verb in its third person singular subject form *gòo*. Each of the following *kụ̀*-clauses describes a new event in the event line of the narrative, and their verbs express a third person subject, which is coreferential with the subject expressed by the finite verb in (60.1).

(60) 1. *gòo* *kwèec,*
   SEQ.3SG refuse.NF
   'Then he refused,'
2. *kụ̀* *lọ̀oom* *tɔ̀ŋ* *kụ̀* *páal,*
   and take.3SG [spear.SG and knife.SG]
   'and took a spear and a sword,'
3. *kụ̀* *jɔ́ɔɔt* *ẹ̀* *màṯjạ̀aŋ* *kɔ̣̀w,*
   and jump.CF.AP.3SG [PREP horse.SG back.SG]
   'mounted the horse'

DOI 10.15460/auue.2023.96.1.327

4. *kṳ̀* *ŋ̰ɔ̰r* *twèeŋ.*[10]
   and lead.AP.3*sg* front.ESS/ABL
   'and led.' (t.)

A similar example is seen in (61), but here the subject of the sequential auxiliary verb is expressed by the noun phrase *wṳ̀un ṭ̰ɔ̰k*, which literally means 'father of the goat'.

(61) 1. *góo* *wṳ̀un* *ṭ̰ɔ̰k* *bɛ̰̂ɛn,*
   SEQ [father.SG.CS1 goat.SG] come.NF
   'So the owner of the goat came'
2. *kṳ̀* *ɟɔ́ɔt* *àwán* *êe* *jéṭ,*
   and raise.CF.3SG fox.SG [PREP.3SG neck.SG]
   'and put the fox on his shoulder'
3. *kṳ̀* *uɻɛ̰̂ɛṭ* *bàaaj.*
   and take.CF.3SG home.LOC
   'and took it home.' (t.)

Somewhat similar is also sentence (62). After the temporal clause in (62.1) comes the main clause in (62.2), which is a declarative clause beginning with the particle *kɛ̰̀* 'then' and whose finite auxiliary verb *ɟɔ̀l* 'do then' has no proclitic declarative marker and therefore describes a past event (cf. section 5.1.1). This clause is followed by six dependent *kṳ̀*-clauses, which continue the event line. Three of these *kṳ̀*-clauses, (62.3), (62.5) and (62.6), also use the auxiliary verb 'do then', but here with the third person singular form *ɟɔ̀ɔl*. As seen in (62.4), a dependent *kṳ̀*-clause may include a subordinate clause such as a temporal clause beginning with the conjunction *à* 'until'. However, the following *kṳ̀*-clause in (62.5) is not dependent on that clause, but on the matrix part of the *kṳ̀*-clause.

(62) 1. *wà̰n* *céen* *é* *téeem* *rọ́l*
   when PF.NST.3SG.GEN 3SG cut.NF throat.SG
   'After he had slaughtered it,' (Lit. 'when he had cut its throat')

10 The verb *ŋ̰ɔ̰r* 'lead' in (60.4) seems to have an irregularly formed antipassive stem.

DOI 10.15460/auue.2023.96.1.327

2. *kẹ̈* *ɟɔ̈l* *kẹ́=d-è* *jâaaŋ,*
   then do_then thing.SG.CS2=SG-3SG skin.NF
   'then he skinned it (Lit. 'his thing')'
3. *kṳ̈* *ɟɔ̈ɔl* *ɲòp,*
   and do_then.3SG roast.AP.NF
   'and then he roasted'
4. *kṳ̈* *cwḛ̈et* *à* *bḛ̈* *kwɛ̀ɛ̱t,*
   and eat.AP.3SG [until FUT.3SG be_satiated.NF]
   'and he ate until he became satiated'
5. *kṳ̈* *ɟɔ̈ɔl* *rṳ̈ŋ* *kɔ̤̈k*
   and do_then.3SG [meat.PL.CS1 other.PL]
   tîir,
   cut_into_strips.NF
   'and then he cut the rest of the meat into strips'
6. *kṳ̈* *ɟɔ̈ɔl* *jòom* *kɔ̤̈k* *ɲôop,*
   and do_then.3SG [bone.PL other.PL] roast.NF
   'and then roasted some bones'
7. *kṳ̈* *cwèet* *kè,*
   and eat.3SG 3PL
   'and ate them'
8. *kṳ̈* *gɛ́ɛm* *kɔ̤̈k.*
   and give.CF.3SG other.PL
   'and gave away some bones.' (t.)

The *kṳ̈*-clause in (63.2) is dependent on the preceding temporal clause (63.1) that begins with the conjunction *nàa* 'when, if'. This *kṳ̈*-clause is followed by another *kṳ̈*-clause in (63.3), which, like the first *kṳ̈*-clause, must be interpreted as having the same temporal or conditional function as the adverbial clause in (63.1). These three clauses are followed by the main clause in (63.4), whose covert plural topic is coreferential with *wḛ́ew rèen cḛ́ dɔ̤̈ŋ* 'a little money left' in (63.3).

(63) 1. *nàa* *cḛ́* *n̤òm* *ḛ̀* *gɔ̀l*
   [when PF [head.SG.CS1 of clan.SG.GEN]

DOI 10.15460/auue.2023.96.1.327

mwɔ̀ɔr *ɥâaac,*
bull.SG buy.CF.NF
'When the clan leader had sold the bull,'

2. *kṳ̀* *càatáp* *gṳ̂ur,*
and PF.3SG.tax.SG close.NF
'and had paid the tax,'

3. *kṳ̀* *nɔ̀ɔŋ* *wɛ́ɛw* *rèen* *cɛ́*
and have.3SG [money.PL.CS1 two.CS1 [PF
dɔ̰̂oŋ,
remain.NF]]]
'and if there was a little money left,' (Lit. 'and it has two money which remained')

4. *k=áa=ḍṳ́uk* *ràn* *nɔ̀ŋ*
then=D.PL=return.APPL.3SG person.SG.CS1 [have
mwɔ̀ɔr.
bull.SG]
'he would give it back to the owner of the bull.' (t.)

7 Reduced TAM marking

As seen in section 6, a *kṳ̀*-clause does not by itself have any illocutionary force and does not by itself indicate its semantic function in the overall sentence. Rather, it must be interpreted as having the same illocutionary force or semantic function as the clause on which it is dependent. Very often, moreover, a *kṳ̀*-clause also has fewer markers of tense, aspect and mood (TAM) than its controller, but again is to be interpreted as having the same tense, aspect and mood as that clause. This fact is exemplified in the following subsections for the past tense particle (section 7.1), the irrealis particle (section 7.2), the habitual auxiliary verb (section 7.3), the future auxiliary verb (section 7.4), and the perfect auxiliary verb (section 7.5). That the declarative marker is not repeated in a dependent *kṳ̀*-clause was shown in section 6.1.1. In the following examples, the relevant instances of TAM markers and of *kṳ̀* are underlined in the interlinear translation.

Published by Hamburg University Press
DOI 10.15460/auue.2023.96.1.327

7.1 Past tense particle (PST) not repeated

The past tense particle *ḛ̀* or *ḛ́* in a controlling clause is not repeated in a dependent *kṳ̀*-clause, as exemplified in (64). This particle occurs in the declarative main clause in (64.1), where it fuses with the plural declarative marker into *áa*. Here the past tense particle makes its clause denote a past state as opposed to a present state. The dependent *kṳ̀*-clauses in (64.2) and (64.3) must also be interpreted as describing past states, but the past tense particle is absent in them. So, the main clause not only determines the interpretation of the illocutionary force of the *kṳ̀*-clauses, but also their temporal interpretation.

(64) 1. *bɛ̰̂ɛj=k-éen áa kè ṯjâ̰aak,*
home.PL.CS2=PL-3PL D.PL.PST 3PL be_near.REC
'Their homes were near each other,'

2. *kṳ̀ ɲíc-kḛ̀ cèŋ*
and do_properly-3PL inhabit.AP.NF
káam=k-éen,
gap.PL.CS2=PL-3PL
'and they lived in harmony,' (Lit. 'and they inhabited properly in their gaps')

3. *kṳ̀ jée-kḛ̀ kwáat tɔ̰̀k.*
and be-3PL clan.SG.CS2 one
'and they were one clan.' (t.)

The same phenomenon is seen in (65). The declarative main clause in (65.1) has three TAM markers, namely the declarative proclitic (D.PL), the past tense particle (PST), and the perfect auxiliary verb (PF), and it describes a resultative past state. The *kṳ̀*-clause in (65.2) must also be interpreted as describing a resultative past state, but only the perfect auxiliary is repeated, while the past tense particle is not.

(65) 1. *kṳ̀ rɔ̰̀oṯ áa kè cḛ́*
and hippopotamus.PL D.PL.PST 3PL PF
ḏjḛ̀ṯ àpɛ̂ɛj,
bear.AP.NF very_much
'And hippopotami had multiplied in great number,'

Published by Hamburg University Press
DOI 10.15460/auue.2023.96.1.327

2. *kṳ̀* *cɛ̱́* *tòoc* *pjàaṭ* *àrɛ̱̂ɛṭ.*
   and PF swamp.SG.GEN be_good.NF very_much
   'and the swamp had become very nice.' (t.)

7.2 Irrealis particle (IRR) not repeated

The irrealis particle *dɛ̱̀* in a controller clause is also not repeated in a dependent *kṳ̀*-clause, as exemplified in (66). This particle occurs in the declarative main clause in (66.2) together with the past tense particle *ɛ̱* (here fusing with the plural declarative marker into *áa*) and the perfect auxiliary verb *cɛ̱́*. The clause describes a counterfactual past event which would have taken place if the condition described by the adverbial clause in (66.1) had obtained. None of the three TAM markers in (66.2) are repeated in the dependent *kṳ̀*-clause in (66.3), which nevertheless must be interpreted as an additional counterfactual past event.

(66) 1. *nàŋ* *ɛ̱́* *cɛ̱́* *mwɔ̱̂ol,*
   if PST PF stay.NF
   'If he had stayed,'
2. *ràp* *áa* *kè* *dɛ̱̀* *cɛ̱́* *ṭɔ̱̀ok,*
   sorghum.PL D.PL.PST 3PL IRR PF finish.NF
   'sorghum would have finished,'
3. *kṳ̀* *dɔ̱̂oŋ* *ké* *cɔ́k.*
   and remain.3SG [COM hunger.SG]
   'and he would have remained hungry.' (Lit. 'and he remains with hunger')

The same pattern is found in (67). In (67.1), which is a declarative clause embedding a complement clause beginning with the complementizer *lán*, the irrealis particle *dɛ̱̀* occurs in combination with the preceding *ée*, which is a fusion of the singular declarative marker *à* and the past tense particle *ɛ̱*. To the counterfactual past situation described by this clause is added another counterfactual past situation expressed by the dependent *kṳ̀*-clause in (67.2), although none of the TAM markers are repeated here.

(67) 1. *[...]* *ée* *dɛ̱̀* *ɲjɛ̀ɛc* *lán*
   [...] D.SG.PST IRR know.1SG [COMPL

DOI 10.15460/auue.2023.96.1.327

cı̤̂in *éen* *kḛ́* *bɔ̤́*
not_have.NST 3SG.GEN thing.SG.CS1 [come
ḛ́=tḛ́ɛɛn,
DEM=place.SG.CS1.DEM1.SG]]
'[...] I would have known that there is nothing coming here,'

2. *kṳ̀* *tà̤a* *ḛ̀* *wé* *jìic.*
and be_present.1SG [PREP [2PL stomach.PL]]
'and I would have been among you.' (t.)

Example (67), together with (68) just below, are from a marriage negotiation party in which an interpreter (an *àgàamlô̤oŋ* in Dinka) repeats more loudly, clause by clause, what the speakers say and at the same time often rewords the clauses according to his interpretation. Passage (67) is from the turn of one of the speakers, who utters both (67.1) and the dependent *kṳ̀*-clause in (67.2). Then (67.2) is rendered by the interpreter as the independent clause in (68). This independent clause includes both the declarative marker *à* and the past tense particle, fused into *ée*, and the irrealis particle *dḛ̀*, just as in (67.1), so it is clear that the *àgàamlô̤oŋ* interprets (67.2) as having the same TAM as (67.1).

(68) *ée* *ɰà* *dḛ̀* *cḛ́* *ɲṳ̀c*
D.SG.PST 1SG IRR PF sit.NF
lɔ̀ŋ=tṳ̂uuj.
side.SG.CS1=DEM3.ESS/ABL
'I would have sat on the other side.' (t.)

7.3 Habitual auxiliary verb (HAB) not repeated

The habitual auxiliary verb *èe* in a controller clause is not repeated in a dependent *kṳ̀*-clause. This is the case whether the controller is, for instance, a declarative clause (69)–(70), a relative clause (71), or a purposive clause (72).

The habitual auxiliary verb occurs in the declarative clause in (69.1), where it fuses with the singular declarative marker as *èe* and describes a habitual action of the fox. The dependent *kṳ̀*-clause in (69.2) describes a subsequent habitual action, but the habitual auxiliary verb is not repeated.

DOI 10.15460/auue.2023.96.1.327

(69) 1. *èe* *tɛ̣̀c,*
D.SG.HAB lie.NF
'It lies down'
2. *kù* *dɛ̀ɛɲ* *è* *t̪àr.*
and project.3SG [3SG pair_of_buttocks.SG]
'and projects its anus.' (t.)

In (70.1), the habitual auxiliary verb also occurs in a declarative clause, where it fuses with the short third person plural pronoun *kè* into *kêe*. Unlike in (69.1), it here occurs in combination with the past tense particle expressed together with the plural declarative marker in *áa*. The following *kù*-clause in (70.2) contains neither of these TAM markers, but like (70.1) it refers to a past habitual situation.

(70) 1. *rɔ̰̀oṯ* *áa* *kêe* *kwɔ̀ɔl*
hippopotamus.PL D.PL.PST 3PL.HAB river_bed.PL
wêec,
dig.NF
'Hippopotami used to dig river beds'
2. *kù* *dɔ̰̀oor-kɛ̰̀* *ɲɪ̰́in* *ké* *wɛ̰̀ar.*
and join.CAUS-3PL tributary.PL [COM river.SG]
'and join tributaries with the river.' (t.)

The relative clause in (71.2) is headed by *tíŋ* 'woman' in (71.1) and begins with the habitual auxiliary verb, which here has the low-toned form *ɛ̰̀* with breathy voice quality. The dependent *kù*-clause in (71.3) has the same function as (71.2), restricting the potential range of referents of *tíŋ* 'woman' with a proposition referring to a habitual situation, but it does not repeat the auxiliary verb.

(71) 1. *kwáat* *à=n̪jàar* *tíŋ*
clan.SG D.SG=love woman.SG.CS1
'The family loves a woman'
2. *ɛ̰̀* *mɔ́ɔ̰oc*
[HAB give.AP.NF
'who receives them with hospitality' (Lit. 'who gives')

DOI 10.15460/auue.2023.96.1.327

3. *kṳ̀* *ṭèeek* *ké.*
   and respect.3SG 3PL]
   'and respects them.' (t.)

The purposive clause in (72.3), which begins with the future auxiliary verb in its third person singular form *bɛ̀*, includes the habitual auxiliary verb in its non-finite form *âa*, but this verb is not repeated in the *kṳ̀*-clause in (72.4). Semantically, however, (72.4) is within the scope of *bɛ̀* of the preceding clause. The singular nouns *nwɛ̀ɛɛr* 'Nuer' (72.1), *mwɔ̂ɔŋɟà̱aŋ* 'Dinka' (72.3) and *wóŋ* 'cow' (72.4) are here used with collective meaning.

(72) 1. *nàa* *lɔ́* *nwɛ̀ɛɛr* *uɟɛ̀eet* *àgàaar,*
   when go_and_do Nuer.SG arrive.CP.NF Agar.ALL
   'When the Nuer came to Agar land,'
2. *kɛ̀* *mɛ̂ɛt* *tɔ̂ɔɔŋ*
   then mix.MID.CF war.LOC
   'they participated in the war'
3. *bɛ̀* *mwɔ̂ɔŋɟà̱aŋ* *âa* *nɔ̰̀k*
   FUT.3SG Dinka.SG HAB.NF kill.NF
   'in order to kill Dinka'
4. *kṳ̀* *pèeec* *wóŋ.*
   and kidnap.3SG cow.SG
   'and raid cattle.' (t.)

In (73), the first clause (73.1) is an order in which the habitual auxiliary verb occurs in the second person plural form *jáa-kà̱*. The following *kṳ̀*-clause in (73.2) has the same illocutionary force, but lacks the habitual auxiliary verb of the first clause, so it is presumably a dependent clause rather than an independent clause.

(73) 1. *jáa-kà̱* *lɔ̰̀ɔŋ* *tɛ́=d-wɔ̰́on,*
   HAB-2PL pray.AP.NF place.SG.CS2.ESS/ABL=SG-2PL
   'You must pray in your place'
2. *kṳ̀* *lɔ̰̀ɔŋ-kṳ̀* *tɛ́=d-à.*
   and pray.AP-1PL place.SG.CS2.ESS/ABL=SG-1PL
   'and we must pray in our place!' (t.)

Although the habitual auxiliary verb is not repeated in a dependent *kṳ̀*-clause, such a clause may itself introduce this auxiliary verb, as

DOI 10.15460/auue.2023.96.1.327

seen in (74). The sequential declarative clause in (74.1) does not include the habitual auxiliary verb, but the following *kṳ̀*-clause in (74.2) does, here in the high-toned form *ḛ́* with breathy voice quality. Another example is seen in (58.4) in section 6.3 above.

(74) 1. *góo tɔ́ŋ ŋwɔ̀ɔt=ḛ́ lɔ́ twêeŋ*
SEQ war.SG.GEN CONT.NF[=while go front.ALL]
'So the war still continued,'
2. *kṳ̀ cḛ̀ kɔ̀c ḛ́ ró̤ot t̪áan.*
and NEG person.PL HAB self.PL hand_over.CF.NF
'and people did not surrender.' (Lit. 'and people do not hand themselves over') (t.)

7.4 Future auxiliary verb (FUT) repeated or not repeated

Unlike the habitual auxiliary verb, which is not repeated in a dependent *kṳ̀*-clause, the future auxiliary verb *bḛ́* (FUT) varies between being repeated and not being repeated. It is not clear what determines this variation, which is illustrated in (75)–(76). In both sentences, the first clause is declarative with the future auxiliary verb making reference to a future situation, but while the auxiliary is not repeated in the *kṳ̀*-clause in (75.2), it is repeated in the *kṳ̀*-clause in (76.2).

(75) 1. *ŋɛ́ɛk à=bḛ́ jâa bɛ̤̂ɛn,*
each.SG D.SG=FUT HAB.NF come.NF
'Each will come'
2. *kṳ̀ tèeem tḛ̀=d-è.*
and cut.3SG place.SG.CS2=SG-3SG
'and book his place.' (Lit. 'and he cuts his place') (t.)

(76) 1. *k=à=bî̤i nɔ̤̂ɔk,*
AFF=D.SG=FUT.UNSP kill.NF
'He will be killed,'
2. *kṳ̀ bî̤i t̪ɔ̀ɔn àamà̤al ɟâal*
and FUT.UNSP bull.SG.CS1 of.sheep.SG do_then.NF

Published by Hamburg University Press
DOI 10.15460/auue.2023.96.1.327

ɲâaaj.
remove.CF.NF
'and the ram will be taken away.' (t.)

Note also that the future auxiliary verb, like the habitual auxiliary verb, may be used in a dependent *kṳ̀*-clause even if it is not used in the controller. This is seen in (77), where the controller of the *kṳ̀*-clause in (77.3) is the temporal clause in (77.2).

(77) 1. *à=cɛ̀n* *ràn* *ɛ̀* *dèk*
D.SG=not_have person.SG.CS1 [HAB drink.AP.NF
ké *pàrwậaj=d-è*
COM in_laws.SG.CS2=SG-3SG]
'Nobody drinks with his in-laws'

2. *àgṵ́t* *tɛ̀* *léee* *rwậaaj* *tɔ̀ok*
until when go_and_do.NST marriage.SG end.NF
'until marriage is over,'

3. *kṳ̀* *bɛ́* *párwậaj=d-ṳ̀* *ɪ́*
and FUT in_laws.SG.CS2.GEN=SG-2SG 2SG
ɟàal *wɛ̱́ɛr* *pɪ̈́iw.*
do_then.NF sprinkle.APPL.NF water.PL
'and your in-laws will sprinkle you with water (as an introduction to eating with in-laws).' (t.)

7.5 Perfect auxiliary verb (PF) repeated or not repeated

When the perfect auxiliary verb *cɛ́* (PF) is used as a perfective past tense marker together with the non-finite auxiliary verb *bậnɛ́* 'come and do' in the controller, neither of these auxiliary verbs are repeated in the *kṳ̀*-clause. An example of this is seen in (78), where the declarative clause in (78.1) controls the *kṳ̀*-clause in (78.2).

(78) 1. *kɔ̂ɔc* *wận* *kɛ̂ɛɲ* *kṳ̀* *ràn*
[[person.PL.CS1 P2 travel] [and person.SG.CS1
ɛ́ *kwàaṭ* *rjậaj* *àa=cɛ́* *bậnɛ́*
PST drive plane.SG]] D.PL=PF come and do.NF

DOI 10.15460/auue.2023.96.1.327

t̪òw,
die.NF
'The passengers and the pilot died,' (Lit. 'The aforementioned people who travelled and the person who was driving the plane died')

2. *kṳ̀ pṳ̀ir màdṳ̀l ẹ̀ kwɛ̀ɛk.*
and live Madul.SG.CS1.GEN of Kuek.SG
'but MacDonald survived.'

Another example is (79), where the declarative clause in (79.2) controls the *kṳ̀*-clause in (79.3).

(79) 1. *wə̤́n cı̤̂i-nẹ̀ jè gâam ẹ̀*
when PF-UNSP.CT 3SG agree.NF [by
râaan ẹ́bə̤́n,
person.SG.GEN all]
'After it was agreed upon by everybody,'

2. *kɔ̀c àa=cı̤̂i bə̤̀nẹ́ kwâaɲ.*
person.PL D.PL=PF.UNSP come_and_do.NF pick.NF
'people were nominated'

3. *kṳ̀ têek-ẹ̀ kè pı̤̀ŋ bı̤̀ik*
and distribute.CF-UNSP 3PL down.ALL [FUT.3PL
t̪òk ɰə̤̂at̪ ẹ̀ ɰə̤́an
message.SG take.CF.NF [PREP [place.PL.CS1
mèc.
be_far]]]
'and were delegated to convey the message to remote areas.' (t.*)*

But when the perfect auxiliary verb is used with perfect meaning in the controller, it is often repeated in the *kṳ̀*-clause. Thus, *cẹ́* in the declarative clause in (80.1) is repeated with the second person singular form *cá* in the *kṳ̀*-clause in (80.2). And the NST form *cı̤́i* in the temporal clause in (81.3) is repeated in the *kṳ̀*-clause in (81.4). Other examples are seen above in (42.2), (63.2) and (65.2).

DOI 10.15460/auue.2023.96.1.327

(80) 1. *kè̤ jî̤in à=cé̤ lò̤ooŋ d̪ôoŋ kɔ̤̀ɔɔt̪,*
then 2SG D.SG=PF law.PL break.NF back.PL
‘So you have violated the laws’ (Lit. ‘Then you have broken the laws’ backs’)

2. *kṳ̀ cá d̪à̤aal è̤*
and PF.2SG [despise.NMLZ.SG.CS1 of
ŋ̪jàlíc bâaaj.
God.SG.GEN] disregard.NF
‘and disregarded sacrilege of God.’ (t.)

(81) 1. *pwò̤or à=kɔ̀ŋ t̪ò̤ok*
cultivate.NMLZ.SG D.SG=do_first finish.NF
‘Cultivation should take place first’

2. *bé̤ lwò̤ok kɔ̤́k ró̤ot*
FUT [trial.PL.CS1.GEN other.PL.GEN] self.PL
bɛ̀ɛr ɟîil
do_again.NF begin.NF
‘so that new cases come up’

3. *tè̤ cí̤i ká dòm-ìc lwɔ̀ɔk,*
when PF.NST [thing.PL.CS1 field-ESS/ABL] yield.NF
‘after harvesting’ (Lit. ‘when things in the field have yielded’)

4. *kṳ̀ cí̤i tɔ́ɔŋpìiɲ kw=àgót*
and PF.NST groundnut.PL and=green_bean.PL
kw=àkwéem […] bɛ̤̂ɛn bèj
and=bean.PL […] come.NF out.CP.ALL
dòm-ìc.
field-ESS/ABL
‘and after groundnuts, green beans, beans […] have come out from the field.’ (t.)

In some cases, however, the perfect auxiliary verb with perfect meaning is not repeated in a dependent *kṳ̀*-clause; the reason seems to be semantic. An example is seen in (82). In the controlling temporal clause in (82.2), the perfect auxiliary verb *cé̤* indicates a state that has resulted from the event denoted by the non-finite main verb

DOI 10.15460/auue.2023.96.1.327

ŋɛ̀ɛɛr 'collapse'. The absence of the auxiliary verb in the *kṳ̀*-clause in (82.3) seems to be due to the absence of a resulting state here, as the impersonal transitive verb *lɛ̂ɛt̪* 'make shiver' denotes an iterative process.

(82) 1. *gòo* *ɟâal* *bɛ̤̂ɛn* *tɔ́ŋ* *bá̤ɲ*
SEQ.3SG do_then.NF come.NF [LOC chief.SG]
'Then he came to the inspector,'

2. *ké̤* *cé̤* *jíc* *ŋɛ̀ɛɛr,*
while PF stomach.SG.EP collapse.NF
'scared,' (Lit. 'while his stomach has collapsed')

3. *kṳ̀* *lɛ̂ɛt̪.*
and shiver.3SG
'and he trembled.' (Lit. 'and it makes him shiver') (t.)

As with the other auxiliary verbs, a dependent *kṳ̀*-clause may itself introduce the perfect auxiliary verb, as exemplified in (83.4). This *kṳ̀*-clause is dependent on the temporal clause in (83.3), which has no perfect auxiliary verb. The perfect auxiliary verb in (83.4) indicates a state resulting from the event of moving to a sitting position.

(83) 1. *nàa* *wá̤n* *à* *pɛ̤́ɛɛc,*
when when ? wake_up.3SG
'When he woke up,'

2. *kè̤* *t̪ì̤ŋ* *t̪ṳ̀rṳ̀mbíl* *è̤* *bà̤ɲ*
then see [car.SG.CS1 of chief.SG.GEN]
'then he saw the inspector's car'

3. *ké̤* *kâ̤ac*
while stand
'standing'

4. *kṳ̀* *cé̤* *bà̤ɲ* *ɲṳ̀c* *ké*
and PF chief.SG.GEN sit.NF [COM
kɔ̂ɔc *cáat̪* *ké* *jè.*
person.PL.CS1 [walk [COM 3SG]]]
'and the inspector himself sitting with those escorting him.' (t.)

DOI 10.15460/auue.2023.96.1.327

8 Conclusion

As shown in this article, Dinka has a coordination construction in which a clause with dependent status is coordinated with a preceding clause by means of the conjunction *kụ̀* 'and'; we have seen that *kụ̀* is also used for coordinating both noun phrases and independent clauses. The dependent *kụ̀*-clause is dependent in the sense that, in itself, it does not express any particular semantic function, but is interpreted as having the same semantic function as its preceding coordinand, which thus controls the interpretation of the *kụ̀*-clause. To a large extent, a dependent *kụ̀*-clause also has fewer markers of tense, aspect and mood (TAM) than its coordinand, but again it is interpreted as having the same TAM as that clause. Since a dependent *kụ̀*-clause is not subordinate, it falls into the category that Foley and Van Valin (1984) call cosubordinate, and it belongs to what Longacre (2007) calls initial-consecutive (as opposed to medial-final) chaining structures.

The controlling clause may be of any type semantically and syntactically. Thus, the controlling clause in Dinka is not restricted to being an independent clause. The controlling clause may also be a dependent clause, whether an adverbial clause or a relative clause. By contrast, all dependent *kụ̀*-clauses are structured alike syntactically.

As observed by Stassen (1985: 90) and Longacre (1990), among others, there is a strong tendency for languages with medial-final chaining to be SOV in clause structure and for languages with initial-consecutive chaining to be VSO or SVO in structure. The Dinka language conforms to this tendency since it has both SVO and VSO constructions (but not SOV).

It is generally taken for granted that in order for two (or more) units to be coordinated, they must be of the same type, cf. e.g. Haspelmath (2007: 1). While this condition is clearly fulfilled when *kụ̀* coordinates noun phrases or independent clauses, a dependent *kụ̀*-clause does not have the same syntactic status as the clause with which it is conjoined (unless the latter is also a dependent *kụ̀*-clause). But the sameness condition may be said to be fulfilled semantically, in that the overall construction forces an interpretation of the dependent *kụ̀*-clause as having the same semantic function and TAM as its coordinand.

DOI 10.15460/auue.2023.96.1.327

Abbreviations

? morpheme with unidentified meaning, 1PL first person plural, 1SG first person singular, 2PL second person plural, 2SG second person singular, 3PL third person plural, 3SG third person singular, AFF affirmative, ALL allative, AP antipassive, APPL applicative, CAUS causative, CF centrifugal, COM comitative, COMPL complementizer, CONT continuous, CP centripetal, CS1 first construct state, CS2 second construct state, CT having a circumstantial topic, D declarative, DEM demonstrative, DEM1 first person demonstrative, DEM3 third person demonstrative, DIM diminutive, EP externally possessed, ESS/ABL essive/ablative, FUT future, GEN genitive, H shift to high tone, HAB habitual, IRR irrealis, LOC locative, MID middle, NEG negation, NF non-finite, NMLZ nominalized, NP noun phrase, NST having a non-subject topic, P2 time particle: in the distant past of today (as opposed to recent past of today), P3 time particle: earlier than last midnight (possibly hesternal), P4 time particle: long ago, PF perfect, PL plural, PREP multipurpose preposition, PRO proform, PST past, QUANT quantification marker, REC reciprocal, SEQ sequential, SG singular, UNSP unspecified subject.

References

Andersen, Torben. 1987. The phonemic system of Agar Dinka. *Journal of African Languages and Linguistics* 9(1). 1–27.

Andersen, Torben. 1991. Subject and topic in Dinka. *Studies in Language* 15(2). 265–294.

Andersen, Torben. 2007. Auxiliary verbs in Dinka. *Studies in Language* 31(1). 89–116.

Andersen, Torben. 2016. Interrogative sentences in Dinka. In Bernhard Köhler (ed.), *Interrogative and syntactic inquiries: Case studies from Africa.* (Frankfurter Afrikanistische Blätter 23). Köln: Rüdiger Köppe Verlag. 7–26.

Andersen, Torben. 2019. External possession of body-part nouns in Dinka. *Linguistics* 57(1). 127–193.

Comrie, Bernard. 1981. *Language universals and linguistic typology: Syntax and morphology*. Oxford: Basil Blackwell.

Dooley, Robert A. 2010. *Exploring clause chaining. SIL Electronic Working papers 2010-001.* https://amerindias.github.io/curso2015/referencias/doo10chain.pdf

Foley, William A. & Robert D. Van Valin, Jr. 1984. *Functional syntax and universal grammar*. Cambridge: Cambridge University Press.

DOI 10.15460/auue.2023.96.1.327

Haspelmath, Martin. 2007. Coordination. In Timothy Shopen (ed.), *Language typology and syntactic description. Volume II.* Second edition. Cambridge: Cambridge University Press. 1–51.

Longacre, Robert E. 1990. Storyline concerns and word order typology in East and West Africa. *Studies in African Linguistics*, Supplement 10. https://doi.org/10.32473/sal.v21iSupp

Longacre, Robert E. 2007. Sentences as combinations of clauses. In Timothy Shopen (ed.), *Language typology and syntactic description. Volume II.* Second edition. Cambridge: Cambridge University Press. 372–420.

Mann, William C. & Sandra A. Thompson. 1987. *Rhetorical Structure Theory: A theory of text organization.* https://www.sfu.ca/rst/pdfs/Mann_Thompson_1987.pdf.

Olson, Michael Leon. 1981. *Barai clause junctures: towards a functional theory of inter-clausal relations.* PhD dissertation, Australian National University. https://openresearch-repository.anu.edu.au/bitstream/1885/110191/2/b12628219-OLSON%2C%20M.L..pdf

Stassen, Leon. 1985. *Comparison and universal grammar*. Oxford: Blackwell.

Van Valin, Robert D., Jr. 2021. Cosubordination. In Robert D. Van Valin Jr. (ed.), *Challenges at the syntax-semantics-pragmatics interface: A Role and Reference Grammar perspective.* Cambrige Scholars Publishing. 241–254.

Van Valin, Robert D., Jr. & Randy J. Lapolla. 1997. *Syntax: Structure, meaning and function.* Cambridge: Cambridge University Press.

DOI 10.15460/auue.2023.96.1.327

Contact influence in the Tjhauba variety of Kgalagadi

Hilde Gunnink

Ghent University – BantUGent (UGent Centre for Bantu Studies)
hilde.gunnink@ugent.be

Abstract:
Tjhauba, spoken in northwestern Botswana, is a regional variety of the Bantu language Kgalagadi. Tjhauba exhibits a number of striking linguistic differences with respect to other, previously described Kgalagadi varieties, some the result of language-internal changes, but mostly due to contact with different surrounding Khoisan and Bantu languages. Making use of newly collected field data, this paper shows that Tjhauba has an extensive inventory of click phonemes, contrasting different click accompaniments and, in the speech of elderly speakers, also different click types. Tracing the sources of Tjhauba click words shows that these originate in different Khoisan languages, but also in the Bantu click language Yeyi. Semantically, click words, but also loanwords that do not contain clicks, cluster in the domain of flora and fauna, particularly species found in or close to water. These linguistic findings also shed light on the history of Tjhauba speakers. The adoption of a large number of click phonemes suggests intensive language contact, as still evidenced by ongoing Tjhauba/Khwe bilingualism. A number of the likely source languages for Tjhauba click words are no longer spoken in the area, suggesting contact situations that are no longer ongoing. Furthermore, clicks occur in loanwords, but unlike in neighbouring Bantu click languages, there is no evidence that clicks were also extended to inherited Tjhauba words. This suggests that the sound symbolic or identity marking functions of clicks as posited for other Bantu click languages do not play a role in Tjhauba.

Keywords: Tjhauba, Kgalagadi, Khoisan, Bantu, language contact, clicks

1 Introduction

This paper discusses contact influence in Tjhauba, a regional variety of the Bantu language Kgalagadi spoken in Botswana. Kgalagadi is spoken across most of Botswana, and exhibits extensive regional variation (Kalasi 2003; Lukusa & Monaka 2008). This variation can par-

DOI 10.15460/auue.2023.96.1.275

tially be attributed to language contact, such as differing degrees of influence from the national language Tswana (Monaka 2013), but possibly also from various Khoisan languages, because many Khoisan speakers live in close contact with Kgalagadi-speaking communities.

In spite of these close relationships, which provide ample opportunity for extensive language contact, contact-induced changes in Kgalagadi from Khoisan languages have not often been identified. For instance, clicks, a salient Khoisan-derived feature, occur in various Southern African Bantu languages, but are absent or marginal in Kgalagadi (Pakendorf et al. 2017: 15). In the Tjhauba variety of Kgalagadi, however, clicks have been suggested to occur more extensively (Lukusa & Monaka 2008: 10; Monaka 2013: 46). In this paper, I present newly collected field data on the Tjhauba variety of Kgalagadi. These confirm that the language has an extensive inventory of click phonemes, which distinguishes multiple click accompaniments, and, in the speech of certain elderly speakers also multiple click types. I also analyze the provenance of the Tjhauba words in which click phonemes occur, showing that they trace back to various Bantu and Khoisan languages. These contact-induced changes shed light on the past and ongoing contact situations in which Tjhauba speakers have been involved.

This paper is structured as follows. In section 2, I provide an introduction to the linguistic landscape of Southern Africa, focusing on Bantu languages, Khoisan languages and contact between them. In section 3, I introduce the Tjhauba variety of Kgalagadi, and give details on its sociolinguistic situation and the context in which the data were collected. Section 4 discusses some key similarities and differences between Tjhauba and its closest linguistic relatives, that is to other Kgalagadi varieties as well as to other members of the wider Sotho-Tswana cluster to which Kgalagadi belongs. In section 5, I discuss contact influence in Tjhauba, focusing on the occurrence of clicks as clear signs of (past) Khoisan contact. Section 5.1 presents a preliminary analysis of the click inventory of Tjhauba, and describes patterns of variation in the realisation of clicks. Section 5.2 considers the lexical items in Tjhauba in which clicks occur, their semantic domains and the (possible) languages of origin. In section 5.3, I consider other contact-induced changes, particularly loanwords that do not contain clicks. In section 6, I discuss the implications of these linguistic findings for the understanding of the history of the Tjhauba

DOI 10.15460/auue.2023.96.1.275

speakers. Conclusions and outlooks for further research are presented in section 7.

2 Languages of Southern Afica

This section introduces the linguistic landscape of modern-day Southern Africa, focusing on Bantu and Khoisan languages in 2.1, and an overview of previous research on Bantu-Khoisan language contact in 2.2. The linguistically diverse Ngamiland region of Botswana, where Tjhauba is spoken, is introduced in 2.3.

2.1 The linguistic landscape of Southern Africa

The linguistic landscape of modern-day Southern Africa is characterized by three main groups of languages: European languages, with relatively small numbers of native speakers but a very strong sociolinguistic position; Bantu languages, spoken by the majority of Southern Africans; and Khoisan languages, spoken by small, severely marginalized communities. European languages only arrived in Southern Africa during the last five hundred years as part of colonization, and these include English, Afrikaans, German (in Namibia) and Portuguese (in Mozambique). Bantu languages are spoken natively by the vast majority of Southern Africans. A subgroup of the larger Niger-Congo phylum, the Bantu family originated in Central-Western Africa around 5,000 years ago, from where Bantu-speaking communities spread East- and South-wards, ultimately settling most of subequatorial Africa (Bostoen 2018). The first Bantu-speaking communities reached Southern Africa around 300 AD, although not all Bantu languages currently spoken in Southern Africa are necessarily descendants of the languages spoken by these early migrants (Gunnink, Chousou-Polydouri & Bostoen 2023). Nowadays, Bantu languages are spoken all over Southern Africa. The majority of these belong to the Southern Bantu subgroup, classified as zone S in Guthrie's alphanumerical, referential classification (Guthrie 1948; see Hammarström 2019 for the most recent version), and confirmed to form a genealogical cluster by more recent research (Gunnink, Chousou-Polydouri & Bostoen 2023; Grollemund et al. 2015). Southern Bantu languages are spoken across the eastern half of Southern Africa, whereas in the western half, languages of zones R and K are found, which are grouped in the

DOI 10.15460/auue.2023.96.1.275

larger South-Western Bantu group also found in Angola (Grollemund et al. 2015).

Before the arrival of Bantu languages, Southern Africa was dominated by speakers of Khoisan languages. Khoisan was initially classified as a single phylum, but specialists now concur that three unrelated families should be recognized, Kx'a, Khoe-Kwadi and Tuu (Güldemann 2014), although the label "Khoisan" is maintained as convenient grouping for Southern African languages using click phonemes that are not part of other language families (e.g. Bantu) (Witzlack-Makarevich & Nakagawa 2019). Of the three Khoisan families, Kx'a and Tuu may have been spoken in Southern Africa for a very long time, but the Khoe-Kwadi languages are likely to be the result of a more recent migration. This would have involved pastoralist communities from Eastern Africa migrating into Southern Africa around 2,000 BP, where they came into contact with resident Kx'a and Tuu speaking communities (Güldemann 2008; Güldemann 2020). Extensive, multi-directional contacts led to a linguistic area with many linguistic features shared across language families (Güldemann & Fehn 2017).

Nowadays, virtually all Khoisan languages are endangered or moribund (Hasselbring 2000; Batibo 1998; Brenzinger 2007), in addition to the (partially unknown) number of languages that have already become extinct (Traill 2002). Of Khoisan languages still spoken today, not all languages are well-documented, although the state of documentation has improved a lot over the last years (Güldemann 2019).

2.2 Bantu-Khoisan contact

Contact between migrating Bantu-speaking communities and resident communities speaking Kx'a, Tuu and Khoe-Kwadi languages resulted in extensive linguistic influence (Bostoen & Gunnink 2022; Pakendorf et al. 2017). The most salient Khoisan-derived feature in Bantu languages is the use of click phonemes; as clicks do not occur in Bantu languages outside Southern Africa, yet are a ubiquitous feature of Khoisan languages, their adoption in certain Southern African Bantu languages is a clear case of Khoisan influence (Vossen 1997; Sands & Güldemann 2009; Herbert 1990). However, while the ultimate Khoisan origin of clicks in Bantu is undisputed, not all Bantu languages necessarily adopted clicks directly from a Khoisan source. Once incorporated, Bantu click languages also passed this feature on

DOI 10.15460/auue.2023.96.1.275

to other Bantu languages (Sands & Gunnink 2019). Not all Bantu languages spoken in southern Africa make use of clicks: Bantu click languages are mostly concentrated in the south-east, including most languages of the Nguni cluster as well as one Sotho language, Southern Sotho (Pakendorf et al. 2017); and in the south-west, where clicks occur in Kwangali, Manyo, Mbukushu, Yeyi and Fwe (Gunnink et al. 2015). In this paper, I show that the latter group also includes the Tjhauba variety of Kgalagadi.

Contact-induced changes from Khoisan languages other than clicks are more difficult to identify in Bantu languages. Certain other phonemes of apparent non-Bantu origin have been attributed to Khoisan influence, particularly in Xhosa (Lanham 1964). In terms of morphosyntactic changes, the development of nominal suffixes in Southern Bantu languages has been analyzed as a contact-induced grammaticalization (Güldemann 1999). Borrowing of morphological forms is seen in Xhosa (Louw 1976) and Yeyi (Gunnink 2022a). Lexical borrowing is more widely attested, e.g. in Xhosa (Louw 1977a), Zulu (Argyle 1986), but also in Bantu languages that did not adopt clicks, such as Herero (Meinhof 1910) and Tswana (Gunnink 2020a). The uneven and limited documentation of Khoisan languages is one factor that complicates the identification of Khoisan influence in Bantu. This also makes it difficult to identify the specific donor language even when such influence can reliably be established.

Cases of Khoisan influence on Bantu that could somewhat reliably be identified show that Bantu-Khoisan contact situations varied widely in space, time, and social circumstances. For instance, Tswana, a Bantu language spoken in most parts of Botswana and therefore in active contact with multiple Khoisan languages, has seen relatively little Khoisan impact: only 23 Khoisan loanwords were identified (Gunnink 2020a), and no clear cases of Khoisan influence in other domains, such as clicks, is reported for Tswana. This is in keeping with the modern contact situation in which Tswana is involved, where small, socially marginalized communities of Khoisan speakers shift to Tswana, a language with a much higher prestige and a large number of native speakers. This contrasts with, for instance, Xhosa, which has adopted a large inventory of click phonemes, as well as other potentially Khoisan-derived phonemes, in addition to many loanwords: this suggests a situation of intensive and prolonged contact. Cases of (relatively) early Khoisan influence on Bantu include the South-West

DOI 10.15460/auue.2023.96.1.275

Bantu click languages, where many Khoisan loanwords seem to come from languages that are no longer spoken in the area or may even be extinct (Gunnink et al. 2015). Another such case are the Nguni languages of South Africa, where the adoption of clicks can be attributed to a single contact event taking place before the diversification of Nguni into different languages (Gunnink 2022b). On the other hand, at least some borrowings from the Khoisan language Khoekhoe into the Bantu language Xhosa can be attributed to the relatively recent past, as they specifically refer to Christian terms, which were introduced from Dutch missionaries via Khoekhoe-speaking interpreters at the end of the 18th century (Louw 1977b: 87).

2.3 The languages of the Ngamiland region of Botswana

The Tjhauba variety of Kgalagadi is spoken in the Ngamiland region in the northwest of Botswana. The landscape of this region is dominated by the Okavango delta, which covers most of the region, and forms a stark contrast with the mostly arid landscape that characterizes the rest of Botswana. Ngamiland is a linguistically and ethnically diverse region, hosting languages of different lineages, spoken by ethnically, culturally, and socio-economically diverse populations. In this section, I briefly outline the population history of the region and its modern sociolinguistic make-up.

Modern-day Ngamiland is home to small communities speaking different Khoisan languages, but the majority of modern inhabitants of Ngamiland speak one or more Bantu languages. The first (presumably) Bantu-speaking communities settled in the area in the second half of the first millennium (Wilmsen 2011; Denbow 2011; Tlou & Campbell 1997). It is unclear, however, whether they were ancestral to any of the modern-day Bantu-speaking groups living in the area. Of the modern-day Bantu languages still spoken in the area, Yeyi was probably the first to arrive, dating back to before 1750 (Tlou 1985: 12), possibly to 1650 (Mpho 1988, cited in Larson 1989: 25), or even 1600 in the eastern part of the area (Tlou & Campbell 1997: 138). Mbukushu-speaking communities entered Ngamiland from the north in the 19th century (Tlou 1985: 14). Around the same time, the Batawana, a Tswana group, migrated to Ngamiland from the South, and established their political, social and economic dominance in the area (Tlou 1985). This led to a process of language shift towards Tswana (particularly the Tawana variety) which continues up to today, and

DOI 10.15460/auue.2023.96.1.275

involved populations speaking Yeyi, Mbukushu, Kgalagadi, and various Khoisan languages (Sommer & Vossen 2000; Vossen 1988; Nyati-Ramahobo 2000).

As for the Kgalagadi-speaking peoples of Botswana, their settlement history in Ngamiland is not well-known. Their linguistic affiliation with the Sotho-Tswana group (S30) suggest an origin far to the Southwest of Ngamiland. According to Tlou (1985: 11), Kgalagadi communities may have lived on the southern fringe of the delta for a long time. According to Chebanne and Monaka (2008: 140), Tjhauba communities were the first Kgalagadi-speakers in the delta, followed by newer communities speaking different Kgalagadi dialects. This conclusion is partially based on the large divergence of the Tjhauba variety with respect to other Kgalagadi varieties, and is confirmed here.

Khoisan-speaking communities in Ngamiland, as in most other parts of Southern Africa, are small, marginalized, and threatened by language shift. Hunter-gatherer communities have a very long history in the region (Tlou 1985), but how these prehistoric communities relate to present-day Khoisan speakers in the area is difficult to establish. In present-day Ngamiland, languages of the Kx'a and Khoe families are spoken. Speakers of Ju, a dialect cluster belonging to the Kx'a family, inhabit the north-western part of the region. The Ju variety they speak is described as closely related to Ju|'hoan as spoken across the border in Namibia (Sands 2010; Snyman 1997). Khoe languages spoken in Ngamiland inlcude the Khwe cluster and Ts'ixa. Varieties belonging to the Khwe cluster are spoken throughout the Okavango delta, and include varieties such as ǁAni, Buga, ǁXom, ǁXoo and Buma (Fehn 2019a; Brenzinger 1998). Their speakers have also been referred to as Banoka (from Tswana *noka*, 'river') or River Bushmen (Tlou 1985). Another Khoe language, Ts'ixa, is spoken on the eastern edge of the delta (Fehn 2014), which may have a genealogical affinity to the Khwe cluster (Fehn 2018).

The Ngamiland is clearly a region where speakers of Bantu and Khoisan languages come into contact with each other. The linguistic effects of this contact situation have mainly been identified in Yeyi, a Bantu language that has acquired a large click inventory (Sommer & Voßen 1992; Fulop et al. 2003), but has also adopted certain verbal affixes through contact with Khoe (Gunnink 2022a). Mbukushu, a Bantu language that extends beyond Botswana into Namibia, Angola

DOI 10.15460/auue.2023.96.1.275

and Zambia, has adopted a far smaller number of clicks, but has also developed head-final nominal compounds under influence of Khoisan contact (Gunnink et al. 2015). Tawana, the Tswana variety spoken in the region, is not well-documented, but a number of Khoisan loanwords identified in Tswana are specific to Tawana (Gunnink 2020a: 36). Furthermore, relationships between speakers of various Khoisan and Bantu languages in Ngamiland have been reported to be close and amicable; for instance, both Khwe and Ts'ixa speakers consider the Yeyi as their "cousins" (Fehn 2014: 335; Boden 2009: 35). Some Tjhauba speakers expressed an even stronger bond with the ǁAnikhoe, considering the ǁAnikhoe and the Tjhauba to be one people. This shows that Bantu-Khoisan contacts in the Ngamiland region were not only intensive, but also, at least for certain ethnic groups, involved a certain degree of social equality.

3 The Tjhauba variety of Kgalagadi

Tjhauba is considered both by its speakers and by linguists as a regional variety of the Bantu language Kgalagadi. The Kgalagadi language is also known as Shekgalagadi, *she-* being a noun class prefix indicating 'language'. The name of the language is also spelled Kgalagari, reflecting the fact that in most varieties of Kgalagadi, /l/ is realised as [r] before a high vowel /i/ or /u/, unlike in Tswana, where /l/ is realised as [d] before high vowels. The realisation Kgalagadi is thus somewhat of an exonym, reflecting the Tswana pronunciation of the name.

Kgalagadi (S311) is part of the Sotho-Tswana cluster, together with Tswana, Northern and Southern Sotho, among others. A recent lexicon-based phylogenetic classification of Southern Bantu languages confirmed the unity of the Sotho-Tswana cluster, and classified Kgalagadi within Sotho-Tswana as a sister clade to Southern Sotho, Lozi, Tswana and Tawana (Gunnink, Chousou-Polydouri & Bostoen 2023). Furthermore, it classified the Ngologa variety of Kgalagadi, as described by Lukusa & Monaka (2008), and Tjhauba as direct sister branches, confirming the close relationship between these two varieties. Better documentation of other Kgalagadi varieties would increase our understanding of how Tjhauba, Ngologa, and other Kgalagadi varieties relate to each other.

DOI 10.15460/auue.2023.96.1.275

There is considerable variation within Kgalagadi, which is partly due to varying degrees of contact with different languages. The Ngologa variety, spoken in Southwestern Botswana, is often presented as being the most conservative and "pure" (Carl Grulke, p.c.), having been influenced less by other languages (Lukusa & Monaka 2008: 7). As such, most work on Kgalagadi is based mostly or totally on the Ngologa variety (Lukusa & Monaka 2008; Monaka 2005; Neumann 1999), or on the geographically close Shaga variety (Dickens 1987; Dickens 1978; Dickens 1984a; Dickens 1986; Monaka 2005).

The most northwestern variety of Kgalagadi is called Tjhauba (or Shetjhauba), the area where it is spoken is called Ritjhauba (Monaka 2013: 46), and its speakers are referred to as Baritjhauba or Batjhauba (Chebanne & Monaka 2008: 140). Tjhauba is clearly distinct from other Kgalagadi varieties, as indicated by a large degree of lexical variation and the use of click phonemes, which are rare in other Kgalagadi varieties (Lukusa & Monaka 2008: 10; Monaka 2013: 46). Tjhauba speakers furthermore confirm that mutual intelligibility with other Kgalagadi varieties is not perfect, and that speakers of other Kgalagadi varieties may struggle to fully understand Tjhauba.

Tjhauba is spoken in three villages in northwestern Botswana, Samochima, Ncamasere and Xaoga[1], situated some twenty kilometers apart, as seen in the map in Figure 1. In Samochima, Tjhauba is spoken in addition to the Bantu language Mbukushu, and Mbukushu appears to be the more commonly used language. In Ncamasere, Tjhauba also exists alongside Mbukushu, though unlike in Samochima here Tjhauba is not dominated by Mbukushu. In Xaoga, Tjhauba is spoken in addition to the ǁAni variety of Khwe, a language of the Khoe family, and the name of the village is of Khwe origin as well, meaning 'place of spears' (from *ǁxàó* 'spear, bullet' (Kilian-Hatz 2003: 221) and a derivational suffix *-xa*[2]). Some Tjhauba speakers are also fluent in Khwe, and there are mixed Tjhauba/Khwe marriages, which contributes to this pattern of multilingualism.

1 The name of the village Ncamasere is also written as Nxamasere or Xamasere. Tjhauba speakers I interviewed invariably realised it as [ŋǀamasere], e.g. with a nasalised dental click. The name of the village Xaoga can also be transcribed as Xhauga. Tjhauba speakers I interviewed realised it as [ǀʰauχa] or [ǁʰauχa], e.g. with an aspirated dental or lateral click.

2 Note, however, that an alternative interpretation 'place of sable antelopes' is also possible, cf. *ǁxáó* 'sable antelope', (Kilian-Hatz 2003: 220).

DOI 10.15460/auue.2023.96.1.275

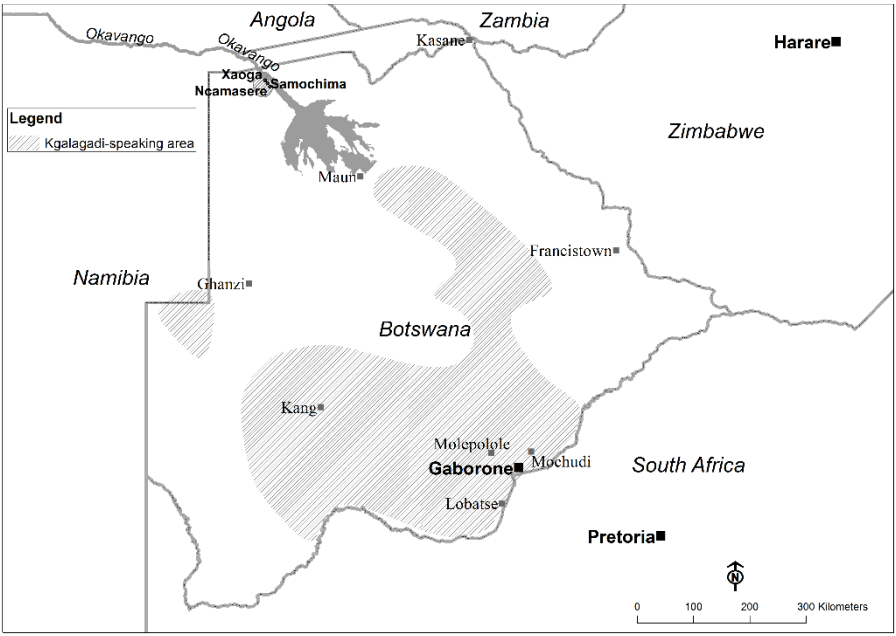

Figure 1: Map of the Kgalagadi-speaking area, based on Andersson and Janson (1997: 47).

As seen in the map in Figure 1, the Tjhauba-speaking area is geographically isolated with respect to other Kgalagadi varieties, the closest of which are spoken around Maun, some two hundred kilometres to the southeast. In addition to Mbukushu and Khwe, Tswana also plays an important role in the Tjhauba-speaking area, as the language of education, government, and general prestige, and virtually all Tjhauba speakers I met were also fluent in Tswana.

The Kgalagadi language is endangered (Lukusa 2000; Monaka 2013), and this is also true for the Tjhauba variety: most speakers are over 40, and children growing up in households where Tjhauba is spoken generally do not acquire the language, but rather grow up speaking Tswana and/or Mbukushu. The current situation suggests that within one or two generations, Tjhauba will have become extinct.

The data presented in this paper are the result of three weeks of fieldwork in Samochima in 2019. The data that were collected consist of a lexical database of some 900 items, as well as elicited phrases and two short transcribed and translated texts. The main consultant who contributed to this fieldwork, Mr. Kamogelo Mokgosi, is a native speaker of Tjhauba in his twenties living in Ncamasere,

DOI 10.15460/auue.2023.96.1.275

who is also fluent in English and Tswana. As most fluent speakers of Tjhauba were older, shorter interviews were also conducted with five elderly speakers of Tjhauba from Ncamasere and Xauga. I would like to express my gratitude to all the Tjhauba speakers who contributed to this study.

4 Tjhauba in comparison with other Sotho-Tswana languages

Although Tjhauba is perceived by both its speakers and outsider linguists as a variety of Kgalagadi, it is clearly one of the most divergent varieties of the language. This is partly the result of contact-induced changes, as discussed in section 5. There are also some changes that set Tjhauba apart from other Kgalagadi varieties that are not (recognizably) due to language contact, but rather appear to be internally motivated. In this section, I survey some of these changes by comparing Tjhauba with the Ngologa variety of Kgalagadi, as described by Lukusa & Monaka (2008), as well as to other languages of the wider Sotho-Tswana cluster.

One of the diachronic developments that have caused Tjhauba to diverge from other Kgalagadi varieties is seen in the reflexes of Proto-Bantu *n. Most Kgalagadi varieties have maintained *n as /n/, and this reflex is also seen in other languages of the Sotho-Tswana cluster, such as Tswana and Northern Sotho. In Tjhauba, however, *n has shifted to /l/, as shown in Table 1, which compares Bantu reconstructions with *n with their reflexes in selected Sotho-Tswana languages.

DOI 10.15460/auue.2023.96.1.275

Table 1: Reflexes of *n

Bantu reconstruction[3]	**Tswana**	**Northern Sotho**	**Ngologa**	**Tjhauba**
**nòn* 'be fat, soft, palatable'	*nòn-à* 'become fat'	*nòn-à* 'become fat'	*non-a* 'gain weight'	*lòl-à* 'gain weight'
**kónò* 'arm'	*sì-kxónò* 'elbow'	*sè-kx^{h}ónò* 'elbow'	*ʃɪ-q^{h}ono* 'elbow'	*ʃî-qχóló* 'elbow'
**-an* 'associative (reciprocal)'	*-an* 'reciprocal'	*-an* 'reciprocal'	*-an* 'reciprocal'	*-al* 'reciprocal'
**púan* 'resemble'	*ts^{h}wán-à* 'resemble'	*swán-à* 'resemble'	*tʃ^{h}wan-a* 'resemble'	*tʃ^{h}wál-à* 'resemble'

The change of *n to /l/ in Tjhauba clearly sets this variety apart from the Ngologa variety of Kgalagadi. In addition, there are also innovations in Ngologa that are not shared by Tjhauba. Ngologa has palatalized *nt to /c^{h}/, and *nd to /c/. Tjhauba, on the other hand, has not undergone this palatalization, but has retained the alveolar place of articulation, which is also maintained in other Sotho-Tswana languages. Note that both Tjhauba and Ngologa, as well as the other Sotho-Tswana languages, have lost prenasalisation and shifted voiced stops to voiceless, while adding aspiration to the voiceless stops, a process known as "strengthening" (Dickens 1984b).

Table 2: Reflexes of *nt and *nd

Proto-Bantu	**Tswana**	**Northern Sotho**	**Ngologa**	**Tjhauba**
**ntù* 'person'	*mo-tho* 'person'	*mò-thò* 'person'	*mʊ-c^{h}ʊ* 'person'	*mù-t^{h}ù* 'person'
**túnd* 'teach'	*rut-a* 'teach'	*rút'-à* 'teach'	*ruc-a* 'teach'	*rùt-à* 'teach'
	tau 'lion'	*t'àú* 'lion'	*cau* 'lion'	*tàú* 'lion'
**bíndɪ* 'liver'	*se-bete* 'liver'	*sè-βét'è* 'liver'	*ʃɪ-bɪcɪ* 'liver'	*ʃî-bítí* 'liver'

3 Throughout this section, Bantu reconstructions come from BLR 3 (Bastin et al. 2002), Tswana data come from Cole and Moncho-Warren (2012), Northern Sotho data come from Kriel, van Wyk and Makopo (1989), with transcription conventions based on Kotzé (1989), and Ngologa data come from Lukusa and Monaka (2008). The transcription has been adapted to IPA to facilitate comparison.

DOI 10.15460/auue.2023.96.1.275

Tjhauba also differs from Ngologa in certain aspects of its morphology. Both Ngologa and Tjhauba make use of a nominal suffix to express location. In Ngologa, this suffix consists of a single velar nasal *-ŋ* (Neumann 1999; Lukusa & Monaka 2008). In Tjhauba, the locative suffix only consists of lengthening of the noun's final vowel, as shown in (1)–(2). When the noun's final vowel is /a/, lengthening combines with a change of /a/ to /e/ to express the locative, as shown in (3)–(4).

(1) *mí-zì-ì*
NP4-village-LOC
'at the villages'

(2) *ø-ʈ̪hòʈ̪ó-ò*
NP9-house-LOC
'at the house'

(3) *ø-nòqχé-è* < *nòqχá*
NP9-river-LOC
'at the river'

(4) *ø-tsílè-è* < *tsìlà*
NP9-road-LOC
'at the road'

A similar nominal locative suffix is attested in other Sotho-Tswana languages. In Tswana, for instance, the locative suffix has the shape *-eŋ*, although the vowel /e/ is lost in all cases except when the suffix attaches to a noun ending in a vowel /a/ (Cole 1955: 342). The vocalic properties of the Tswana suffix are similar to the realisation of the locative suffix in Tjhauba, whereas the use of the consonant /ŋ/ shows similarities to the realisation of the locative suffix in Ngologa.

5 Contact-induced change in Tjhauba

Many of the properties that set Tjhauba apart from its closest genetic relatives are the result of contact-induced changes. In this section, I discuss contact influence in Tjhauba, focusing on its inventory of click phonemes in section 5.1, the words in which clicks occur in section 5.2, and loanwords without clicks in section 5.3.

5.1 The click inventory of Tjhauba

Language contact has played an important role in shaping the Tjhauba language, most notably through the introduction of click phonemes.

DOI 10.15460/auue.2023.96.1.275

The Shaga variety of Kgalagadi is reported to have two click phonemes, /|ŋ/ and /!ŋ/, occurring in (at least) two words: /ɳ|ŋú/ 'small' and /muɳ!ŋú/ 'big intestine' (Dickens 1987: 300). Lukusa and Monaka (2008: 10) list two click phonemes in the Ngologa variety of Kgalagadi, bilabial /⊙/ and dental /|/, but no examples are given, possibly because the phonemes are rare in the language. Tjhauba, however, has previously been reported to be much richer in click phonemes (Monaka 2013: 46; Lukusa & Monaka 2008: 10). My recent fieldwork confirms this, and provides data for a first overview of click sounds used in Tjhauba (Table 3).

Table 3: Click inventory of Tjhauba

	Voiceless	Voiced	Nasal	Uvular fricative
Dental	|	g|[4]	ŋ|	|χ ~ |^{h}
Alveolar	!	g!	ŋ!	!χ ~ !^{h}
Lateral	‖	g‖	ŋ‖	‖χ ~ ‖^{h}

This analysis is based on a total of 51 Tjhauba click words, presented in Table 4 in section 5.2. All click words were collected from a single male speaker in his twenties, and a subset was cross-checked with five elderly speakers. Unfortunately, the low frequency of clicks in Tjhauba and the relatively wide phonetic variation in clicks make it difficult to establish which properties of clicks are phonemic. Given the small amount of data, minimal pairs are not available to prove the contrast between all different click realisations. However, the near-minimal pairs in (5)–(7) suggest that the voiceless, voiced, nasal and uvular fricative dental clicks are contrastive.

(5) /| - |χ/

χò-/áb-á	*mù-/χábá*
INF-empty_dish-FV	NP_3-fig
'to empty a dish'	'fig tree'

4 Voicing and nasality on clicks can also be transcribed using diacritics, but the more common practice in click studies is to use a preceding <g> to mark voicing, and a preceding <n> to mark nasality (see Sands (2020) for an overview of transcription conventions of clicks, and the complexities associated with transcribing diacritics on clicks).

DOI 10.15460/auue.2023.96.1.275

(6) /| - ŋ|/

χò-/áí	*χò-ŋ/àì*
INF-be_weak	INF-tell
‘to be weak’	‘to tell’

(7) /| - g|/

|úmú ‘mongongo nut’ *g|ùmùχwè* ‘owl’

Glottalisation of clicks occurs phonetically, but does not appear to be contrastive, because glottalisation only affects clicks preceded or followed by a syllable containing a nasal consonant, as in (8)–(12).

(8) *χò-/ʔám-á*
INF-lick-FV
‘to lick’

(9) *mò-/ʔárà*
NP_3-tree_sp
‘tree sp. (not to be put in fire or cattle will die)’

(10) */ʔámátátì*
‘catfish sp.’

(11) *mò-/ʔíŋ|á ~ mò-/íŋ|á*
NP_3-date
‘fruit of the Senegal date palm *(Phoenix reclinata)*’

(12) *mò-ŋ|àù|árá ~ mò-ŋ|àù|ʔárá*
NP_3-tree_sp
‘tree sp.’

However, two words are attested where a glottalised click is not preceded or followed by a nasal consonant, as listed in (13)–(14).

(13) */ʔaa* ‘no’

(14) */ʔárò* ‘wild date palm *(Phoenix reclinata)*’

In other languages, glottalised clicks are often accompanied by some nasal airflow as well (Sands 2020: 24). In combination with the preference of glottalised clicks for a nasal environment (although this rule is not without exception), glottalisation of clicks in Tjhauba is possibly not contrastive, but induced by a preceding or following nasal. It should be noted, however, that nasalisation without glottalisation does appear to be contrastive, because nasal clicks are not limited to a position before or after a nasal consonant, as shown in (15)–(17).

DOI 10.15460/auue.2023.96.1.275

(15) *bù-ŋ|ú*
NP$_{14}$-small
'youth'

(16) *χù-ì-ŋ|óŋ|óbèl-à*
INF-MID-tiptoe-FV
'to walk on tiptoe'

(17) *χò-ŋ|òqχòl-à*
INF-uproot-FV
'to uproot'

Clicks with a uvular fricative release appear to be phonemic, as shown by their contrast with plain voiceless clicks in (5) above. However, the uvular fricative release is not always strongly fricated, and can also be realised as aspiration, as in (18). Only five words containing a click with a uvular fricative release are attested (see 47–51 in Table 4), making this the most infrequent click realisation in Tjhauba.

(18) *mò-|χábá ~ mò-|hábá*
NP$_3$-fig
'fig tree'

Tjhauba exhibits dental, alveolar and lateral click types, but the evidence for their contrast is limited, and there is extensive interspeaker variation in the realisation of clicks. The youngest speaker used dental clicks only, with one exception listed in (19).

(19) *mò-!χúú ~ mò-‖χúú*
NP$_1$-!Xung
'!Xung person'

Although this realisation is undoubtedly related to the self-designation of the ethnic group in question, which also uses a click other than the dental, it is surprising that the Tjhauba speaker alternates between an alveolar and a lateral click. Furthermore, Tjhauba speakers are in even closer contact with the ǁAnikhwe, whose ethnonym contains a lateral click, yet in the speech of this particular speaker, their name is realised with a dental click, as seen in (20).

(20) *bà-|ànìkhwè*
NP$_2$-ǁAnikhwe
'ǁAnikhwe people'

Elder speakers showed more variation in click types, producing dental, alveolar and lateral clicks. Certain words were consistently realised with the same click type by all elder speakers, both in repe-

DOI 10.15460/auue.2023.96.1.275

titions by the same speaker, as well as repetitions of the same token by different speakers. Some examples are given in (21).

(21) No inter-speaker variation (in elder speakers)

(a) Dental clicks
mà-g|í
NP_6-waterlily
'edible waterlily *(Nymphaea caerulea)*'

ŋ|ú 'small'

(b) Alveolar clicks
mù-!'úní, mù-ŋ!'ùní
NP_3-palm
'palm tree *(Hyphaene petersiana)*'

(c) Lateral clicks
g‖ɔ̀bɔ̀ 'mud'

These data from elderly Tjhauba speakers suggest that they do contrast click types. In addition, however, there is also some inter-speaker variation in the realisation of click types by different elder speakers, as illustrated in (22).

(22) Inter-speaker variation in the realisation of click type*s*

(a) *g‖ɔ́χɔ̀rɔ̀, g|ɔ́χɔ́rɔ̀, g!ɔ́χɔ̀rɔ̀* 'adam's apple, throat'

(b) *mù-g|úmà, mù-g‖úmà, mù-g!úmà, mù-g‖ómà, mù-g!ómà*
NP_3-muscle
'muscle (esp. biceps)'

Conclusions on the phonemic status of click type are therefore very tentative. On the one hand, the interchangeability of click type, both between speakers and within a single speaker, seems to suggest that click types are in free variation. However, the restriction of interchangeability to particular words, and the consistent realisation of words with a particular click type across tokens by the same or different speakers, suggests that click type is used contrastively. The preference for dental clicks by the single younger speaker who contributed to this study is an indication that Tjhauba is moving from a system where click type is used contrastively to one where all clicks

DOI 10.15460/auue.2023.96.1.275

are realised as dental. A similar preference for the dental click is seen in the South-West Bantu click languages Fwe, Mbukushu, Manyo and Kwangali, spoken in northern Namibia, northwestern Botswana and southwestern Zambia, where there is free variation in click type but the dental click is the most common (Bostoen & Sands 2012; Gunnink et al. 2015; Gunnink 2020b).

Variation in the realisation of clicks is also seen in occasional interchangeability of clicks with non-clicks, as shown in (23).

(23) Variation between clicks and non-clicks

(a) *dì-|àbú, dì-k'àbú*
NP_{10}-shoe
'shoes'

(b) *|ʔárò, ts'árò* 'palm tree'

(c) *mà-gɪ́ú, mà-g‖ú, mà-gú*
NP_{6}-waterlily
'waterlilies'

(d) *qχàχàg|ǂpù, |χàχàg|ǂpù* 'bat'

Only the words listed in (23) are recorded with and without a click realisation. Interchangeability between clicks and non-clicks is seen in speakers of all ages. Despite the small amount of data, it is clear that possible replacements of clicks are plosives or affricates, and that the voicing of the click is unchanged in the non-click replacement. This is similar to the interchanging of clicks and non-clicks in Fwe, which also maintains the voicing (and nasality) of the click in the non-click replacement (Gunnink 2020b), although click/non-click interchanging is much more productive in Fwe than what is attested in Tjhauba.

5.2 The click lexicon

Only 51 click words were collected out of an approximately 900 word lexical database. Data collection was targeted towards clicks, so assuming that approximately 5% of the Tjhauba lexicon consists of click words is probably an overstatement. All recorded click words are listed in Table 4, including all different realisations that were recorded, as well as correspondences in other languages. These potential source words have been copied in their original transcription, with the exception of Naro, Manyo and Yeyi, which have been retranscribed according to the IPA. Khwe data are from Kilian-Hatz (2003), Ts'ixa data are from Fehn (2019b), Naro data are from Visser

DOI 10.15460/auue.2023.96.1.275

(2001), Ju|'hoan data are from Dickens (1994), which represents the variety of Ju|'hoan spoken in the Nyae Nyae area, Manyo data are from Möhlig and Shiyaka-Mberema (2005), and Yeyi data are from various sources specified in the table. Furthermore, data are provided from the Khoe-Kwadi language Khoekhoe, spoken in Namibia (Haacke & Eiseb 2002); from North-Western !Xun (König & Heine 2008) and the !Xun dialects documented in Snyman (1997), spoken across northern Namibia and southern Angola. These languages are not likely to have been in contact with Tjhauba due to their geographic distribution, but their linguistic relatives are. Therefore, an attestation of a potential source word in Khoekhoe does not necessarily indicate Khoekhoe as the direct donor language, but does point towards a general Khoe origin of the particular lexeme. Similarly attestations of potential source words for Tjhauba click words in !Xun varieties spoken outside the general Tjhauba-speaking area could be suggestive of a general !Xun origin. For the same reason, reconstructions from Proto-Khoe (or its later subbranches) are given where possible, to support a general Khoe origin. This approach is especially relevant given the gaps in the documentation of Khoe and !Xun varieties spoken in close proximity to Tjhauba.

Table 4: Tjhauba click words

	Lexeme	**Part of speech**	**Translation**	**Correspondences in other languages**
1.	*ǁúmú* *!úmú* *|úmú*	n	'mongongo nut *(Schinziophyton rautanenii)*'	Khwe */qóm̀* 'manketti tree, nut', Khoekhoe */gõm̀-s* 'manketti fruit/kernel'
2.	*mà-/é*	n	'waterlily sp.'	Yeyi *ma-ǂe* 'edible water plant' (Chebanne et al. 2007: 28)
3.	*ʃì-/áχà*	n	'tree sp.'	
4.	*!ùbwé*	n	'flower sp.'	

DOI 10.15460/auue.2023.96.1.275

5.	*/àbú* *ǁàbú* *k'àbú*	n	'shoe'	Khwe *ǁàvòo* 'shoe', Ts'ixa *ǁābō* 'shoe, sandal', Naro *nǁàbo* 'shoe', Proto-Khoekhoe **ǁhabo*, Proto-Non-Khoekhoe/Proto-West-Khoe **ǁ̃nabo /*ǁ̃abo*, Proto-East-Khoe **ǁabo* 'Sandale'
6.	*χù-/úb-á*	v	'to kiss'	Khwe *ǁ'oevɛ, ǁ'óvɛ* 'to kiss', Ts'ixa *ǁʔóbē* 'to kiss', Naro *ǁ'obè* 'to kiss', !Xun */'òbā̋* 'kiss'[5], North-Western !Xun */'òbā* 'kiss', Proto-West-Khoe **ǁʔobe* 'küssen'
7.	*χú-/ôw-á*	v	'to be tasteless'	Khwe *ǂhòá* 'be tasteless', Khoekhoe *ǂopo* 'lukewarm, tasteless'
8.	*χò-/áb-á*	v	'to throw food out of a dish'	Ts'ixa *ǁk'ápà* 'manner in which sticky food is served on a plate'
9.	*χò-/áí*	v	'to be weak, lazy'	Khwe *ǁhã̀ĩ́, ǁxã̀ĩ́* 'be meagre, thin; be weak, feeble'
10.	*χù-/òp-à*	v	'to be wet (of animals)'	Khwe */'ó:* 'lay in water to soften', Naro */'óó/'òò* 'make a little bit wet'

5 This form is attested for all !Xun varieties documented by Snyman (1997), except the Cuando/Cuito varieties (classified as Northern !Xun by Sands 2010) and Lister farm !Xun (classified as South-Eastern !Xun by Sands 2010).

DOI 10.15460/auue.2023.96.1.275

11.	*mò-/ànìkʰwè*	n	'‖Anikhwe person'	Khwe *‖Àní-khwè* '‖Ani-Khwe'
12.	*/ʔárɔ̀* *ts'árɔ̀*	n	'Senegal date palm *(Phoenix reclinata)*'	
13.	*/ʔaa*	int	'no'	
14.	*χò-/ʔám-á*	v	'to lick'	Khwe */'óáma* 'lick out with index finger', Manyo *n/âma* 'taste food with finger', !Xun *n‖òḿ'ḿ* 'lick out'[6]
15.	*/ʔámátátì* *‖ʔámátátì*	n	'catfish'	
16.	*mò-/ʔárà* *mò-‖ʔàrà* *mò-!ʔàrà*	n	'tree sp. (not to be put in fire or cattle will die)'	
17.	*mò-/ʔíŋ/á* *mò-/íŋ/á*	n	'fruit of the Senegal date palm *(Phoenix reclinata)*'	Yeyi *zi-ŋ/iŋ/ga* 'fruits of the wild date palm' (Lukusa 2009: 277)
18.	*mò-ŋ/àù/árá* *mò-ŋ/àù/ʔárá* *ʃì-ŋ/àú/àrà*	n	'shrub sp. (eaten by goats)'	
19.	*mò-ŋ‖ʔwìí* *mò-ŋ/ʔwìí*	n	'tree sp.'	

6 This form is attested in all !Xun varieties documented by Snyman (1997), except the Cuando/Cuito varieties (classified by Sands 2010 as Northern !Xun).

DOI 10.15460/auue.2023.96.1.275

20.	*mò-ŋ!ʔòní* *mò-!ʔòní*	n	‘palm tree *(Hyphaene petersiana)*’	Yeyi *mù-n!’úní* ‘fruit of the date palm *(Phoenix reclinata)*’ (Sommer & Voßen 1992: 33), Ts’ixa *!’ùní* ‘*Hyphaene ventricosa*’ (Vossen 2011: 195), Buga *!’úní* ‘*Hyphaene ventricosa*’ (Vossen 2011: 195), Khoekhoe *!’ùnĩ́* ‘makalani fruit/nut’
21.	*ŋ|ú*	adj	‘small’	
22.	*mò-ŋ!á*	n	‘paper-bark thorn *(Vachellia/ Acacia sieberiana)*’	Yeyi *ù-n!à* ‘paper-bark thorn *(Acacia sieberiana)*’ (field notes), Ju|’hoan *n!án* ‘blue thorn acacia *(Acacia erubescens)*’, *n≠aqng* ‘plate thorn acacia *(Acacia fleckii)*’, North-Western !Xun *!!àqñ* ‘plate thorn *(Acacia fleckii)*’
23.	*mò-ŋ|àúbàlà* *mò-ŋ‖àúbàlà*	n	‘leadwood *(Combretum imberbe)*’	
24.	*ʃì-ŋ|úkûmà*	n	‘plant sp., similar to sweet potato’	
25.	*tʃìtʃìríŋ|ùmè*	n	‘fruit of river tree sp.’	
26.	*ŋ|áúbè*	n	‘plant sp.’	

DOI 10.15460/auue.2023.96.1.275

27.	*χò-ŋ|àì* *χò-ŋ‖à-él-à*	v	‘to tell’	Khwe *n‖áà* ‘talk to, narrate, tell, say, inform (sb)’, Naro *n‖ae* ‘tell’, Ts’ixa *n‖gae* ‘sing’, Yeyi *ǀi-n!ee* ‘story’ (Lukusa 2002: 128), North-Western !Xun *n‖àɛ̃* ‘tell, say to, mention; yell (of women when dancing), sing (of birds)’, Proto-Khoe **‖̃a*, Proto-Non-Khoekhoe **‖̃nã*, **‖̃ã* ‘erzählen/mitteilen’
28.	*χù-ì-ŋ|òkóḓèlà*	v	‘to lean (onto, against)’	
29.	*χù-ì-ŋ|óŋ|óbèl-à*	v	‘to walk on tiptoe’	North-Western !Xun */òè|òè‖ú* ‘stand on one’s toe tips’
30.	*χò-ŋ|òqχòl-à*	v	‘to uproot’	
31.	*ʃī-g|í*	n	‘candlepod thorn *(Acacia hebeclada)*’	
32.	*sì-g|ànànà*	n	‘scented thorn (*Vachellia nilotica*)	
33.	*sì-g‖úkùmù*	n	‘fruit sp.’	
34.	*g|áìg|áì* *g‖áìg‖áì* *g‖êg‖é* *g|ág‖áì*	n	‘blacksmith lapwing *(Vanellus armatus)*’	Ju|’hoan *‖’áí‖’áí* ‘blacksmith plover, *Hoplopterus armatus*’
35.	*g‖íg|ítʃà*	n	‘grass sp.’	

DOI 10.15460/auue.2023.96.1.275

36.	*g|ǵnìg|á*	n	'sp. of water plant'	
37.	*g|ɔ̀bɔ̀* *g‖ɔ̀bɔ̀*	n	'mud'	Khwe *ǂqóvo* 'soil, clay; beer grounds', Ts'ixa *g‖óbò* 'mud', Khoekhoe *ǂgȍà-b* 'mud', Yeyi *ì-g‖óbò* 'mud' (Sommer 1995: 408)
38.	*g|ɔ́χɔ̀rɔ̀* *g‖ɔ́χɔ̀rɔ̀* *g|ɔ́χɔ́rɔ̀* *g!ɔ́χɔ̀rɔ̀*	n	'Adam's apple, throat'	Ts'ixa *ŋg‖ōó-xōrō* 'larynx, windpipe', Lister Farm !Xun *!hùgùrù* 'adam's apple', Khwe *gó-xòrò* 'windpipe, trachea'
39.	*g|wǐí* *g|ǐí* *g|ùí*	n	'edible waterlily *(Nymphaea caerulea)*'	Ju|'hoan *g|hòè* 'edible water lily *(Nymphaea caerulea, N. capensis, Nymphoides indica)*', Yeyi *ma-ǂwii* 'roots from an edible plant' (Chebanne et al. 2007: 27)
40.	*mà-g|íbírò*	n	'leaves of *Nymphaea caerulea*'	
41.	*g|ùmùχwè* *g|ùmùkʰwè*	n	'owl'	

DOI 10.15460/auue.2023.96.1.275

42.	*g|wèé* *g‖wèé*	n	'tortoise'	Khwe *‖góé* 'leopard tortoise', Ts'ixa *g‖óé* 'leopard tortoise *(Stigmochelys pardalis)*', Naro *g‖òé* 'leopard tortoise', Ju|'hoan *g‖òé* 'tortoise (large sp.)', Khoekhoe *‖noe-b* 'leopard tortoise'
43.	*mà-gʟú* *mà-g‖ú* *mà-gú*	n	'edible waterlily *(Nymphaea lotus)*'	
44.	*mò-g|èbè*	n	'large feverberry *(Croton megalobotrys)*'	
45.	*mú-g|wàá* *mò-g‖wáá* *mú-g‖wàá*	n	'waterberry *(Syzygium cordatum)*'	
46.	*mò-g|úmà* *mò-g‖úmà* *mò-g!úmà* *mò-g‖úmà* *mò-g!úmà*	n	'muscle (esp. biceps)'	Yeyi *mu-g!uma* 'upper arm' (Lukusa 2002: 132), Ju|'hoan *g‖kóm* 'upper arm', North-Western !Xun *!ồmā* 'arm', !Xun *g‖x'óm*, *g!òmá* 'upper arm'
47.	*mù-!χúú* *mù-‖χúú*	n	'!Xung person'	Ju|'hoan *!Xùún* '!Kung person'
48.	*mò-|χábá*	n	'fig tree *(Ficus sycomorus)*'	Khwe *|xává* 'sycamore fig *(Ficus sycomorus)*'

DOI 10.15460/auue.2023.96.1.275

49.	*qχàχàg/ípù /χàχàg/ípù*	n	'bat'	Yeyi *u-mpapag/ipwi* 'bat' (Lukusa 2002: 137), *mpápà-g/ípí* 'bat/small bird' (Sommer & Voßen 1992: 30)
50.	*χò-/χàdálàl-à*	v	'to sit dispersed'	
51.	*bó-kù/χùnì*	n	'amaranthus'	

Tjhauba click words are strongly clustered in the semantic domain of flora, and to a lesser extent, fauna. 26 click words refer to botanical species or parts thereof, and five click words refer to species of animals. Plants growing in and along the water are especially well-represented, including four terms related to species of waterlily. Another term for a species of waterlily is referred to with a Khwe loanword that does not contain a click (see (25a) in section 5.3). Waterlilies, and especially their starchy roots, form an important staple food for Tjhauba speakers in times of famine, when the roots replace cultivated crops such as millet, sorghum or maize.

24 out of 51 click words correspond to click words in another language. Table 5 summarizes the number of source words for Tjhauba click words found in each language.

Table 5: The sources of Tjhauba click words

Source language	**Number of putative loans**
Khoe-Kwadi	
Khwe	13
Ts'ixa	6
Naro	5
(Khoekhoe)	5
(Proto-Khoe)	3
Kx'a	
Ju|'hoan	6
(Other !Xun)	6
Bantu	
Yeyi	8

DOI 10.15460/auue.2023.96.1.275

Manyo	1

However, identifying the ultimate source language is not straightforward, for a number of reasons. Firstly, not all potential source languages are (well) documented. The actual donor language of some Tjhauba click words may be a language for which no data are available, or a documented language in which the particular lexeme that provided the source for the Tjhauba borrowing is undocumented. This is especially the case for click words whose etymology could only be found in languages not known to have been in contact with Tjhauba, or reconstructed languages. Secondly, some Tjhauba click words have potential sources in multiple languages. Some source words are shared across multiple languages of the Khoe family, suggesting this sharing is due to inheritance, as these languages are (closely) related. For instance, there are five Tjhauba click words with a possible source in Naro, but these words also have possible sources in Ts'ixa and/or Khwe, which are phonologically and semantically an equally good fit. Furthermore, Naro is spoken far to the south of where Tjhauba is spoken, and there is currently no direct contact between Tjhauba and Naro speakers. It is therefore likely that the putative Naro influence in Tjhauba is in fact the result of influence from another Khoe language[7].

Some source words are also shared by unrelated languages, however: by the Bantu languages Manyo and Yeyi and the Khoe languages Khwe, Naro, Ts'ixa and Khoekhoe (see 14 and 27), by the Bantu language Yeyi and the Kx'a language Ju|'hoan (see 22 and 46), or by the Khoe languages and the Kx'a language Ju|'hoan (see 42). As Tjhauba also shares click words with Yeyi, Ju|'hoan, Khwe and Ts'ixa that are not shared with other languages, contact with these languages is still likely to have taken place. Manyo shares only one click word with Tjhauba, which is also attested in the Khoe language Khwe. Manyo speakers are not currently in contact with Tjhauba speakers, as Manyo is spoken further northwest in Namibia. This suggests that direct contact between Manyo and Tjhauba most likely did not take place.

7 Certain shared tonal patterns and lexical isoglosses between Naro and ǁAni may suggest older contact or migration (Fehn 2019a). If speakers of Naro or a related language once lived further north, this may explain some of the apparent Naro influence found in Tjhauba.

DOI 10.15460/auue.2023.96.1.275

Loanwords with clicks have undergone some phonological and morphological adaptation in Tjhauba. Morphological adaptation of nouns involves the addition of a noun class prefix. Nouns seem to be assigned to a noun class based on their semantics, e.g. words for trees are assigned to class 3 (using the prefix *mʊ-*), but those for smaller trees or shrubs to class 7 (using the prefix *sɪ-/ʃɪ-*). Words for plants and animals typically appear in the prefixless class 1a. Words referring to humans are assigned to class 1 (using the prefix *mʊ-*). These patterns mostly follow tendencies for noun class semantics also found in native Tjhauba vocabulary (Gunnink 2022c). The addition of a noun class prefix is expected for borrowings from Kx'a or Khoe languages, as these do not have a noun class system similar to Tjhauba. However, for borrowings from Yeyi, another Bantu language, another option is the maintenance of the original noun class prefix, or its change into a phonologically similar prefix in Tjhauba. While this is the case for some loans (e.g. 20, 46), in others a prefix of the semantically appropriate noun class seems to have been used (e.g. 17, 22).

Morphological adaptation of verbs includes the addition of a suffix *a*, an inflectional suffix used in a wide range of constructions in Tjhauba (Gunnink 2022c). There are also borrowed verbs that do not display this final suffix (e.g. 9, 27). A total of six lexical verbs without it are attested in Tjhauba, including the two loanwords listed here (see Gunnink 2022c).

Phonological adaptation of borrowed click words in Tjhauba sometimes involves changes to the realisation of the clicks as they are used in the source language. Click phonemes that are absent in Tjhauba have been adapted; for instance, source words with a palatal click have been borrowed with a dental click instead (e.g. 7, possibly also 22, 37). However, there are also cases where clicks are adapted even though the click realisation of the source word does exist in other words in Tjhauba. For instance, Tjhauba *χò-|áí* 'be weak, lazy' corresponds to Khwe *ǁhȁí̋, ǁxȁí̋* 'be meagre, thin; be weak, feeble' (see 9). The aspirated or velar fricative click of the Khwe source word has been adapted to a simple voiceless click in Tjhauba, even though in other cases, the velar fricative accompaniment has been maintained as a uvular fricative (see 47, 48). These unexpected phonological differences may suggest that Khwe, or at least the Khwe variety that is documented, was not the direct source of these Tjhauba loanwords.

DOI 10.15460/auue.2023.96.1.275

The preference for dental clicks in Tjhauba means that certain source words with a click other than the dental correspond to a dental click in Tjhauba (see, for instance, 6, 9, 11). However, as discussed in section 5.1, elder speakers also use clicks other than the dental in certain words, and this appears to correlate somewhat with the click type of the original source word. Words that elderly speakers consistently realise with a lateral click correspond to source words with lateral clicks (5, 27, 34, 37). Words that elderly speakers consistently realise with a dental click correspond to source words with dental clicks (14, 39, 49). In one case of elderly speakers consistently using an alveolar click, the source word also contains an alveolar click (20).

5.3 Other contact-induced influence

Click phonemes are one of the most salient cases of contact-induced change in Tjhauba, but other contact-induced changes can also be identified. In addition to the click-containing loanwords listed in section 5.2, Tjhauba has also borrowed lexemes without clicks from Yeyi (24), from Khoe languages, most commonly Khwe (25), and Mbukushu (26), although Mbukushu has not contributed any loanwords to Tjhauba that contain clicks.

(24) Yeyi loanwords in Tjhauba

(a) *ŋgwéʃè* ‘tigerfish’ < Yeyi *ŋgweʃe* ‘tigerfish’ (Field notes)

(b) *ŋ̀kàʃí* ‘punt’ < Yeyi *iŋkasi* ‘punting pole, paddle’ (Lukusa 2009)

(c) *mù-ɟàmbùrù*
NP_3-skirt
‘skirt worn by female initiate’
< Yeyi *mu-ʒamburo* ‘women’s traditional attire’ (Lukusa 2009)

(d) *mù-ʔúlí*
NP_3-rope
‘rope made from palm leaves’
< Yeyi *mù-n!’únì* ‘fruit of the date palm *(Phoenix reclinata)*’ (Sommer & Voßen 1992: 33)

DOI 10.15460/auue.2023.96.1.275

(25) Khoe loanwords in Tjhauba

(a) *dòó* ‘waterlily’ < Khwe *dó* ‘waterlily (*Nymphaea capensis*)’ (Kilian-Hatz 2003: 36), ǁAni *dǒ* ‘small fruit of the waterlily’ (Heine 1999: 113)

(b) *púmbùlù* ‘mosquito’ < Khwe *pímboro* ‘mosquito’ (Kilian-Hatz 2003: 104), Ts’ixa *pímbōrō*, *púmbōrō* ‘mosquito’ (Fehn 2019b), North-Western !Xun *pīímbúlú* (König & Heine 2008: 148)

(c) *ŋgòròŋgó* ‘bushbuck’ < Khwe *ngùrúngù*, *ngùrúngùrù* ‘bushbuck’ (Kilian-Hatz 2003: 95)[8]

(d) *kòmà* ‘papyrus’ < Khwe *koámá*, *koómá* ‘papyrus’ (Kilian-Hatz 2003: 61), ǁAni *kwàmâ* ‘reed sp.’ (Heine 1999: 115)

(e) *ʔáú* ‘fish’ < ǁAni *ǂʔāù* ~ *ǂʔēù*, ǁXom *ǂʔéū*, Buga *ǂʔáū* ~ *ǂʔéū* ‘fish’ (Fehn 2019a: 25)

(26) Mbukushu loanwords in Tjhauba

(a) *ʃì-nùŋgù*
NP$_7$-porcupine
‘porcupine’
< Mbukushu *θi-nungu* ‘porcupine’ (Wynne 1980: 395)

(b) *ʃì-téŋgù*
NP$_7$-bird
‘bird sp.’
< Mbukushu *θi-tengu* ‘drongo’ (Wynne 1980: 165)

These loanwords have been adapted phonologically to a certain degree. Most significant is the loss of the click in *ʔáú* ‘fish’, which appears to be borrowed from a source word with an initial click followed by a glottal stop, of which only the glottal stop is maintained.[9]

8 Kilian-Hatz (2003: 95) lists this as a Mbukushu loanword in Khwe, but the word is not attested in the fairly comprehensive Mbukushu dictionary by Wynne (1980).

9 It is also possible that the original source word already lost its click. Shua varieties, a cluster of Khoe languages spoken further east in Botswana, exhibit a form *ʔáū* ‘fish’ (Fehn 2018: 20). While this form would provide a better phonological fit to the Tjhauba word, there is no known contact between Tjhauba and Shua speakers.

DOI 10.15460/auue.2023.96.1.275

A similar process has affected *mò-ʔólí* ‘rope made of palm leaves’, where the nasal glottalised click in the Yeyi source word was adapted to a glottal stop. This is significant, not only because clicks were maintained in other borrowings (see 5.2), but also because the glottal stop is rare in Tjhauba, and has only been attested in loanwords. Attested click loss patterns in Khoisan languages also show the replacement of glottalized clicks with glottal stops (Traill & Vossen 1997: 43–44; Fehn 2020).

The Yeyi source word *mù-n!’únì* ‘fruit of the date palm *(Phoenix reclinata)*’ is of particular interest because it appears to have been borrowed twice in Tjhauba. In the Tjhauba word *mò-ʔólí* ‘rope made of palm leaves’ the click has been lost, and the second root consonant /n/ has been replaced by /l/. This is not a case of phonological nativization (as /n/ does occur phonemically in Tjhauba, Gunnink (2022c)), but part of a regular sound change that has historically changed all instances of *n to /l/ (see section 4). The second Tjhauba loanword that reflects the same Yeyi source is *mù-n!’únì* ‘fruit of the date palm *(Phoenix reclinata)*’, which not only reproduces the semantics of the source more closely, but also displays less phonological adaptation, maintaining the click and not changing the second root consonant /n/ to /l/. The most likely explanation would posit Tjhauba *mò-ʔólí* ‘rope made of palm leaves’ as an early loan, which must have at least predated the *n > /l/ shift, and Tjhauba *mù-n!’únì* ‘fruit of the date palm *(Phoenix reclinata)*’ as a later loan. This would then entail that clicks were not maintained in early loanwords, but were only borrowed into Tjhauba relatively more recently.

Similar to the click-containing loanwords discussed in section 5.2, most (eight out of eleven) loanwords listed in (24)–(26) refer to animal and plant species. Terminology for plants or animals living in or near water and activities carried out on water are also well-represented among Tjhauba loanwords.

Tswana also exerts strong influence on Tjhauba. Most Tjhauba speakers are fluent in Tswana, and younger generations have already shifted to Tswana. Given the close genealogical relationship between Tswana and Tjhauba, however, Tswana influence in Tjhauba is not always easily identified. A thorough study of the extent of Tswana influence on Tjhauba is beyond the scope of this research.

DOI 10.15460/auue.2023.96.1.275

6 Discussion

The data presented in this paper have shown Tjhauba to be a highly divergent regional variety of the Sotho language Kgalagadi. In this section, I discuss the implications of these linguistic findings for our understanding of the history of Tjhauba speakers, their interactions with speakers of surrounding languages, and the history of the Ngamiland region within Southern Africa.

As discussed in section 4, there are a number of phonological and morphological differences between Tjhauba and other Kgalagadi varieties that appear to have come about through language-internal processes. These differences are quite extensive, suggesting that Tjhauba speakers diverged from other Kgalagadi-speaking communities long ago. This is consistent with their relative geographic isolation with respect to other Kgalagadi-speaking communities.

In addition, Tjhauba has been heavily affected by contact with surrounding Bantu and Khoisan languages. The most salient foreign influence in Tjhauba is its large click inventory, consisting of 12 click phonemes, although their phonemic status cannot be conclusively proven due to the limitations of the dataset. Tracing the possible etymologies of Tjhauba click words gives insight into the specific donor languages of Tjhauba clicks. As shown in section 5.2, Tjhauba click words correspond to possible source words in both Bantu and Khoisan languages, of which Khwe and Ts'ixa (both Khoe-Kwadi), Ju|'hoan (Kx'a) and Yeyi (Bantu) are most likely to have been in direct contact with Tjhauba.

Of these likely donor languages, only Khwe is in direct contact with Tjhauba (see section 2). Ts'ixa is spoken in the village of Mababe, to the east of the Okavango river delta (Fehn 2014), and therefore separated from the Tjhauba speaking area by several hundred kilometres. As Ts'ixa has some affinities with Khwe (Fehn 2018), and given the documented contact between Tjhauba and Khwe speakers, apparent Ts'ixa influence in Tjhauba may in fact reflect influence from a linguistically similar Khwe variety on which no data are available. Unexpected phonological differences between Tjhauba click words and some (putative) Khwe source words also suggest a possibly undocumented Khwe lect as a source.

Direct and ongoing contact between Ju and Tjhauba is difficult to investigate. The nearest Ju variety is spoken in northwestern

DOI 10.15460/auue.2023.96.1.275

Botswana to the west of the Okavango river, and therefore bordering on the areas where Tjhauba is spoken (Pratchett 2017: 11). I did not, however, encounter any Ju speakers in Tjhauba-speaking villages, and none of the Tjhauba speakers I interviewed reported Ju as a language spoken in their villages. It is therefore likely that ongoing contact between Tjhauba and Ju is limited, though the incorporation of Ju loanwords in Tjhauba suggests it was more extensive in the past.

Yeyi is currently not spoken in or near the Tjhauba-speaking area. During my fieldwork, the only Yeyi speakers in this area were individuals who recently migrated from elsewhere, and the closest Yeyi-speaking communities live much further to the south. However, Sommer and Voßen (1992) report data from Yeyi spoken in Shakawe and Gauxa collected in 1990, but also describe Yeyi spoken in these areas as moribund, due to a nearly completed shift to Tswana. It is clear that this shift has been completed now, but if Yeyi was still spoken in this area one or two generations ago, this could well account for the extensive influence that Yeyi has had on Tjhauba.

The etymologies of Tjhauba click words therefore show that the incorporation of clicks in Tjhauba must have been the result of contact with multiple languages, and some of these contact situations must have taken place in the past. Furthermore, while Khoisan languages clearly played an important role in the acquisition of clicks in Tjhauba, eight out of the 24 Tjhauba click words whose possible source was identified are likely to come from Yeyi, a Bantu language. This does not necessarily indicate that Yeyi contact was responsible for the introduction of clicks in Tjhauba; another possible scenario involves the incorporation of clicks in Tjhauba as the result of Ju or Khoe contact, followed by a period of Yeyi contact, during which new loanwords containing clicks were incorporated, but clicks were already part of the Tjhauba phoneme inventory. This scenario is supported by the repeated borrowing of the Yeyi noun *mù-n!'únì* 'fruit of the date palm *(Phoenix reclinata)*', which was first borrowed without a click as Tjhauba *mò-ʔólí* 'rope made of palm leaves', and subsequently with the maintenance of the click as *mù-n!'únì* 'fruit of the date palm *(Phoenix reclinata)*', as discussed in section 5.3. This suggests there was an early period of contact with Yeyi when Tjhauba did not yet incorporate click phonemes, followed by a later period of contact when clicks in borrowings were taken over unadapted.

DOI 10.15460/auue.2023.96.1.275

The semantics of click words and other lexical borrowings also shed light on the nature of these contact situations. In section 5.2, it was shown that click words are especially common in the domain of flora and fauna, and that species growing or living in and near water are especially well-represented. As shown in section 5.3, plant and animal names are also common among loanwords not including clicks. This suggests that Tjhauba speakers are relative newcomers to the area, having migrated from the rather different environment of the Kalahari desert, where other Kgalagadi varieties are spoken, to the banks of the Okavango river. Names for newly encountered animal and plant species were then adopted from resident speakers of neighbouring languages, who clearly had more knowledge of the local environment. This contact may also have involved other types of knowledge transfer; the Yeyi, for instance, are credited with the invention of different techniques for fishing, hippo hunting and boat-making (Tlou 1985: 25–26). The Tjhauba word for punting paddle, *ŋ̀kàʃí*, is of Yeyi origin (see (24b) in section 5.3), suggesting Yeyi contact may have influenced the Tjhauba use of boats.

Tjhauba is part of a larger cluster of Bantu languages making use of clicks, the South-West Bantu click languages (Gunnink et al. 2015). The focus on flora and fauna in the Tjhauba click lexicon is also mirrored in these other South-West Bantu click languages (Gunnink et al. 2015: 204–205; Sommer & Voßen 1992), but the use of clicks in Tjhauba also exhibits some distinct characteristics. Firstly, the South-West Bantu click languages Mbukushu, Kwangali, Manyo and Fwe all have a rather limited click inventory, consisting of four or five click phonemes, none of which are contrastive for click type, whereas Tjhauba, like Yeyi, uses a much larger click inventory, and shows some signs of click type being used contrastively. This suggests a possibly more intensive contact situation, where extensive bilingualism would have resulted in the adoption of a large number of new phonemes. This is supported by ongoing Tjhauba/Khwe multilingualism observed during fieldwork, as discussed in section 3.

Secondly, the etymologies of click words in Tjhauba appear to be more easily traced than those in other South-West Bantu click languages. 24 out of 51 recorded click words in Tjhauba have an assignable etymology in another language[10]. Most of these etymologies

10 Note that out of the Tjhauba click words without identifiable origin, nine refer to plant species that could not be reliably identified, which hampers the iden-

DOI 10.15460/auue.2023.96.1.275

are fairly convincing, in the sense that there are few unexplainable formal or semantic differences between the Tjhauba word and its putative source. In other South-West Bantu click languages, however, only between 16% and 36% of click words (depending on the language) have an identifiable Khoisan etymology (Gunnink et al. 2015: 204), and not all suggested etymologies are equally plausible, possibly because the actual source language is an extinct and/or undocumented language (Gunnink et al. 2015: 199). This could indicate that the contact situations in which Tjhauba acquired click words were more recent than those in which other South-West Bantu click languages were involved, from donor languages that are still spoken (and documented), or languages that do not differ very extensively from their modern-day relatives on which the identification of source words was based.

Thirdly, and most strikingly, in the South-West Bantu click languages Fwe, Manyo, Mbukushu, and Kwangali clicks also occur in originally clickless vocabulary (Gunnink et al. 2015; Bostoen & Sands 2012).[11] This click insertion was not the result of a regular phonological process, but has rather been linked to sound symbolism (Bostoen & Sands 2012) and identity-marking (Gunnink et al. 2015). No evidence for click insertion is seen in the Tjhauba click lexicon, suggesting that the identity-marking functions that are attributed to clicks in other South-West Bantu click languages are not present in Tjhauba.

The Tjhauba situation of contact with surrounding click languages (both Bantu and Khoisan) can also be compared to the contact that other Kgalagadi varieties have with neighbouring Khoisan-speaking communities. As noted in 5.1, other Kgalagadi varieties use little to no click phonemes, as opposed to Tjhauba's large click inventory. The social circumstances of contact involving other Kgalagadi varieties are also distinct. Whereas relationships between Tjhauba speakers and neighbouring Khwe speakers are fairly close and amicable, Kgalagadi-Khoisan contact situations taking place further south are dis-

tification of source words. A proper identification of these plant species would likely increase the number of etymologies for Tjhauba click words even further.

11 No click insertion was observed in Yeyi (Gunnink et al. 2015: 206). Two possible exceptions are Yeyi *u-n!oko* 'leftovers of porridge in the pot' (Seidel 2008: 112), from Proto-Bantu *kókó 'crust' (Bastin et al. 2002), and Yeyi */hwata* 'drip' (Lukusa 2009), from Proto-Bantu *tònt 'drip' (Bastin et al. 2002).

DOI 10.15460/auue.2023.96.1.275

tinctly more unequal. Kgalagadi-speakers living in the Central Kgalagadi Game Reserve in Central Botswana exchange products and services with various Khoisan communities living in the area, such as speakers of G|ui, G‖ana, and !Xoon, but this contact is characterized by a clear dominance on the part of the Kgalagadi (Ikeya 2000; Silberbauer & Kuper 1966; Ikeya 2018). This is coupled with bilingualism with, and language shift to Kgalagadi by speakers of different Khoisan languages (Chebanne & Monaka 2008; Monaka & Lepekoane 2008; Hasselbring 2000; Lukusa 2000; Monaka 2013). The difference in social circumstances of the Tjhauba-Khoisan contact situation with respect to contact between other Kgalagadi varieties and Khoisan languages is therefore mirrored in the linguistic outcome: the more equitable contact situation in which Tjhauba is involved results in a much more extensive linguistic restructuring than the unbalanced social relations between Kgalagadi and Khoisan speakers elsewhere.

The linguistic data therefore prove Tjhauba to be a highly divergent Kgalagadi variety, that has been strongly influenced by extensive contact with other populations of northern Ngamiland speaking Bantu, Khoe and Kx'a languages. The name Tjhauba also provides an intriguing link to the Tjaube, a former population of northern Namibia who now speak Shambyu, one of the two dialects subsumed under the Bantu language Manyo (Möhlig 2017). The history of the Tjaube is detailed in the Tjaube chronicle, originally recorded in 1954 from Rudolf Haushiku, a Tjaube descendant (Möhlig 1998; Möhlig 2017). This text describes the journey of the Tjaube from Ngamiland to their present location in northern Namibia (Fleisch & Möhlig 2002: 33). The Tjaube detailed in this chronicle not only bear a strikingly similar name to the Tjhauba of Botswana, they are also described as "neither Bantu nor San, but a third ethnic group" (Möhlig 1998: 363). This is reminiscent of Tjhauba being a Bantu language with strong Khoisan influence. However, the Tjaube do not necessarily have to be equated with the Tjhauba; modern Tjhauba speakers attribute their name to the now-deserted village of the Ditjhauba (near modern Samochima), and if (Di)Tjhauba functioned primarily as a geographic rather than ethnolinguistic designation, other populations originating from the same area may have once used the same name. Therefore the similarities and differences between the

DOI 10.15460/auue.2023.96.1.275

Tjaube and the Tjhauba, considering oral history, ethnography and linguistics, require further investigation.

7 Conclusion

Tjhauba, a previously undocumented regional variety of Kgalagadi spoken in northwestern Botswana, exhibits many linguistic differences with respect to the better documented Kgalagadi varieties spoken further south. In this paper, I have shown that many of these linguistic differences, particularly the use of a large inventory of click phonemes, are the result of extensive contact with neighbouring languages, including Khwe and possibly Ts'ixa, two languages of the Khoe-Kwadi family, Ju, a language of the Kx'a family, and Yeyi, another Bantu language not closely related to Tjhauba. Some of these contact situations may have taken place in the past, whereas others are still ongoing. The predominance of flora and fauna related terminology is in line with the relatively isolated position of Tjhauba speakers with respect to other Kgalagadi varieties, living along the Okavango river rather than in the Kalahari desert. The large number of click phonemes incorporated in Tjhauba suggests an intensive contact situation, involving extensive bilingualism, some of which continues until today. Unlike other Bantu click languages, however, Tjhauba exhibits no evidence of having extended clicks to originally clickless vocabulary, suggesting that in Tjhauba, clicks are not associated with sound symbolic or identity marking functions.

Acknowledgments

This research was supported by a postdoctoral grant funded by The Research Foundation - Flanders (FWO) (12P8419N) and a FWO travel grant, whose financial support is gratefully acknowledged. Fieldwork in Botswana was made possible by a research permit issued by the Ministry of Sport, Youth and Culture of Botswana. I am grateful to Prof. Budzani G. Mogara and Prof. Anderson Chebanne for their support. I also thank Rev. Carl Grulke of the Kgalagadi Bible Translation Project for his help with my fieldwork, and Jan Gunnink for creating the map used in this paper. Finally and most importantly, I thank the Shekgalagadi speakers who contributed to this study: Kamogelo Mokgosi, Tshiamiso Ramphisi, Boipheto Mokgosi, Thapohedi Samokhongoro and Moeletsi Samokhongoro.

DOI 10.15460/auue.2023.96.1.275

References

Andersson, Lars-Gunnar & Tore Janson. 1997. *Languages in Botswana.* Gaborone: Longman Botswana.

Argyle, William John 1986. The extent and nature of Khoisan influence on Zulu. *Sprache und Geschichte in Afrika* 7(2). 43–71.

Bastin, Yvonne, André Coupez, Evariste Mumba & Thilo C. Schadeberg. 2002. Bantu Lexical Reconstructions 3. Tervuren: Royal Museum for Central Africa, online database: http://linguistics.africamuseum.be/BLR3.html

Batibo, Herman M. 1998. The fate of the Khoesan languages of Botswana. In Matthias Brenzinger (ed.), *Endangered languages in Africa.* Köln: Rüdiger Köppe. 267–284.

Boden, Gertrud. 2009. The Khwe and West Caprivi before Namibian independence: Matters of land, labour, power and alliance. *Journal of Namibian Studies* 5. 27–71.

Bostoen, Koen. 2018. The Bantu expansion. In *Oxford Research Encyclopedia of African History*. Oxford: Oxford University Press. https://doi.org/10.1093/acrefore/9780190277734.013.191.

Bostoen, Koen & Hilde Gunnink. 2022. The impact of autochtonous languages on Bantu language variation: A comparative view on Southern and Central Africa. In Salikoko S. Mufwene & Anna María Escobar (eds.), *The Cambridge handbook of language contact.* Cambridge: Cambridge University Press. 152–186.

Bostoen, Koen & Bonny Sands. 2012. Clicks in south-western Bantu languages: contact-induced vs. internally motivated change. In Matthias Brenzinger & Anne-Maria Fehn (eds.), *Proceedings of the 6th World Congress of African Linguistics Cologne 2009.* Köln: Rüdiger Köppe. 129–140.

Brenzinger, Matthias. 1998. Moving to survive: Kxoe communities in arid lands. In Mathias Schladt (ed.), *Language, identity and conceptualization among the Khoisan.* Köln: Rüdiger Köppe. 321–357.

Brenzinger, Matthias. 2007. Language endangerment in southern and eastern Africa. In Matthias Brenzinger (ed.), *Language diversity endangered.* Berlin: Mouton de Gruyter. 179–204.

Chebanne, Anderson M. & Kemmonye C. Monaka. 2008. Mapping Shekgalagari in Southern Africa: A sociohistorical and linguistic study. *History in Africa* 35. 133–143.

DOI 10.15460/auue.2023.96.1.275

Cole, Desmond T. 1955. *An introduction to Tswana grammar.* London: Longmans, Green and Co.

Cole, Desmond T. & Lally Moncho-Warren. 2012. *Setswana and English illustrated dictionary.* Northlands: Macmillan.

Denbow, James. 2011. Excavations at Divuyu, Tsodilo Hills. *Botswana Notes and Records* 43. 76–94.

Dickens, Patrick. 1978. A preliminary report on Kgalagadi vowels. *African Studies* 37. 99–106.

Dickens, Patrick. 1984a. Qhalaxari verb tone classes. *African Studies* 43(2). 109–118.

Dickens, Patrick. 1984b. The history of so-called strengthening in Tswana. *Journal of African Languages and Linguistics* 6. 97–125.

Dickens, Patrick. 1986. Tone in Qhalaxarzi main verb constructions. *South African Journal of African Languages* 6. 67–70.

Dickens, Patrick. 1987. Qhalaxarzi consonants. *African Studies* 46(2). 297–305.

Dickens, Patrick. 1994. *English-Ju|'hoan, Ju|'hoan-English dictionary.* Köln: Rüdiger Köppe.

Fehn, Anne-Maria. 2014. *A grammar of Ts'ixa (Kalahari Khoe).* Köln: Universität zu Köln PhD Thesis.

Fehn, Anne-Maria. 2018. New data on northeastern Kalahari Khoe phoneme inventories - a comparative survey. *Africana Linguistica* 24. 5–29.

Fehn, Anne-Maria. 2019a. Phonological and lexical variation in the Khwe dialect cluster. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 169(1). 9–38.

Fehn, Anne-Maria. 2019b. *A dictionary of Ts'ixa: a Khoe language of northern Botswana.* Unpublished manuscript.

Fehn, Anne-Maria. 2020. Click loss in Khoe-Kwadi. In Bonny Sands (ed.), *Click consonants.* Leiden: Brill. 291–335.

Fleisch, Axel & Wilhelm J.G. Möhlig. 2002. *The Kavango peoples in the past. Local historiographies from Northern Namibia.* Köln: Rüdiger Köppe.

Fulop, Sean A., Peter Ladefoged, Fang Liu & Rainer Vossen. 2003. Yeyi clicks: Acoustic description and analysis. *Phonetica* 60. 231–260.

Grollemund, Rebecca, Simon Branford, Koen Bostoen, Andrew Meade, Chris Venditti & Mark Pagel. 2015. Bantu expansion shows that habitat alters the route and pace of human dispersals. *Proceedings of the National Academy of Sciences* 112(43). 13296–13301.

DOI 10.15460/auue.2023.96.1.275

Güldemann, Tom. 1999. Head-initial meets head-final: nominal suffixes in Eastern and Southern Bantu from a historical perspective. *Studies in African Linguistics* 28(1). 49–91.

Güldemann, Tom. 2008. A linguist's view: Khoe-Kwadi speakers as the earliest food-producers of southern Africa. *Southern African Humanities* 20. 93–132.

Güldemann, Tom. 2014. "Khoisan" linguistic classification today. In Tom Güldemann & Anne-Maria Fehn (eds.), *Beyond "Khoisan": Historical relations in the Kalahari basin.* Amsterdam & Philadelphia: John Benjamins. 1–40.

Güldemann, Tom. 2019. The state of documentation of Kalahari Basin languages. In Bradley McDonnell, Andrea L. Berez-Kroeker & Gary Holton (eds.), *Reflections on language documentation 20 years after Himmelmann 1998.* Honolulu: University of Hawai'i. 210–223.

Güldemann, Tom. 2020. Changing profile when encroaching on hunter-gatherer territory: towards a history of the Khoe-Kwadi family in southern Africa. In Tom Güldemann, Patrick McConvell & Richard Rhodes (eds.), *Hunter-gatherers and linguistic history: a global perspective.* Cambridge: Cambridge University Press. 114–146.

Güldemann, Tom & Anne-Maria Fehn. 2017. The Kalahari Basin Area as a 'Sprachbund' before the Bantu Expansion. In Raymond Hickey (ed.), *The Cambridge handbook of areal linguistics.* Cambridge: Cambridge University Press. 500–526.

Gunnink, Hilde. 2020a. Language contact between Khoisan and Bantu languages: The case of Setswana. *Southern African Linguistics and Applied Language Studies* 38(1). 27–45.

Gunnink, Hilde. 2020b. Click loss and click insertion in Fwe. In Bonny Sands (ed.), *Click consonants.* Leiden: Brill. 156–178.

Gunnink, Hilde. 2022a. Morphological Khoisan influence in the Southern African Bantu language Yeyi. *Journal of African Languages and Linguistics* 43(1). 3–35. https://doi.org/10.1515/jall-2022-8892.

Gunnink, Hilde. 2022b. The early history of clicks in Nguni. *Diachronica* 39(3). 311–368. https://doi.org/10.1075/dia.19061.gun.

Gunnink, Hilde. 2022c. A grammar sketch of the Shetjhauba variety of Shekgalagadi. *Studies in African Linguistics* 51(1). 29–55. https://doi.org/10.32473/sal.v51i1.129091.

Gunnink, Hilde, Natalia Chousou-Polydouri & Koen Bostoen. 2023. Divergence and contact in Southern Bantu language and population history: a new phylogeny in cross-disciplinary perspec-

DOI 10.15460/auue.2023.96.1.275

tive. *Language Dynamics and Change* 13(1). 74–131. https://doi.org/10.1163/22105832-bja10022.

Gunnink, Hilde, Bonny Sands, Brigitte Pakendorf & Koen Bostoen. 2015. Prehistoric language contact in the Kavango-Zambezi transfrontier area: Khoisan influence on southwestern Bantu languages. *Journal of African Languages and Linguistics* 36(2). 193–232.

Guthrie, Malcolm. 1948. *The classification of the Bantu languages.* London: Published for the International African Institute by the Oxford University Press.

Haacke, Wilfrid H. G. & Eliphas Eiseb. 2002. *A Khoekhoegowab dictionary*. Windhoek: Gamsberg Macmillan Publishers.

Hammarström, Harald. 2019. An inventory of Bantu languages. In Mark Van de Velde, Koen Bostoen, Derek Nurse & Gérard Philippson (eds.), *The Bantu languages.* 2nd edition. London & New York: Routledge. 17–78.

Hasselbring, Sue. 2000. Where are the Khoesan of Botswana? In Herman M. Batibo & Birgit Smieja (eds.), *Botswana: The future of the minority languages*. Frankfurt: Peter Lang. 13–31.

Heine, Bernd. 1999. *The ǁAni: Grammatical notes and texts.* Köln: Institut für Afrikanistik.

Herbert, Robert K. 1990. The sociohistory of clicks in Bantu. *Anthropological Linguistics* 32(3–4). 295–315.

Ikeya, Kazunobu. 2000. The historical dynamics of the socioeconomic relationships between the nomadic San and the rural Kgalagadi. *Botswana Notes and Records* 31. 19–32.

Ikeya, Kazunobu. 2018. Settlement patterns and sedentarization among the San in the Central Kalahari (1930–1996). *SENRI Ethnological Studies* 99. 177–196.

Kalasi, Ntebogang Gloria. 2003. *A lexical study of Šekgalagari dialects in Southern and Kgalagadi districts.* Gaborone: University of Botswana MA Thesis.

Kilian-Hatz, Christa. 2003. *Khwe dictionary*. Köln: Rüdiger Köppe.

König, Christa & Bernd Heine. 2008. *A concise dictionary of Northwestern !Xun.* Köln: Rüdiger Köppe.

Kotzé, Albert E. 1989. *An introduction to Northern Sotho phonetics and phonology*. Hout Bay: Marius Lubbe.

Kriel, Theunis Johannes, Egidius B. van Wyk & S. A. Makopo. 1989. *Pukuntšu Woordeboek Noord-Sotho - Afrikaans Afrikaans - Noord-Sotho*. 4th edition. Pretoria: Van Schaik.

DOI 10.15460/auue.2023.96.1.275

Lanham, Leonard W. 1964. The proliferation and extension of Bantu phonemic systems influenced by Bushman and Hottentot. In Horace G. Lunt (ed.), *Proceedings of the Ninth International Congress of Linguists.* The Hague: Mouton. 382–391.

Larson, Thomas J. 1989. The Bayeyi of Ngamiland. *Botswana Notes and Records* 21. 23–42.

Louw, Jacobus A. 1976. The influence of Khoi on Xhosa morphology. In Willem J. de Klerk & Frits A. Ponelis (eds.), *Gedenkbundel H.J.J.M. van der Merwe.* Pretoria: J.L. van Schaik. 87–95.

Louw, Jacobus A. 1977a. The linguistic prehistory of the Xhosa. In Wilhelm J.G. Möhlig, Franz Rottland & Bernd Heine (eds.), *Zur Sprachgeschichte und Ethnohistorie in Afrika.* Berlin: Dietrich Reimer. 127–151.

Louw, Jacobus A. 1977b. Clicks as loans in Xhosa. In Jan W. Snyman (ed.), *Bushmen and Hottentot linguistic studies 1975.* Pretoria: UNISA. 82–100.

Lukusa, Stephen T.M. 2000. Shekgalagadi struggle for survival: Aspects of language maintenance and shift. In Herman M. Batibo & Birgit Smieja (eds.), *Botswana: The future of the minority languages.* Frankfurt: Peter Lang. 55–77.

Lukusa, Stephen T.M. 2002. *Groundwork in Shiyeyi grammar with a Shiyeyi-English glossary.* Frankfurt am Main: Peter Lang.

Lukusa, Stephen T.M. 2009. *Shiyeyi - English dictionary.* München: Lincom.

Lukusa, Stephen T.M. & Kemmonye C. Monaka. 2008. *Shekgalagari grammar: A descriptive analysis of the language and its vocabulary.* Cape Town: CASAS.

Meinhof, Carl. 1910. *Grundriß einer Lautlehre der Bantusprachen nebst einer Anleitung zur Aufnahme von Bantusprachen.* Berlin: Reimer.

Möhlig, Wilhelm J.G. 1998. The Tjaube tradition of the Kavango area (Namibia): Truth or fiction? In Walther Heissig & Rüdiger Schott (eds.), *Die heutige Bedeutung oraler Traditionen / The present-day importance of oral traditions: Ihre Archiverung, Publikation und Index-Erschließung / Their preservation, publication and indexing.* Wiesbaden: Westdeutscher Verlag. 363–375.

Möhlig, Wilhelm J.G. 2017. Traces of Central Khoisan in a Bantu text of the Middle Kavango: The Tjaube Chronicle. In Anne-Maria Fehn (ed.), *Khoisan languages and linguistics. Proceedings of the 4th International Symposium, July 11–13, 2011, Riezlern/Kleinwalsertal.* Köln: Rüdiger Köppe. 245–265.

DOI 10.15460/auue.2023.96.1.275

Möhlig, Wilhelm J.G. & Karl Peter Shiyaka-Mberema. 2005. *A Dictionary of the Rumanyo Language.* Köln: Rüdiger Köppe.

Monaka, Kemmonye C. 2005. Shekgalagari layrngeal contrasts: the plosives. *South African Journal of African Languages* 25(4). 243–257. https://doi.org/10.1080/02572117.2005.10587262.

Monaka, Kemmonye C. 2013. A sociolinguistic study of Shekgalagari: issues of survival in the shadow of Setswana. *Nawa: Journal of Language and Communication* 7(2). 42–53.

Monaka, Kemmonye C. & Patricia Lepekoane. 2008. How the !Xóõ became the Balala: Socio-economic and linguistic factors considered. In Sonja Ermisch (ed.), *Khoisan Languages and Linguistics. Proceedings of the 2nd International Symposium, January 8-12, 2006, Riezlern/Kleinwalsertal.* Köln: Rüdiger Köppe. 265–278.

Neumann, Sabine. 1999. *The locative class in Shengologa (Kgalagadi)*. Frankfurt am Main: Peter Lang.

Nyati-Ramahobo, Lydia. 2000. Linguistic and cultural domination: The case of the Wayeyi of Botswana. In Herman M. Batibo & Birgit Smieja (eds.). *Botswana: The future of the minority languages.* Frankfurt: Peter Lang. 217-234.

Pakendorf, Brigitte, Hilde Gunnink, Bonny Sands & Koen Bostoen. 2017. Prehistoric Bantu-Khoisan language contact: A cross-disciplinary approach. *Language Dynamics and Change* 7(1). 1–46.

Pratchett, Lee James. 2017. *Dialectal diversity in Southeastern Ju (Kx'a) and a documentation of Groot Laagte ǂKx'ao‖'ae.* Berlin: Humboldt University PhD thesis.

Sands, Bonny. 2010. Juu subgroups based on phonological patterns. In Matthias Brenzinger & Christa König (eds.), *Khoisan Languages and Linguistics: Proceedings of the 1st International Symposium, January 4-8, 2003, Riezlern/Kleinwalsertal.* Köln: Rüdiger Köppe. 85–114.

Sands, Bonny. 2020. Click consonants: An introduction. In Bonny Sands (ed.), *Click consonants.* Leiden: Brill. 1–73.

Sands, Bonny & Tom Güldemann. 2009. What click languages can and can't tell us about language origins. In Rudolf P. Botha & Chris Knight (eds.), *The cradle of language.* Oxford: Oxford University Press. 204–218.

Sands, Bonny & Hilde Gunnink. 2019. Clicks on the fringes of the Kalahari Basin Area. In Emily Clem, Peter Jenks & Hannah Sande (eds.), *Theory and description in African linguistics: Selected papers from the 47th Annual Conference on African Linguistics.* Berlin: Language Science Press. 703–724.

DOI 10.15460/auue.2023.96.1.275

Seidel, Frank. 2008. *A grammar of Yeyi.* Köln: Rüdiger Köppe.
Silberbauer, George B. & Adam J. Kuper. 1966. Kgalagari masters and Bushmen serfs: some observations. *African Studies* 25(4). 171–179.
Snyman, Jan W. 1997. A preliminary classification of the !Xũũ and Žu|'hõasi dialects. (Ed.) Wilfrid H.G. Haacke & Edward D. Elderkin. *Namibian Languages: Reports and Papers.* Köln: Rüdiger Köppe. 21–106.
Sommer, Gabriele. 1995. *Ethnographie des Sprachwechsels: Sozialer Wandel und Sprachverhalten bei den Yeyi (Botswana)*. Köln: Rüdiger Köppe.
Sommer, Gabriele & Rainer Voßen. 1992. Schnalzwörter im Yei (R.41). *Afrika und Übersee* 75. 1–42.
Sommer, Gabriele & Rainer Vossen. 2000. Language gain and language loss: The spread of Setswana in Ngamiland. In Herman M. Batibo & Birgit Smieja (eds.), *Botswana: The Future of the Minority Languages.* Frankfurt: Peter Lang. 129–151.
Tlou, Thomas. 1985. *A history of Ngamiland. 1750 to 1906. The formation of an African state.* Gaborone: Macmillan.
Tlou, Thomas & Alec Campbell. 1997. *History of Botswana.* Gaborone: Macmillan.
Traill, Anthony. 2002. The Khoesan languages. In Rajend Mesthrie (ed.), *Language in South Africa.* Cambridge: Cambridge University Press. 27–49.
Traill, Anthony & Rainer Vossen. 1997. Sound change in the Khoisan languages: new data on click loss and click replacement. *Journal of African Languages and Linguistics* 18(1). 21–56.
Visser, Hessel. 2001. *Naro dictionary: Naro-English, English-Naro.* Gantsi, Botswana: Naro Language Project.
Vossen, Rainer. 1988. *Patterns of language knowledge and language use in Ngamiland, Botswana.* Bayreuth: Bayreuth University.
Vossen, Rainer. 1997. What clicks sounds got to do in Bantu. In Birgit Smieja & Meike Tasch (eds.), *Human contact through language and linguistics.* Frankfurt am Main: Peter Lang. 353–366.
Wilmsen, Edwin N. 2011. Nqoma: An Abridged Review. *Botswana Notes and Records* 43. 95–114.
Witzlack-Makarevich, Alena & Hirosi Nakagawa. 2019. Linguistic features and typologies in languages commonly referred to as 'Khoisan.' In H. Ekkehard Wolff (ed.), *The Cambridge handbook of African linguistics.* Cambridge: Cambridge University Press. 382–416.
Wynne, Ronald C. 1980. *English-Mbukushu dictionary.* Amsterdam: Avebury Publishing Co.

DOI 10.15460/auue.2023.96.1.275

Two more contexts for Ge‘ez *u > u and three for *a > ə

Benjamin D. Suchard

Leiden University/KU Leuven
benjamin.suchard@gmail.com

Abstract:
The main Ge‘ez (Classical Ethiopic) verbal adjective is characterized by an *ə-u* vowel melody. Based on cognate evidence, the most basic form of this adjective, 0_1-stem *1ə2u3*, derives from a **1a2uː3*- pattern and thus shows assimilation of **aCuː* > *əCu*. This assimilation does not operate in a set of specialized numerals shaped like *1ä2u3*, which should be reconstructed as **1a2u3*- with short **u*. Short **u* also yields Ge‘ez u in the nonaccusative case of the masculine cardinal numerals, like **ɬalaːθtu* > *śälästu* ‘three’; this ending goes back to the Proto-Semitic diptotic nominative. The assimilation of **aCuː* > *əCu*, on the other hand, also affected the personal pronoun **huːʔa-tuː* > *wəʾətu*, the perfect of fientive verbs like **gabaruː* > *gäbru* ‘they did’, and the jussive of stative verbs like **yitrapuː* > *yətrəfu* ‘may they remain’. *ə* was leveled to other parts of these paradigms, solving several longstanding problems of Ge‘ez morphology.

Keywords: Semitic, Ethiosemitic, passive participle, historical phonology, historical morphology

Ge‘ez (*gəʿz*, Classical Ethiopic) is a Semitic language of the Ethiosemitic subfamily, spoken in present-day northern Ethiopia and Eritrea during the first half of the first millennium CE and used there as a liturgical and scholarly language up to the present day.[1] The most common Ge‘ez verbal adjective is shaped like *1ə2u3* in the basic form of the verb, known as 0_1.[2] Its semantics are mediopassive, expressing

1 The research for this article was funded by Dutch Research Council (NWO) grant number VI.Veni.191T.023. As always, I am very grateful to Marijn van Putten for his comments on an earlier draft. I also thank the editors and anonymous reviewers for their comments. On the transcriptions of Ge‘ez and other languages used here, see the final section.

2 This article follows the convention of using *1*, *2*, and *3* to abstractly represent the three radicals of triconsonantal roots. *C* stands for any consonant, regardless of root structure. The terms for verb classes like 0_1 refer to the morphological absence

DOI 10.15460/auue.2023.96.1.296

the state associated with the related verb, as in *qətul* ‘killed’, *nəbur* ‘sitting’, *nəʾus* ‘small’, or *ʾəḫuz* ‘possessing’ (examples taken from Tropper 2002: 98) corresponding to *qätälä* ‘to kill’, *näbärä* ‘to sit’, *nəʾsä* ‘to be small’, and *ʾäḫäzä* ‘to seize’. In the absence of related adjectives with the expected **1u2uː3-* pattern elsewhere in Semitic, these adjectives are commonly derived from a reconstructed **1a2uː3-* pattern based on the correspondence in meaning to certain adjectival patterns in other Semitic languages (e.g. Fox 2003: 200), such as Biblical Hebrew *1å2u3*, e.g. *šåmur* ‘preserved’, *zå̱kur* ‘mindful’, *ʿårum* ‘clever’. This implies that the Ge‘ez pattern shows a conditioned sound change of **a > ə* before **uː*. As the verbs cited above (e.g. **qatala*) show, this differs from the usual development, **a > ä*. This vowel pattern has been extended to other verb stems, e.g. *qəddus* ‘holy’ from 0_2 *qäddäsä* ‘to sanctify’. In verbs with a lengthened first stem vowel like 0_3 *baräkä* < **baːraka* ‘to bless’, the verbal adjective is shaped like *buruk* < **buːruːk-* ‘blessed’. This shows that the *ə* in the first syllable of the other verbal adjectives derives from **uː* **1a2uː3-* > **1u2uː3-* > *1ə2u3*. In other words, **a* has undergone conditioned assimilation in quality to the following **uː*. Contrary to what we might expect, no such assimilation of **a > *i* seems to have taken place before **iː*, as is clear from the numerous **1a2iː3-* > *1ä2i3* adjectives like *ʿäbiy* ‘big’, *däqiq* ‘small’, and *näkir* ‘strange’ (Tropper 2002: 56) and the absence of a *1ə2i3* pattern.[3]

The sound change **aCuː > *uCuː* is phonetically plausible, but also ad hoc. Beyond these verbal adjectives, it is not generally recognized as operating in Ge‘ez. In this paper, we will consider two more contexts where **a* yields *ə* in syllables preceding *u*, namely, the third person singular independent pronouns and the 0_1 verb. In both of these paradigms, *ə* has spread beyond its original conditioning environment, while **a* has frequently been restored in the verb. Before examining these changes, we must confront a category that appears

(0) or presence of a derivational prefix (A for *ʾä-/-a-*, T for *tä-/-t-*, Ast for *ʾästä-/-astä-*) or lengthening in the stem ($_1$ for no lengthening, $_2$ for lengthening of the second root consonant, $_3$ for a lengthened stem vowel following the first root consonant). 0_1 is thus a morphologically unmarked verb class, with no derivational prefix (0) and no lengthening in the stem ($_1$).

3 **a* does shift to *ə* before gutturals, as in *ləhiq* ‘old’, but this happens before all vowels and is hence not an assimilatory change (Tropper 2002: 36–7).

DOI 10.15460/auue.2023.96.1.296

to form an exception to the assimilation of *aCuː to *uCuː, namely, that of the numerals patterned like *1ä2u3*.

Lack of assimilation in *1ä2u3* < **1a2u3-*

Ge'ez has a set of numerals used exclusively to refer to indications of time, especially days (Tropper 2002: 83–4). These are formed with the otherwise quite rare *1ä2u3* pattern:[4] *śälus* 'third, three (of days/nights etc.)', *räbuᶜ* 'four(th)', and so on up till *ᶜäśur* 'ten(th)'. *ʾəḥud* 'first, one' shows raising of **a*, but this is due to the following guttural and not directly conditioned by the following *u* (see Footnote 3). *Sänuy* 'second, two' preserves the Proto-Semitic root for 'two' (cf. Classical Arabic *θaːniy-* 'second' etc.), which has otherwise been replaced in Ethiosemitic (apart from *sanəy* 'the next day'); contrast the more common cardinal *kəlʾe(tu/ti)* 'two' and the ordinals *kaləʾ*, *dagəm*, *kaᶜəb*, and *baᶜəd*, all 'second' (Tropper 2002: 83). This preservation suggests that the *1ä2u3* numerals are archaic.

The archaism of the *1ä2u3* numerals is confirmed by cognates in other Semitic languages. In Old Babylonian, the usual form of the ordinals 'third'–'tenth' reflects **1a2u3-*, e.g. *šaluš-* 'third', *rebu-* < **rabuʕ-* 'fourth', *ḫamuš-* 'fifth' (Huehnergard 2011: 240). Old Assyrian attests vestiges of this pattern in *rabū-t-um* 'the fourth (f.)', *rabū-ni* 'our fourth witness', *ḫamuš-ni* 'our fifth witness', *ḫamuš-t-i* 'one fifth', and, significantly, a period of time known as a *ḫamuš-t-um* (Kouwenberg 2017: 281–286). The same pattern underlies Biblical Hebrew *ᶜåśor* 'tenth (day), ten (days)' (Koehler & Baumgartner 1994: 741). Various Arabic dialects like Sanaani (Qafisheh 1992: 144) and Urban Hijazi (Omar 1975: 67) attest words like *ʔaθ-θaluːθ* 'Tuesday' and *ʔar-rabuːʕ* 'Wednesday'.[5] Finally, Modern South Arabian attests a full set of separate numerals used for counting days like Omani Mehri *śīləθ* 'three', *rība* 'four', *ḫayməh* 'fifth' (Rubin 2018: 300–301). These derive from a pattern like **1a2U3-*, where **U* stands for any high vowel, long or short (Dufour 2021).

4 The only other example mentioned by Tropper (2002: 56) is *ḥäṣur* 'fenced-in place, wall'. Based on the sound correspondence identified below, it is plausible to connect this with the Biblical Hebrew place name *ḥåṣor* and derive both from **ħaθʾur-* (cf. the Arabic verb *ḥaḍara* 'to fence' from the same root for the identity of the second consonant).

5 I thank Maarten Kossmann and Fahad Alsharif for alerting me to these forms.

DOI 10.15460/auue.2023.96.1.296

At first glance, the Ge‘ez *qätul* numerals would seem to go back to **1a2uː3-*, matching the forms in dialectal Arabic. Ge‘ez u normally reflects **uː*, which would rule out a reconstruction with short **u* like that in Akkadian and Hebrew. If so, these numerals violate the sound law we are investigating, **aCuː > əCu*.

In some environments, however, Ge‘ez *u* goes back to short **u*. Al-Jallad (2014) convincingly argues that this is the regular development in originally word-final position. Thus, the first-person singular perfect ending **-ku* develops into *-ku*, not ***-k(ə)*. *U* is also preserved in the normal form of the cardinal numerals used with masculine nouns (excepting *kəlʾe* ‘two’, which retains an old dual ending), like *ʾäḥäd-u/ä* ‘one’, *śäläst-u/ä* ‘three’, *ʾärbaʿt-u/ä* ‘four’, etc.; in each example, *-u* is the nonaccusative ending and *-ä* is the accusative ending. Similarly, feminine ‘six’–‘ten’ show uninflecting *-u*, as in *səssu* ‘six’ (with contraction in **θamaːniy-u > sämani* ‘eight’).[6] Tropper (2002: 80–81) attributes the retention of the Proto-Semitic nominative ending **u* in the numerals to the fact that it is stressed, but this does not explain why the ending was lost in ‘three’–‘five’ when used with feminine nouns, e.g. *śälas* ‘three (nonaccusative)’. Tropper & Hasselbach-Andee (2021: 121) add the possibility that the *-u* is “a reflex of the common abstract marker *-ū* attested throughout Semitic”. As noted by Brockelmann (1908: 415–6), however, this putative suffix only occurs in combination with the following feminine suffix **-t-*; one may also wonder why a numeral would be formed with an abstract marker.[7] Finally, we may think of the use of the third person masculine singular possessive suffix *-u* as a marker of definiteness (as suggested by a reviewer of this paper), as in *däbr-u* ‘the mountain’ (Tropper 2002: 163–4). But *-u* follows the numerals in

6 The different treatment of the numerals up to five and those from six upwards is reminiscent of the traces of a base-five number system identified in Awngi (Southern Agaw) by Hetzron (1967: 170). This may well be a contact feature in Ge‘ez, which shows a fair number of other features that can be attributed to Agaw influence (Appleyard 2015).

7 Tropper & Hasselbach-Andee (2021: 234) write that “[a]n exception to the proposed analysis of *-u* in cardinal numbers as a reflex of the original nom. marker might be ከንቱ *kantu* ‘nothingness’, where the acc. in *-o* indicates that the final *u* might be the original vocalic ending of the noun”. This seems to be an additional argument against the numerals’ *-u* deriving from an abstract suffix **-uː-*, as it alternates with an accusative in *-ä* and not in *-o*, but I am not sure of the authors’ intent here.

DOI 10.15460/auue.2023.96.1.296

both definite and indefinite contexts. Moreover, the possessive suffix *-u* becomes *-o* in the accusative, while in the feminine numerals ‘one’ and ‘three’–‘five’, nonaccusative *-u* interchanges with accusative *-ä*. We might also expect feminine ‘eight’ to appear not as *sämani* but as ***sämanihu* if the final *-u* of the other numerals were the same as the possessive suffix, as *-hu* is the shape of that suffix after historically long vowels like *i* (e.g. *bəʾəsi-hu* ‘his man’).

Following Al-Jallad’s rule, we may instead reconstruct the numerals used with masculines with a Proto-Semitic diptotic inflection of nominative **-u*, oblique **-a*. This matches the shape of the numerals when used to refer to abstract numbers in Classical Arabic, as in *sittat-u ʔakθaru min ẖamsat-a* ‘six (nominative) is more than five (oblique)’ (Fischer 1972: 72).[8] The preservation of word-final **-u* in **łalaːθ-t-u* > *śäläs-t-u* then contrasts with its centralization and ultimate loss before a consonant in **łalaːθ-um* (cf. Arabic *θalaːθ-un*) > **śälas-əm* > *śälas*.

If Ge‘ez preserved **u* word-finally, it may also have done so in some other environments, as in the *1ä2u3* numerals. We can then connect them with their cognates reflecting **1a2u3*. Based on the shape of the numerals, the relevant sound law can initially be described as **CaCuC* > *CäCuC*. **CaCuC* does seem to have shifted to **CäCəC* in the perfect, e.g. **kabura* (cf. Classical Arabic *kabura*) > **käbərä* > *käbrä* ‘he was great’. Besides the preceding **a* and syllable structure, the relevant factor in **1a2u3-* > *1ä2u3* may be the following short high vowels **u* and **i* in the nominative and genitive case endings, vowels which never directly follow the perfect stem: the perfect stem is either followed by a low vowel **a*, a long vowel, or a consonant. If so, *u* was preserved in the non-accusative case(s) of **1a2u3-* words: nominative **1a2u3-um* and genitive **1a2u3-im* > nonaccusative *1ä2u3*. *U* was then reintroduced to the accusative, where **1a2u3-am* should have yielded ***1ä23-ä*; this was replaced by *1ä2u3-ä*.

Based on this reconstruction as **1a2u3*, then, we can understand why the *1ä2u3* numerals did not participate in the assimilation to **uː* seen in the **1a2uː3-* > *1ə2u3* verbal adjectives: they did not contain an **uː* for **a* to assimilate to in the first place.

8 This is probably a retention which has been restricted to this specific context in Arabic. On the possibility of all nouns in **-at-* originally having been diptotic, see Van Putten (2017).

DOI 10.15460/auue.2023.96.1.296

The third person singular independent pronouns

The Ge‘ez independent personal pronouns of the third person singular are masculine *wəʾətu* and feminine *yəʾəti*. In the accusative, they become *wəʾətä* and *yəʾətä*, respectively. They show a clear resemblance to the related pronouns in other Semitic languages, in particular the forms reflecting Proto-Semitic **suːʔa*, **siːʔa* and the dedicated oblique forms like Akkadian *šuāti*, *šiāti* (as well as the West Semitic cognates listed by Leslau 2006: 602). Their exact form in Ge‘ez remains unexplained, however, especially as far as the second *ə* is concerned (Suchard 2019: 210); compare the same vowel in the Tigre and Gafat pronouns *hətu* (m.), *həta* (f.) and *wət* (m.), *yət* (f.), respectively, and the Tigrinya demonstrative *ətu* ‘this’ (Leslau 2006: 602, 625). Brockelmann (1908: 303) explains this as assimilation to the preceding *ə* due to the intervening guttural, but as Rundgren (1955: 188) and Voigt (1987: 50) point out, this assimilation operates the wrong way around: normally, **wəʾätu* etc. should assimilate to ***wäʾätu*. Rundgren (1955: 195) relies on dubious reconstructions like **hu(ː)-hu(ː)-tuː*, while Voigt connects the change of **a* to *ə* to **miʔat- > məʾət* ‘hundred’. As Ugaritic *mỉt* shows, however, the Ge‘ez word goes back to a form with the short feminine suffix, **miʔt-*: the second *ə* is merely epenthetic. No parallel sound change has therefore been identified so far.

Like the scholars mentioned in the last paragraph, I propose to derive the Ge‘ez pronouns from the Proto-West-Semitic forms **huːʔa* and **hiːʔa* (for these reconstructions, see Suchard 2019: 211). In these grammatical words, initial **h-* was lost, followed by breaking of **uːʔa* and **iːʔa* to **wuʔa* and **yiʔa*.[9] These pronouns were suffixed with the pronominal elements *-tu* (masculine) and *-ti* (feminine) also seen elsewhere in Ge‘ez (cf. Leslau 2006: 569), e.g. in the singular proximal demonstratives *zə-n-tu* (masculine), *zat-ti* (feminine). These

9 Given the preservation of *h* in Tigre *hətu*, *həta*, and plural *hətom*, *hətan* (Elias 2014: 35), this loss of **h-* may have postdated the addition of *-tu* and related developments described below. Additionally, an anonymous reviewer of this paper notes that reconstructing the pronouns as **huʔa* and **hiʔa* (cf. Huehnergard 2019: 53), as may be supported by Classical Arabic *huwa* and *hiya*, allows for the arguably simpler changes **huʔa > *wuʔa* and **hiʔa > *yiʔa*, with **h* changing to an approximant matching the following vowel.

DOI 10.15460/auue.2023.96.1.296

developments closely resemble those proposed by Voigt (1987), but we will now depart from his suggestion.

Despite their shared accusative form *-tä* with short **a*, *-tu* and *-ti* probably go back to forms with long vowels, **-tuː* and **-tiː*. The feminine form can be connected with the Classical Arabic feminine proximal demonstrative *tiː*, which also occurs as a suffix on the relative pronoun *alla-tiː* (cf. the masculine *alla-ðiː*) and with additional elements following in the distal demonstratives *tiː-ka* (masculine *ðaː-ka*) and, with vowel shortening in a closed syllable, *ti-lka* (masculine *ðaː-lika*). Masculine **-tuː* in Ge‘ez then results from contamination between **tiː* and the nominative of the masculine demonstrative, **ðuː*. The generalization of **-tuː* for the masculine and **-tiː* for the feminine may well have been motivated by the same contrast in vowel quality seen in the personal pronouns **(h)uːʔa* and **(h)iːʔa*, which also functioned as distal demonstratives.

These considerations give us a reconstructed form **wuʔa-tuː* for the masculine nonaccusative. According to the assimilatory sound change seen in the *1ə2u3* verbal adjectives, this regularly yields **wuʔu-tuː* > *wəʾətu*. The *ə* vowel was then analogically introduced to the feminine at a time when the pronouns with and without suffixed *-tu*, *-ti* coexisted: **wəʾä* : *wəʾə-tu* = **yəʾä* : *yəʾə-ti*. The accusative *-tä* was analogically modeled after the numerals once **-u* and **-uː* had merged into *-u*: *śälästu* : *śälästä* = *wəʾətu* : *wəʾətä*.[10] Through one last analogy, this also allowed speakers to derive the feminine accusative form: **wəʾä* : *wəʾə-tä* = **yəʾä* : *yəʾə-tä*. After the more archaic forms **wəʾä* and **yəʾä* had been lost, this leaves us with the full attested paradigm: masculine *wəʾətu* (nonacc.), *wəʾətä* (acc.), feminine *yəʾəti* (nonacc.), *yəʾətä* (acc.).

The 0_1 verb

West Semitic distinguishes between three patterns in the G-stem verb, the basic verb class corresponding to the 0_1 stem in Ge‘ez (for a detailed overview, see Aro 1964). The original system may be best preserved in Classical Arabic, where we can distinguish between fientive, stative, and adjectival verbs. Each class of verbs has a distinctive

10 Brugnatelli (1982: 63), on the other hand, believes that this analogy operated in the opposite direction, maintaining case inflection in the numerals with *-tu* while it was lost in the feminine numerals ending in *-u*.

DOI 10.15460/auue.2023.96.1.296

pattern of vowels in the perfect and jussive (also in the imperfect in Central Semitic). This is illustrated in Table 1, where all forms are cited in the third person masculine singular. Note that there are two subclasses of fientive verbs and that phonologically conditioned variant forms are not indicated.

Table 1. Different G-stem verb classes in Classical Arabic

tense	**fientive *(u)*** *qtl* 'to kill'	**fientive *(i)*** *srq* 'to steal'	**stative** *lbs* 'to wear'	**adjectival** *kbr* 'to be great'
Perfect	*qat**a**la*	*sar**a**qa*	*lab**i**sa*	*kab**u**ra*
Jussive	*yaqt**u**l*	*yasr**i**q*	*yalb**a**s*	*yakb**u**r*

Together with the generalization of *ə* < **i* in the jussive prefix,[11] the normal Ge'ez sound changes of **a* > *ä*, **i* and **u* > *ə* have yielded two main patterns. The two fientive paradigms have merged, as in *qätälä/yəqtəl*, *säräqä/yəsrəq*. In the perfect of the stative and adjectival verbs, **i/*u* > **ə* has been deleted; these classes have also merged, with the stative form of the jussive mostly winning out, as in *läbsä/yəlbäs*, *käbrä/yəkbär*. A relatively large number of verbs, however, show unexpected vowels. Some verbs are fientive in meaning but stative in form, like *gäbrä/yəgbär* 'to do'. Others are stative in meaning but can be inflected either as statives or as fientives, like *tärfä/yəträf* besides *täräfä/yətrəf* 'to remain'. Moreover, stative verbs show *ä* in the stem instead of expected *ə* when the ending starts with a consonant, which is in the first and second person: *läb**ä**s-ku* 'I wear', *läb**ä**s-kä* 'you (m.sg.) wear', etc. This resembles Philippi's Law in Hebrew (cf. Suchard 2019: 141–67), but no such sound change can be seen elsewhere in Ge'ez.[12] The mix-ups in verb class can be explained in part by the ambiguity in the imperfect, which is inflected the same for all classes: *yəqättəl* 'he kills', *yəläbbəs* 'he wears', *yəgäbbər* 'he does', *yətärrəf* 'he remains'. But it is hard to see how this ambiguity in the entire imperfect paradigm would have resulted in the transfer of

11 This vowel occurred in the prefix of stative verbs, a distribution known as the Barth-Ginsberg Law (see recently Kossmann & Suchard 2018; Schachmon & Bar-Asher Siegal 2023). *A* has been generalized in Modern Standard Arabic and Classical Arabic as commonly taught at Western universities, but some varieties of Classical Arabic preserved *i* in the stative prefixes other than *ya-* (cf. Van Putten 2022: 36–38).

12 As Philippi's Law only fully shifted **i* to a during a late, historically attested phase of Hebrew, the *ä* in *läbäskä* etc. and the *a* in *låḇåštå* etc. cannot simply be used to reconstruct Proto-West-Semitic **a* in these forms.

DOI 10.15460/auue.2023.96.1.296

just the first and second person forms from the fientive to the stative in the perfect.

In the third person masculine plural, both the fientive perfect **1a2a3u:* and the stative jussive **yi12a3u:* (also second person masculine plural **ti12a3u:*) present us with candidates for **aCu: > əCu* to operate. In the fientive perfect, this would have led to stem allomorphy, with the stem **1a2a3-* in most persons alternating with **1a2u3-u:* in the third person masculine plural. Many verbs will have reintroduced **a* to the third person masculine plural, restoring the inherited fientive paradigm. In verbs like *gbr*, however, **gabar-u: > *gabur-u:* seems to have extended **u* to other parts of the paradigm, specifically the rest of the third person: feminine plural **gabar-ā > > *gabur-ā*, masculine singular **gabar-a > > *gabur-a*, and feminine singular **gabar-at > > *gabur-at*. This would have resulted in the mixed paradigm attested in historical Ge‘ez; see Table 2. Based on the shared pattern in the third person forms like **gabur-a* ‘he did’ and *kabur-a* ‘he was great’, this mixed paradigm was extended first to the adjectival verbs, and after the merger of **u* and **i*, to the stative verbs.

Table 2. Developments leading to the stem alternation in some fientive and all stative verbs in Ge‘ez

meaning	1. Proto-West-Semitic	2. *aCu: > *uCu:	3. third person stem leveled	4. extension to adjectival verbs	5. extension to stative verbs
‘he killed’	*qatal-a	*qatal-a	*qatal-a	*qatal-a	qätäl-ä
‘I killed’	*qatal-ku	*qatal-ku	*qatal-ku	*qatal-ku	qätäl-ku
‘they killed’	*qatal-u:	*qatul-u:	*qatal-u:	*qatal-u:	qätäl-u
‘he did’	*gabar-a	*gabar-a	*gabur-a	*gabur-a	gäbr-ä
‘I did’	*gabar-ku	*gabar-ku	*gabar-ku	*gabar-ku	gäbär-ku
‘they did’	*gabar-u:	*gabur-u:	*gabur-u:	*gabur-u:	gäbr-u
‘he was great’	*kabur-a	*kabur-a	*kabur-a	*kabur-a	käbr-ä
‘I was great’	*kabur-ku	*kabur-ku	*kabur-ku	*kabar-ku	käbär-ku

DOI 10.15460/auue.2023.96.1.296

‘they were great’	*kabur-u:	*kabur-u:	*kabur-u:	*kabur-u:	käbr-u
‘he wore’	*labis-a	*labis-a	*labis-a	*labis-a	läbs-ä
‘I wore’	*labis-ku	*labis-ku	*labis-ku	*labis-ku	läbäs-ku
‘they wore’	*labis-u:	*labis-u:	*labis-u:	*labis-u:	läbs-u

Similarly, originally stative or adjectival forms like *yitrap-u:, *titrap-u: > *yitrup-u:, *titrup-u: could either have been brought back in line with the rest of the paradigm, resulting in an ordinary stative verb like *tärfä/yəträf*, or have triggered the morphological shift of the entire verb to the fientive paradigm, yielding forms like *täräfä/yətrəf*. Certain derived stem forms would also have undergone the change of *aCu: to *uCu:, such as the derived stem perfect forms like 0_2 *qaddasu: ‘they sanctified’ or 0_3 *ba:raku: ‘they blessed’, or jussive and imperfect forms with the passive-reflexive *t(a)-* prefix like T_1 *yitqatalu: ‘may they be killed’, *yitqattalu: ‘they are killed’. But here, this would not have caused any confusion with other paradigms where the *u was morphologically significant (as with 0_1 verbs), enabling the transfer to another inflectional class (like fientive *gabara* becoming formally stative *gäbrä*). Hence, paradigm pressure could easily have restored *a in such forms based on its retention in the other person, numbers, and gender forms. Thus, the *aCu: > *uCu: change explains some peculiarities of the Ge‘ez 0_1 verb, while its lack of traces in the derived stems makes good morphological sense.

Summary

Based on the change of *1a2u:3- > 1ə2u3* in the Ge‘ez verbal adjective, we have identified the same sound law *aCu: > əCu* in the personal pronoun *hu:ʔa-tu: > wəʾətu*, the originally fientive third person plural masculine perfect forms like *gabar-u: > gäbru*, and the originally stative jussive forms like *yitrap-u:, *titrap-u: > yətrəfu, tətrəfu*. The fact that this sound law did not operate on the *1ä2u3* numerals, together with cognate evidence, suggests that they should be reconstructed as *1a2u3-*, providing another context where *u was preserved as *u* besides the word-final context identified by Al-Jallad (2014). We have also identified this preservation of *u in word-final

DOI 10.15460/auue.2023.96.1.296

position in the nominative of the regular numerals used with masculine nouns like *ʾäḥäd-u* ‘one’, *śäläst-u* ‘three’, which should be reconstructed as diptotes.

Transcription and abbreviations

Ge‘ez is transcribed here according to the following conventions, based on those of Tropper (2002) with the exception of *ä* and *a* for the first and fourth order vowels, respectively (Tropper: *a*, *ā*). Phonetic realizations are given in the International Phonetic Alphabet (IPA) and should be taken as broad indications. On the transcriptions *wəʾətu*, *yəʾəti* as opposed to *wəʾtu*, *yəʾti*, cf. Bulakh (2016: 124–26).

Ge‘ez script (fidäl)	transcription	reconstructed pronunciation (early 1st millennium CE)	contemporary received pronunciation
ሀ	*h*	[h]	[h]
ለ	*l*	[l]	[l]
ሐ	*ḥ*	[ħ]	[h]
መ	*m*	[m]	[m]
ሠ	*ś*	[ɬ]	[s]
ረ	*r*	[r]	[r]
ሰ	*s*	[s]	[s]
ቀ	*q*	[k’]	[k’]
በ	*b*	[b]	[b], [β]
ተ	*t*	[t^h]	[t^h]
ኀ	*ḫ*	[χ]	[h]
ነ	*n*	[n]	[n]
አ	ʾ	[ʔ]	zero, [j]
ከ	*k*	[k^h]	[k^h]
ወ	*w*	[w]	[w]
ዐ	ʿ	[ʕ]	zero, [j]
ዘ	*z*	[z]	[z]
የ	*y*	[j]	[j]
ደ	*d*	[d]	[d]
ገ	*g*	[g]	[g]

DOI 10.15460/auue.2023.96.1.296

ጠ	*ṭ*	[tʼ]	[tʼ]
ጰ	*ṗ*	[pʼ]	[pʼ]
ጸ	*ṣ*	[sʼ]	[sʼ]
ፀ	*ś́*	[ɬʼ]	[sʼ]
ፈ	*f*	[f]	[f]
ፐ	*p*	[pʰ]	[pʰ]
1st order vowel	*ä*	[ɐ]	[ɛ], [a], [ɔ]
2nd order vowel	*u*	[uː]	[u]
3rd order vowel	*i*	[iː]	[i]
4th order vowel	*a*	[aː]	[a]
5th order vowel	*e*	[je]	[e]
6th order vowel	*ə*	[ɨ]	[ɨ], [i], [u]
7th order vowel	*o*	[wo]	[o]

Transcriptions of other Semitic languages follow established systems (e.g. Lettinga 2012 for Biblical Hebrew), sometimes modified to more closely approximate the IPA. Reconstructed proto-forms and proto-phonemes are marked with an *asterisk while hypothetical forms that contradict actually attested forms are marked with **two asterisks.

Abbreviations

acc.	accusative
f.	feminine
m.	masculine
nonacc.	nonaccusative
nom.	nominative
pl.	plural
sg.	singular

DOI 10.15460/auue.2023.96.1.296

References

Al-Jallad, Ahmad. 2014. Final short vowels in Gə‘əz, Hebrew *’attâ*, and the anceps paradox. *Journal of Semitic Studies* 59(2). 315–327. https://doi.org/10.1093/jss/fgu003

Appleyard, David. 2015. Ethiopian Semitic and Cushitic. Ancient contact features in Ge‘ez and Amharic. In Aaron M. Butts (ed.), *Semitic languages in contact*. (Studies in Semitic Languages and Linguistics 82). Leiden: Brill. 16–32. https://doi.org/10.1163/9789004300156_003

Aro, Jussi. 1964. *Die Vokalisierung des Grundstammes im semitischen Verbum*. Helsinki: Societas Orientalis Fennica.

Brockelmann, Carl. 1908. *Grundriss der vergleichenden Grammatik der semitischen Sprachen. Vol. 1. Laut- und Formenlehre.* Berlin: Richard & Reucher.

Brugnatelli, Vermondo. 1982. *Questioni di morfologia e sintassi dei numerali cardinali semitici*. Florence: La Nuova Italia.

Bulakh, Maria. 2016. Some problems of transcribing Geez. In Alessandro Bausi (ed.), *150 Years after Dillmann’s lexicon: Perspectives and challenges of Gəʕəz studies*. Wiesbaden: Harrassowitz. 103–137.

Dufour, Julien. 2021. Vowel quality as a history maker. Stress, metaphony and the renewal of Proto-Semitic morphology in Modern South Arabian. In Patience Epps, Danny Law, & Na’ama Pat-El (eds.), *Historical linguistics and endangered languages. Exploring diversity in language change*. London: Routledge. 56–100.

Elias, David L. 2014. *The Tigre language of Ginda‘, Eritrea*. (Studies in Semitic Languages and Linguistics 75). Leiden: Brill.

Fischer, Wolfdietrich. 1972. *Grammatik des klassischen Arabisch*. (Porta linguarum orientalium 11). Wiesbaden: Harrassowitz.

Fox, Joshua. 2003. *Semitic noun patterns*. (Harvard Semitic Studies 52). Winona Lake: Eisenbrauns.

Hetzron, Robert. 1967. Agaw numerals and incongruence in Semitic. *Journal of Semitic Studies* 12(2). 169–197.

Huehnergard, John. 2011. *A grammar of Akkadian*. 3rd ed. (Harvard Semitic Studies 45). Winona Lake: Eisenbrauns.

Huehnergard, John. 2019. Proto-Semitic. In John Huehnergard and Na’ama Pat-El (eds), *The Semitic languages*, 2nd ed. London & New York: Routledge Taylor & Francis Group. 49–79.

Koehler, Ludwig & Walter Baumgartner. 1994. *The Hebrew and Aramaic lexicon of the Old Testament*. 1st ed. Leiden: Brill.

DOI 10.15460/auue.2023.96.1.296

Kossmann, Maarten G., & Benjamin D. Suchard. 2018. A reconstruction of the system of verb aspects in proto-Berbero-Semitic. *Bulletin of the School of Oriental and African Studies* 81(1). 41–56. https://doi.org/10.1017/S0041977X17001355

Kouwenberg, Norbert J. C. 2017. *A grammar of Old Assyrian*. (Handbook of Oriental Studies. Section 1, The Near and Middle East 118). Leiden: Brill.

Leslau, Wolf. 2006. *Comparative dictionary of Geʿez*. Wiesbaden: Harrassowitz.

Lettinga, Jan P. 2012. *Grammatica van het Bijbels Hebreeuws*. 12th, revised ed. Leiden: Brill.

Omar, Margaret K. 1975. *Saudi Arabic: Urban Hijazi dialect. Basic course.* Washington: Foreign Service Institute.

Qafisheh, Hamdi A. 1992. *Yemeni Arabic reference grammar.* Kensington: Dunwoody.

Rubin, Aaron D. 2018. *Omani Mehri: A new grammar with texts.* (Studies in Semitic Languages and Linguistics 93). Leiden: Brill.

Rundgren, Frithiof. 1955. *Über Bildungen mit š- und n-t-Demonstrativen im Semitischen*. (Beiträge zur vergleichenden Grammatik der semitischen Sprachen). Uppsala: Almqvist & Wiksells.

Shachmon, Ori & Elitzur Bar-Asher Siegal. 2023. The derivatives of Barth's Law in the light of modern Arabic dialects. *Bulletin of the School of Oriental and African Studies. Online prepublication.* https://doi.org/10.1017/S0041977X22000866

Suchard, Benjamin D. 2019. *The development of the Biblical Hebrew vowels.* (Studies in Semitic Languages and Linguistics 99). Leiden: Brill.

Suchard, Benjamin D. & Jorik (F.J.) Groen. 2021. (Northwest) Semitic sg. **CVCC-*, pl. **CVCaC-ū-*: Broken plural or regular reflex? *Bulletin of the School of Oriental and African Studies* 84(1). 1–17. https://doi.org/10.1017/S0041977X2100001X

Tropper, Josef. 2002. *Altäthiopisch: Grammatik des Geʿez mit Übungstexten und Glossar*. (Elementa Linguarum Orientis 2). Münster: Ugarit-Verlag.

Tropper, Josef & Rebecca Hasselbach-Andee. 2021. *Classical Ethiopic: A grammar of Gəʿəz*. (Languages of the Ancient Near East 10). University Park: Eisenbrauns.

Van Putten, Marijn. 2017. The feminine ending *-at as a diptote in the Qurʾānic Consonantal Text and its implications for Proto-Arabic and Proto-Semitic. *Arabica* 64(5–6). 695–705. http://dx.doi.org/10.1163/15700585-12341474

DOI 10.15460/auue.2023.96.1.296

Van Putten, Marijn. 2022. *Quranic Arabic: From its Hijazi origins to its Classical reading traditions*. (Studies in Semitic Languages and Linguistics 106). Leiden: Brill.

Voigt, Rainer M. 1987. Die Personalpronomina der 3. Personen im Semitischen. *Die Welt des Orients* 18. 49–63.

DOI 10.15460/auue.2023.96.1.296

The Ngəmba interrogative verb *ghě* 'to what?'

Solange Mekamgoum[a] *& Roland Kießling*[b]

University of Hamburg[ab]
solange.mekamgoum@uni-hamburg.de
roland.kiessling@uni-hamburg.de

Abstract:
While interrogative pronouns, adverbials, and determiners seem to constitute universal word categories (Ultan 1978), interrogative verbs are rather rare worldwide (Hagège 2008). One of the languages to attest this rare category is Ngəmba, a Ghomala' variety of the Eastern Grassfields Bantu group in Cameroon. This article provides a first descriptive outline of the semantic and morphosyntactic properties of the Ngəmba interrogative verb *ghě* 'do what?'. Based on comparative evidence from micro-variation across closely related neighbouring Ghomala' varieties, it fleshes out a historical model that traces the Ngəmba interrogative verb back to a fusion of a prior verb meaning 'do' with an interrogative element.

Keywords: Grassfields Bantu, Bamileke, Ghomala', Ngəmba, interrogative verb, interrogative system, content questions

1 Introduction

Cross-linguistically, inventories of question words frequently include interrogative pronouns such as 'who' and 'what', interrogative adverbials such as 'how', 'where' and 'when', interrogative quantifiers such as 'how many' and interrogative determiners such as 'which' (Velupillai 2012: 358). They possibly constitute universal word categories (Ultan 1978, Siemund 2001). In contrast, interrogative items that take the place of verbs are rather rare worldwide, as pointed out by Idiatov & van der Auwera 2004 and in the seminal article of Hagège 2008. It is striking that interrogative verbs seem to be absent in European languages, while they have been reported for various language families scattered throughout the world including Australian, Amerindian, Austronesian, Altaic, Papuan and Sino-Tibetan. The only unambiguous African attestation in Hagège's survey of 28 languages

DOI 10.15460/auue.2023.96.1.273

is Rundi.[1] To what extent the rarity of interrogative verbs is a product of a research paradigm that is biased by standard average European expectations is still to be explored.

Interrogative verbs are special in that they perform two jobs at the same time, i.e. they establish a predication, while at the same time, they question the very predication they express (Hagège 2008: 2). Thus, an "important feature of a sentence in which an interrogative verb appears as the main predicate is that the question asked concerns neither an argument […], nor an adjunct, an adverbial modifier, or an adnominal modifier […], but the very state, process, or action which is expressed by the predicate" (Hagège 2008: 4).

Interrogative verbs cover some of the most basic functions in everyday communication, denoting meanings such as 'be who' / 'be what', 'do what' / 'what happened', 'be how' / 'do how', 'say what', 'be where' / 'go where' (Hagège 2008: 18). This is also precisely where the Ngəmba interrogative verb *ghě/ghyɛ̌* meaning 'do what? / what happened?' fits.[2]

Ngəmba is an under-researched variety of the Eastern Grassfields Bantu group in the West region of Cameroon, classified by Dieu & Renaud (1983: 124) and Eberhard et al. 2022 as a dialect of Ghɔmálaʔ called Ghɔmálaʔ-West and Ghɔmálaʔ-Ngemba, respectively.[3] Ngəmba subdivides in five varieties named after the settlement areas where they are spoken as shown in figure 1, i.e. Bamendjou and Bameka in the Upper-Plateau division, Bansoa in the Menoua division, Bamougoum in the Mifi division and Bafounda in the Bamboutos division.

DOI 10.15460/auue.2023.96.1.273

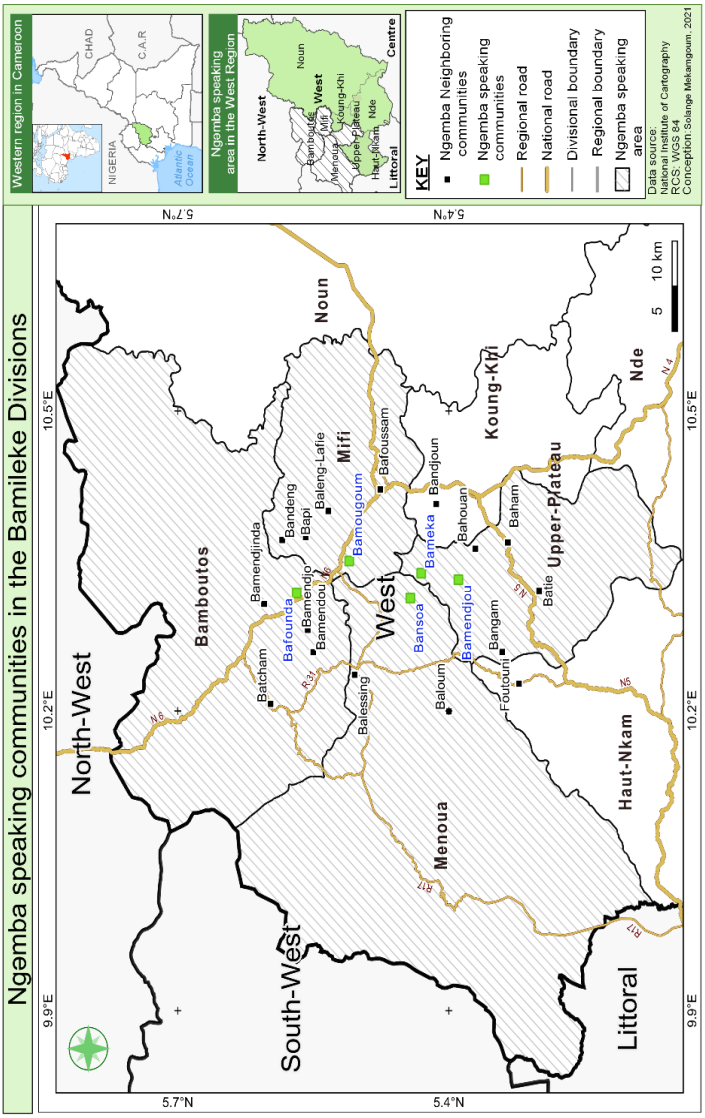

Figure 1. Location of Ngəmba speaking communities in the Bamileke divisions

While Ngəmba definitely remains an under-researched variety of the Ghomala' cluster, it has received some attention both by local language activists and professional linguists. Beside a primer (kě ŋgə̂mba[4] 2014), there are descriptive efforts in the domains of verbal morphosyntax (Soh 2008), morphophonology (Fossi & Ouafo 2012), nominal morphosyntax and semantics (Fossi 2015; Mekamgoum 2021; Mekamgoum & Kießling 2022) and basic lexical compilations (Soh 2017; Deeh Ségallo 2015, 2016), supplemented by in-depth studies of anthroponyms (Mensah & Mekamgoum 2017) and cultural scripting of speech acts such as rebuking (Mekamgoum 2013) and advising (Mekamgoum 2022).

The present article is organized in six sections. The introduction in section 1 is followed by a brief outline of the Ngəmba interrogative system, arranged along the major division of content vs. polar questions in section 2. Among the content questions, section 3 zooms in on the interrogative verb *ghě* 'do what?' and explores its morphosyntactic properties. Section 4 widens the perspective to equivalent items and constructions in closely related Bamileke varieties. This prepares the ground for developing a historical model in section 5 to account for its emergence in Ngəmba. Section 6 concludes the study and suggests avenues for further research on interrogatives in Grassfields languages and beyond.

2 The interrogative system of Ngəmba

The Ngəmba interrogative system is characterized by the following typological profile: polar questions are formed by clause final enclitics which "combine with a specific interrogative intonational pattern" (Tadjo Fongang 2020: 99). Content questions are formed by question words which include pronouns, adverbials, adjectives, and an interrogative verb. The basic array of primary, i.e. monomorphemic question words, namely, *wɔ́* 'who?', *kɔ* 'what?' and *hɔ́* 'where?', CPX-*é* 'which', *llá* 'how much (price)', *sʉ́* 'when', *sʉ́ʔʉ́* 'how many, what amount of', is considerably expanded by secondary and tertiary question words, most of which are derived from primary *kɔ* 'what', e.g. *njiʔ kɔ* 'when?' (< 'moment what?'), *ŋgə̀ kɔ̀* 'how?'

4 kě ŋgə̂mba is the scientific committee for the development of the Ngəmba language. It comprises language activists who speak the different Ngəmba dialects.

DOI 10.15460/auue.2023.96.1.273

(< ‘that what?’) and *ndɔŋ/ndzin ŋgə̀ kɔ̀* ‘how much/many precisely?’ (< ‘quantity that what?’).

In a wider comparative perspective, Ngəmba stands out by three properties: (a) all question types, including polar questions, are morphologically marked, i.e. interrogative status cannot be expressed by intonation alone; (b) the question word *sʉ́ʔʉ́* ‘how many, what number of?’ stands out in that it entails a complex construction involving an elaborate set of numeral classifiers both of the sortal and the mensural type (Mekamgoum & Kießling 2022); (c) the presence of an interrogative verb *ghě* ‘do what?’.

3 The interrogative verb *ghě*[5]

The Ngəmba item *ghě* [ɣě][6] ‘do what?’ qualifies as an interrogative verb in that, like any other verb, it “functions as the main or secondary predicate of the sentence where it appears; but at the same time […] questions the very state of affairs denoted by the predicate itself” (Hagège 2008: 2). In other words, it performs two jobs at once, i.e. it establishes a predication, while at the same time it questions the very predication it expresses. Therefore, a more adequate translation equivalent would actually be ‘to what?’ instead of ‘to do what?’. This can be seen in the two following examples. In (1) the Ngəmba equivalent is actually “If we walk together, it will what?” and (2) rather expresses “You spent the day in school today whatting?”

(1) Interrogative verb *ghě* as main predicate[7]

5 The data used in this article have three sources: (a) spontaneous interactions recorded between 2015 and 2021 for Mekamgoum 2022, (b) elicitation through interviews and (c) the intuition of the first author as proficient native speaker of Bamendjou-Ngəmba. In more detail, primary Ngəmba utterances are extracted from the recorded and transcribed spontaneous multimedia data. To obtain these primary utterances in further categories of tense, mood, aspect and polarity, other Ngəmba native speakers were consulted, namely, Jean Fokam and Soh Ta (Bamendjou) and Maman Micheline (Bameka). Examples (7c), (8c) (17a) and (19d) came from our own native speaker proficiency. As with the data in section 4, table 1, the following native speakers were consulted: Georgette Djoukouo for Baham, Bahouan and Bandjoun, Kouamou Nadine for Bangou, Batoufam and Bandjoun, Wega Simeu for Batie and Bandjoun, Solange Mekeng for Fotouni, Suzanne Buekam for Babouantou, Stelle Kameni for Baleveng and Keungne Joseline for Bamendjo.

7 The transcription used throughout this contribution follows the conventions of the Alphabet for Cameroonian languages (Tadajeu & Sadembouo 1984) which

DOI 10.15460/auue.2023.96.1.273

pɔ̀ghɔ̀ *póncə* *n-jin* *mbǎ* *ghě*
2+1.DU together CS-walk and.3SG.F0 do.what
'What would happen, if we walk together?'

(2) Interrogative verb *ghě* as second predicate
pʉ̌ *tsɔ́k* *səkút* *léʔ-à* *ŋ-gě^{l}é*[8]
2PL spend.day school day-PROX CS-do.what.QINT
'You spend the day in school today doing what?'

The verbal status of *ghě* is corroborated by the fact that it shares all crucial properties of a full-fledged verb, i.e. it participates in verbal inflection, derivation and negation.

The following examples show that *ghě* 'do what' can be fully inflected for all Ngəmba tense and aspect categories, i.e. the continuous (3b), habitual (3c) and frequentative (3d) aspects of the present tense (4a–d), the past tenses (5–8), and the future tenses (8–11). In the course of inflection, *ghě* 'do what' combines with the continuous proclitics *(ssí) mbóó* (3b, 4–7c) and the habitual proclitic *khìʔí* (3c). For the continuous and the frequentative, it receives the consecutive prefix *N-* that triggers the regular permutation of the fricative *gh* to the plosive *g*. In the continuous aspect, the verb undergoes further suprasegmental alternations with respect to tone.

(3) Interrogative verb *ghě* in various inflectional categories of the present tense

---

deviates in the following respects from IPA: c [tʃ], sh [ʃ], gh [ɣ], bh [β], j [dʒ], zh [ʒ], ʉ [y, ʉ], ' [ʔ]. Aspiration [^{h}] and palatalisation [^{j}] are coded by h and y, respectively. Unfortunately, this results in the rather clumsy graphemic representation of the aspirated voiced velar fricative [ɣ^{h}] as ghh, as it occurs in Batie (see section 4). Apart from the common tone symbols [́] for high tone, [̀] for low tone, [̌] for a contour tone rising from low to high level and [̂] for a contour tone falling from high to low level, the mark [̄] is employed for a tone falling from high to mid level and absence of tone marking on vowels denotes a mid tone, even in environments where the unmarked vowel follows another one with a different tone, as in (3b) or (4b) for example.

8 The alternation of *gh* ~ *g* observed in the initial consonant of the interrogative verb reflects a morphophonological process in Ngəmba by which fricatives such as *gh*, *bh* and *zh* and sonorants such as *l* undergo hardening to plosives or affricates, i.e. *g*, *b*, *dʒ* and *d* in postnasal position, respectively. In a historical perspective, the process must probably be viewed the other way round, i.e. the postnasal alternants retain the more archaic plosive that has undergone lenition elsewhere.

DOI 10.15460/auue.2023.96.1.273

(a) Simple present
ɔ̀ ghě ndɑ̂
2SG do.what house.QINT
'What do you do in the house?'

(b) Present continuous
ɔ́ ssí m-bóó ŋ-gěe ndɑ̂
2SG LOC CS-CONT CS-do.what.IPF house.QINT
'What are you doing in the house?'

(c) Present habitual
ɔ̀ khìʔí ghě ndɑ̂
2SG HAB do.what house.QINT
'What do you usually do in the house?'

(d) Present frequentative
ɔ̂ ŋ-gě ndɑ̂
2SG.FRQ CS-do.what house.QINT
'What do you frequently do in the house?'

In (4–7), *ghě* is inflected for the past tenses of Ngəmba, i.e the immediate past (P0) in (4), the hodiernal past (P1) in (5), the hesternal (P2), and the distant past (P3) in (7).

(4) Interrogative verb *ghě* in inflectional categories of the immediate past tense (P0)

(a) Perfective immediate past (P0)
ɔ́ ghě ne ndɑ̂
2SG.P0.PF do.what about house.QINT
'What have you just done about the house?'

(b) Imperfective immediate past (P0)
ɔ̀ ghěe ne ndɑ̂
2SG do.what.IPF about house.QINT
'What did you just do about the house?'

DOI 10.15460/auue.2023.96.1.273

(c) *ɔ̂ (mbə́ ssí) m-bóó ŋ-gěe*
2SG CS-be LOC CS-CONT CS-do.what.IPF
ndœ̂
house.QINT
'What were you just doing in the house?'

(5) (a) Perfective hodiernal past (P1)
ɔ́ nə ŋ-gě↓é ndœ̂
2SG P1.PF CS-do.what house.QINT
'What have you done in the house?'

(b) Imperfective hodiernal past (P1)
ɔ́ ke ŋ-gěe ndœ̂
2SG P1.IPF CS-do.what.IPF house.QINT
'What did you do in the house?'

(c) Continuous hodiernal past (P1)
ɔ́ kě[9] *m-bóó ŋ-gěe ndœ̂*
2SG P1.IPF CS-CONT CS-do.what.IPF house.QINT
'What were you doing in the house?'

(6) Interrogative verb *ghě* in inflectional categories of the hesternal/distant past tense (P2)

(a) Perfective hesternal past tense (P2)
ɔ̀ kwʉ̌ ŋ-gě ne ndœ̂
2SG P2.PF CS-do.what about house.QINT
'What have you done about the house?'

(b) Imperfective hesternal past tense (P2)
ɔ̀ kə̀ ghěe ne ndœ̂
2SG P2.IPF do.what.IPF about house.QINT
'What did you do about the house?'

9 The reasons of the tonal alternation in the hodiernal past marker, as seen in (5b) and (5c), is not well understood so far.

DOI 10.15460/auue.2023.96.1.273

(c) Continuous hesternal past tense (P2)

ɔ̀	*kǎ*	*m-bóó*	*ŋ-gěe*	*ne*
2SG	P2.IPF	CS-CONT	CS-do.what.IPF	on

ndœ̂
house.QINT
'What were you doing on the house?'

(7) Interrogative verb *ghě* in inflectional categories of the distant past tense (P3)

(a) Perfective distant past tense (P3)

ɔ̀	*lwʉ́*	*ŋ-gě*	*ne*	*ndœ̂*
2SG	P3.PF	CS-do.what	about	house.QINT

'What have you done about the house?'

(b) Imperfective distant past tense (P3)

ɔ̀	*lə̀*	*ghěe*	*ne*	*ndœ̂*
2SG	P3.IPF	do.what.IPF	about	house.QINT

'What did you do about the house?'

(c) Continuous distant past tense (P3)

ɔ̀	*lǎ*	*m-bóó*	*ŋ-gěe*	*ne*
2SG	P3.IPF	CS-CONT	CS-do.what.IPF	about

ndœ̂
house.QINT
'What were you doing about the house?'

In (8–11), *ghě* is inflected for the future tenses of Ngəmba, i.e the immediate future (F0) in (8), hodiernal future (F1) in (9), crasternal (tomorrow's) future (F2) in (10) and the distant future (F3) in (11).

(8) Interrogative verb *ghě* in inflectional categories of the immediate future tense (F0)

(a) Simple future tense (F0)

ɔ̀	*ghɔ̌*	*ghě*	*ndœ̂*
2SG	F0	do.what	house.QINT

'What will you just do in the house?'

DOI 10.15460/auue.2023.96.1.273

(b) Continuous immediate future tense (F0)
ɔ̀ ghɔ̌ bhóó ghě ndɑ̂
2SG F0 CONT do.what house.QINT
'What will you just be doing in the house?'

(9) Interrogative verb *ghě* in inflectional categories of the hodiernal future tense (F1)

(a) Simple hodiernal future tense (F1)
ɔ̀ ghɔ̌ pǐ ghě ndɑ̂
2SG F0 F1 do.what house.QINT
'What will you do in the house?'

(b) Continuous hodiernal future tense (F1)
ɔ̀ ghɔ̌ pǐ bhóó ghě ndɑ̂
2SG F0 F1 CONT do.what house.QINT
'What will you be doing in the house?'

(10) Interrogative verb *ghě* in inflectional categories of the crasternal future tense (F2)

(a) Simple crasternal future tense (F2)
ɔ̀ ghɔ̌ cwɔ́ʔɔ́ ghě ndɑ̂
2SG F0 F2 do.what house.QINT
'What will you do in the house?'

(b) Continuous crasternal future tense (F2)
ɔ̀ ghɔ̌ cwɔ́ʔɔ́ bhóó ghě ndɑ̂
2SG F0 F2 CONT do.what house.QINT
'What will you be doing in the house?'

(11) Interrogative verb *ghě* in inflectional categories of the distant future tense (F3)

(a) Simple distant future tense (F3)
ɔ̀ ghɔ̌ fɔ́ ghě ndɑ̂
2SG F0 F3 do.what house.QINT
'What will you do in the house?'

DOI 10.15460/auue.2023.96.1.273

(b) Continuous distant future tense (F3)
ɔ̀ ghɔ̌ fɔ́ bhóó ghě ndœ̂
2SG F0 F2 CONT do.what house.QINT
'What will you be doing in the house?'

The interrogative verb *ghě* undergoes negation just like any other ordinary verb, i.e. the immediate past perfective of the indicative mood is negated by the circumclitic *kà … bhɔ́* (13), the simple present of the potential mood by the circumclitic *là … bhɔ́* (14) and all other TAM categories are negated by the circumclitic for general negation *cà … bhɔ́*, e.g. in the simple present (12a), the immediate past (12b–c), the hodiernal past (13d–f) and the hodiernal future (12g–h), as detailed in Mekamgoum (2022).

(12) Interrogative verb *ghě* under general negation with *cà … bhɔ́*

(a) Negative simple present
ɔ̀ cà ghě nè ndœ́ bhɔ̀
2SG NEG do.what about house NEG.QINT
'What do you not do about the house?'

(b) Negative imperfective immediate past (P0)
ɔ̀ cà ghěe nè ndœ́ bhɔ̀
2SG NEG do.what.IPF about house NEG.QINT
'What did you not just do about the house?'

(c) Negative continuous immediate past (P0)
ɔ̀ cə̂ (m-bə́ ssi) m-bóó ŋ-gěe
2SG NEG CS-be LOC CS-CONT CS-do.what.IPF
ndœ́ bhɔ̀
house NEG.QINT
'What were you not just doing in the house?'

DOI 10.15460/auue.2023.96.1.273

(d) Negative perfective hodiernal past (P1)
ɔ̀ cǎ nà ŋ-gě↓é nè ndœ́ bhɔ̀
2SG NEG P1.PF CS-do.what.? about house NEG.QINT
'What have you not just done about the house?'

(e) Negative imperfective hodiernal past (P1)
ɔ̀ cǎ kè ŋ-gěe ndœ́ bhɔ̀
2SG NEG P1.IPF CS-do.what.IPF house NEG.QINT
'What did you not do in the house?'

(f) Negative continuous hodiernal past (P1)
ɔ̀ cà kě (m-bá ssi) m-bóó ŋ-gěe bhɔ̀
2SG NEG P1.IPF CS-be LOC CS-CONT CS-do.what.IPF NEG.QINT
'What were you not doing?'

(g) Negative hodiernal simple future (F1)
ɔ̀ cǎ pǐ ghě nè ndœ́ bhɔ̀
2SG NEG F1 do.what about house NEG.QINT
'What will you not do about the house?'

(h) Negative hodiernal continuous future (F1)
ɔ̀ cǎ pǐ bhóó ghě nè ndœ́ bhɔ̀
2SG NEG F1 CONT do.what about house NEG.QINT
'What will you not be doing about the house?'

(13) Interrogative verb *ghě* under specific negation with *kà … bhɔ́*
Negative immediate perfective past
ɔ̀ kà ŋ-gě↓é nè ndœ́ bhɔ̀
2SG P0.PF.NEG CS-do.what.? about house NEG.QINT
'What have you not done about the house?'

DOI 10.15460/auue.2023.96.1.273

(14) Interrogative verb *ghě* under specific negation with *lə̀ … bhɔ́*
Negative simple present potential
mbɛ́ ɔ lə̀ ghěe ne ndœ́ bhɔ̀
POT 2SG NEG do.what.IPF about house NEG.QINT
'What can you not do about the house?'

The interrogative verb *ghě* can also be subjected to verbal derivation. It may derive a pluractional stem *ghěncə̀* (15)[10] by the regular pluractional suffix *-ncə̀* that corresponds to the cognate repetitive-attenuative markers *-ti* in Yemba (Harro 1989) and *-tə* in Ghomala' (Mba 1997).

(15) Interrogative verb *ghě* subjected to pluractional derivation
pʉ̀ ghě-ncə̌[11] *tsǎʔā pû cchá*
2PL do.what-PLUR place.NH.QINT 2PL pass.IMP
ŋ-kwʉ́ ndœ̂ ndìʔ-ǎ
CS-enter house moment-PROX
'What are you (guys) doing there? You, pass and enter the house now!'

Just like any other ordinary verb, the interrogative verb *ghě* can be nominalised by prefixation of the infinitive marker *nə̀-* as in (16a–b).

(16) Interrogative verb *ghě* under nominalisation
(a) *nə̀-ghě pɔ̌ŋ*
INF-do.what be.good.QINT
'Doing what is good?'

(b) *ɔ̀ pè zhwɔ́ nə̀-ghě*
2SG take.T0 thing-MED INF-do.what
'What are you going to do with that thing that you take?'

The interrogative verb *ghě* may be used in an intransitive construction with an agent in subject position as in (2) above for the meaning 'do what?'. It may also feature without any participant in an atransitive construction such as (1) with a dummy subject marker in which case it yields the meaning 'what happen(ed/s)?'. Furthermore, it also

11 The applicability of the pluractional extension to the interrogative verb to form *ghě-ncə̀* seems to present a recent development restricted to the juvenile register of the Mə̂njjwó (Bamendjou) variety.

DOI 10.15460/auue.2023.96.1.273

accepts recipient objects encoded by applicative pronouns such as *zhzhí* 'to X' (17b) or beneficiary objects introduced by prepositions such as *mbbó* 'to, for' (17a) which has grammaticalized from the plural form of *ppó* 'hand'.

(17) Interrogative verb *ghě* with indirect objects

(a) *nít* *ˡmán* *ɔ,* *á* *ghě* *mbbó-ǒ*
let.IMP child NH 3SG.P0.PF do.what to-2SG.QINT
'Let that child alone! What has he/she done to you?'

(b) *ɔ́* *ghěè* *zhzhí* *ǎa*
2SG.P0.PF do.what.? APPL.3SG 3SG.CONT
n-dɛ́-lǎ
CS-cry-cry.QINT
'What have you done to him/her for him/her to be crying?'

The interrogative verb *ghě* 'do what?' can combine with other question markers, e.g. with markers of polar echo questions *lɛ́ɛ* (18a) and *nè*[12] (18b, d), alternative question marker *ke* (18c) and question words *hɔ́* 'where', *njiʔ kɔ̀* 'when' and *ndɔ̀ŋ ŋgə̀ kɔ́* 'how much' (18d).

(18) Interrogative verb *ghě* with other question markers

(a) *ŋgə̀* *mə́* *ghě* *lɛ́ɛ*
QT 1SG.P0 do.what QEQ
'(Are you asking) what I have done?'

(b) *ŋgə̀* *mə̀* *lwʉ̌* *ŋ-gě* *nè*
QT 1SG P3 CS-do.what QES
'What do you say I had done?'

(c) *ɔ̀* *ghɔ̌* *nít* *ke* *ɔ̀* *ghɔ̌* *ghě*
2SG F0 leave AQ 2SG F0 do.what
'You are going to leave it or what are you going to do?'

(d) *ŋga* *ghěe* *njiʔ_kɔ́* *ndɔ̀ŋ_ŋgə̀_kɔ̀*
QT.3SG do.what.P0.IPF when how.much

12 The enclitic *lɛ́ɛ* echoes a previous interrogative utterance, while *nè* echoes a previous statement. There is a third enclitic *á*, which echoes a previous order (imperative).

DOI 10.15460/auue.2023.96.1.273

bhǎʔā́ *hɔ́* *nè*
like.NH where QES
'When and where has s/he done what that much?'

The evidence presented above clearly shows that the Ngəmba item *ghě* shares all properties of a verb, i.e. it inflects like a verb for tense, aspect, mood and polarity, it accommodates arguments and adjuncts, it can be nominalised and even derives a pluractional stem, so that it qualifies indeed as a full-fledged interrogative verb. More so, it is an established category with a special status in Ngəmba grammar that cannot simply be derived from properties resulting from the merger of an erstwhile verb do and the interrogative pronoun *kɔ* 'what'. The special status of the interrogative verb *ghě* resides in the fact that it has the potential to trigger a unique set of applicative pronouns used for introducing a recipient role, presented in table 1 in contrast to major other sets of Ngəmba pronouns (taken from Mekamgoum 2022: 82).

Table 1. Ngəmba pronoun sets

	subject	direct object	PREP1	PREP2	applicative
1SG	*mə*	*á*	*mɔ̀*	*mmɔ̀*	*mmɔ̀*
2SG	*ɔ̀*	*ɔ́*	*ɔ̀*	*wwɔ̀*	*wwɔ̀*
3SG	*à/ì˚*	*í*	*í*	*zhzhí*	*zhzhí*
1PL.INCL	*pə̀*	*wə̀*	*pə̀*	*pə̀*	*wə̀*
1PL.EXCL	*pə̀k˚*	*wə́k*	*pə̀k˚*	*pə̀k˚*	*wə́k*
2PL	*pʉ̀˚*	*wʉ́*	*pʉ̀˚*	*pʉ̀˚*	*wʉ́*
3PL	*wóp*	*wóp*	*pó(p)*	*pó(p)*	*wóp*

Apart from subject and direct object pronominals, there are specialised pronoun sets that are governed by certain prepositions, i.e. prepositions such as *mbbó* 'to, for', *mbè* 'beside', *tthwó* 'on top of', ***né(t)*** 'on'. They require the set labelled PREP1, whereas the comitative preposition *pánà* and its free alternative forms *pwâ* and *pâ/pê* 'with' require the set labelled PREP2. What is remarkable about the applicative set in the last column of table (1) is that it only collocates directly with the interrogative verb as in (18b) and (20a). Combining it with any other verb than *ghě* 'do what' (20d) or as complement of any preposition (20c) results in ungrammaticality. As an alternative to the applicative pronoun, the recipient role may also be expressed via a

DOI 10.15460/auue.2023.96.1.273

prepositional phrase headed by *mbbó* 'to' (20b). In that case the pronoun of set PREP1 has to be used instead of the applicative pronoun.

(20) Interrogative verb *ghě* in collocation with applicative pronoun

(a) *mə́* *ghěè* *wwɔ̌*
1SG.P0.PF do.what? APPL.2SG.QINT
'What have I done to you?'

(b) *mə́* *ghě* *mbbó* *ɔ̌*
1SG.P0.PF do.what to PREP1.2SG.QINT
'What have I done to you?'

(c) **mə́* *ghě* *mbbó* *wwɔ̌*
1SG.P0.PF do.what to APPL.2SG.QINT
'What I have done to you?'

(d) **mə́* *hò* *wwɔ̀* *zhwò* *nə́*
1SG.P0.PF do APPL.2SG thing QES
'Have I done anything to you?'

The potential of *ghě* to select an exclusive set of applicative pronouns proves that the Ngəmba interrogative verb, while being both a verb in its own right and an interrogative word, also establishes a unique grammatical category in terms of the syntactic structure it triggers.

4 Comparative evidence in Bamileke

A cross-Bamileke comparison of coding strategies for the meaning 'do what?' allows for insights into micro-areal dynamics and the etymology of the Ngəmba interrogative verb, as could be gleaned from table 2 that presents the forms of 'do what' in contrast to the form of the verb 'do' and an interrogative item 'what / how about?' across Eastern Grassfields Bamileke closely related to Ngəmba.

Table 2. The Ngəmba interrogative verb and its cognates in Eastern Grassfields Bamileke[13]

13 Abbreviations used for language names in this table: Gh Ghɔmálá', F Fe'fe', Nd Nda'nda', Y Yemba, Ngo Ngomba, Ngə Ngemba.

DOI 10.15460/auue.2023.96.1.273

	language	'do'	'what/how about?'	'do what (about)?'	status
I	Gh-Bahouan, Gh-Baham, Gh-Banjoun	*ghə̀*	*lá*	*ghə̀ lá*	analytic construction: DO + WHAT
	Gh-Batie	*ghhɛ̀*	*lá*	*ghhɛ̀ lá*	
	F-Fotouni	*xhɛ̀*	*lɛ́*	*xhɛ̀ lɛ́*	
	F-Babouantou	*xhɯ́*	*(mə̀) lá*	*xhɯ́ mə̀ lá*	
II	Gh-Bafoussam	*ghə̀*	*(l)á*	*ghə̀ (l)á*	incipient fusion
III	Y-Baleveng	*ghɨ̀*	-	*ghə̌ < ghɨ̀ = á*	transparent interrogative verb from fusion of DO + WHAT
	Ngo-Bamendjo	*gɛ̀t*	-	*gě < gɛ̀ = á*	
	Nd-Bangou	*ghə̀*	*(mə̀) ndèʔé*	*ghyě < ghə̀ = á*	
	Nd-Batoufam	*ghə̀*	*(páʔ) ˡlyɛ́*	*ghě < ghə̀ = á*	
IV	Ngə-Bamendjou	*hò*	-	*ghě < *ghè = á*	interrogative verb
	Ngə-Bamougoum, Bameka, Bansoa, Bafounda	*xhò*	-	*ghyě < *ghè = á*	

Table 2 above arranges expressions of 'do what' for their semantic transparency, and figure 2 below plots their geographical distribution in the West region of Cameroon. The varieties grouped under (I) all show analytic constructions based on the combination of an interrogative item 'what / how about?' and a verb meaning 'do'. Ghomálá'-Bafoussam, the only variety under (II), presents a stage of incipient fusion of the analytical construction, as marked by the optional omission of the initial consonant *l* in the interrogative item *lá*. The varieties assembled under (III) present an interrogative verb that clearly derives from a fusion of both components, i.e. the verb 'do' and the interrogative item *lá*, both items undergoing various types of vowel coalescence, triggered by erosion of intervening consonants, i.e. the initial consonant of the interrogative marker *lá* and the final consonant in the Ngomba-Bamenjo verb *gɛ̀t* 'do'. Furthermore, the interrogative component can be seen to have undergone separate types of development outside its fusion with 'do', e.g. deviating formally by vowel raising to *ɛ* or *e*, attachment of additional markers such as the homorganic nasal *N-* that triggers a hardening of

DOI 10.15460/auue.2023.96.1.273

the liquid to the plosive *d*, combination with additional items such as *mà* (Bangou) and *pá?* (Batoufam) or eventually dropping out altogether (Baleveng, Bamendjo). The Ngəmba varieties under (IV) are the only ones with an interrogative verb that cannot be derived from a fusion of two elements meaning 'do' and 'what' on a synchronic level, since the contemporary verb forms *hò* and *xhò* 'do' do not seem to be cognate to the verb forms *ghà* ~ *gèt* 'do' in the other varieties. Ngəmba rather seems to retain the initial consonant *gh* of the cognate in the interrogative verb, whereas the non-interrogative verb 'do' presents another root *(x)hò*, either a more archaic retention or an innovation.

The map in fig. 2 shows these four types roughly arranged along the north-south axis. The analytical constructions of group (I) form a south-western cluster marked by blue in fig. 2, while the spread zone of the dedicated interrogative verb of the Ngəmba group (IV), marked by green, is in the north – with the transitional type (II), manifest in Ghomálá'-Bafoussam and marked by red, in between. Two zones marked by yellow, one in the north-west and another one in the south east, can be identified for type (III), i.e. dedicated interrogative verbs that are synchronically transparent for their etymology.

5 A historical model for the emergence of interrogative verbs in Eastern Grassfields

In a historical perspective, the four coding types for the meaning 'do what?' identified in section 4 above can be interpreted as stages in a development from a plain interrogative verbal phrase to a fully lexicalised interrogative verb via condensation and fusion, as detailed in table 3.

Table 3. Eastern Grassfields Bamileke genesis of an interrogative verb

(a)	**gèt lá*	analytical construction	(Ngo-Bamendjo)
(b)	**gè-lá*	dental erosion	
(c)	**gə̀-lá*	vowel reduction	
(e)	**ghə̀-á*	liquid elision	Gh-Bafoussam
(f)	*ghă* ~ *ghě* ~ *ghě*	vowel coalescence	Ngə-Bamendjou

DOI 10.15460/auue.2023.96.1.273

Starting point is the analytical construction in (a) that simply consists of two separate components, i.e. a verb **gèt* 'do'[14] and an independent interrogative element **lá* 'what, how'. Subsequent steps of reduction and fusion in (b–f) finally produce the interrogative verb *ghě* attested in Ngəmba. In more detail, dental erosion (b) deletes the terminal consonant in the verb, vowel reduction (c) and initial lenition (d) reducing the verb to the form *ghà*, attested in most of the modern forms. Only Ngomba-Bamendjo retains the initial plosive, while the Fe'fe' reflexes must have undergone additional devoicing. Elision of the initial liquid in the interrogative item *lá* (e) brings the remaining vowel *á* and the schwa of the reduced verb in direct contact, preparing the ground for the final step, i.e. coalescence (f) in forms such as *ghǎ* ~ *ghɛ̌* ~ *ghě*. The rising contour tone in the resulting vowel actually testifies to its origin in the fusion of two prior tone bearing units, low and high. These steps account for the form of the interrogative verb in all Ngəmba varieties. What makes the Ngəmba situation special, though, in contrast to the other varieties, is that the ordinary verb 'do' does not seem to be cognate to the item which got fused in the interrogative verb. Instead, Ngəmba innovated or retained another item *hò* or *xhò* which cannot, by Ngəmba internal criteria, be linked etymologically to the interrogative verb.

6 Conclusion

Interrogative verbs, such as Ngəmba *ghě/ghyɛ̌*, are universally quite rare. Hagège 2008 presents a total of 28 cases and only slightly more (10%) of Idiatov and van der Auwera's (2004) sample of 350 languages across the world have interrogative verbs. One of the reasons for their universal rarity may be their non-compositional structure, i.e. it seems uneconomical to condense the notions of DO and WHAT

14 In the absence of robust Proto-Eastern Grassfields reconstructions for the meaning 'do' to rely on, we interpret the most elaborate form synchronically attested, i.e. the Bamendjo reflex *gèt*, as the most archaic one on which the preliminary model in table 2 is based. Moreover, this form actually suggests an etymological link to Proto-Bantu **gèd* 'try'.

DOI 10.15460/auue.2023.96.1.273

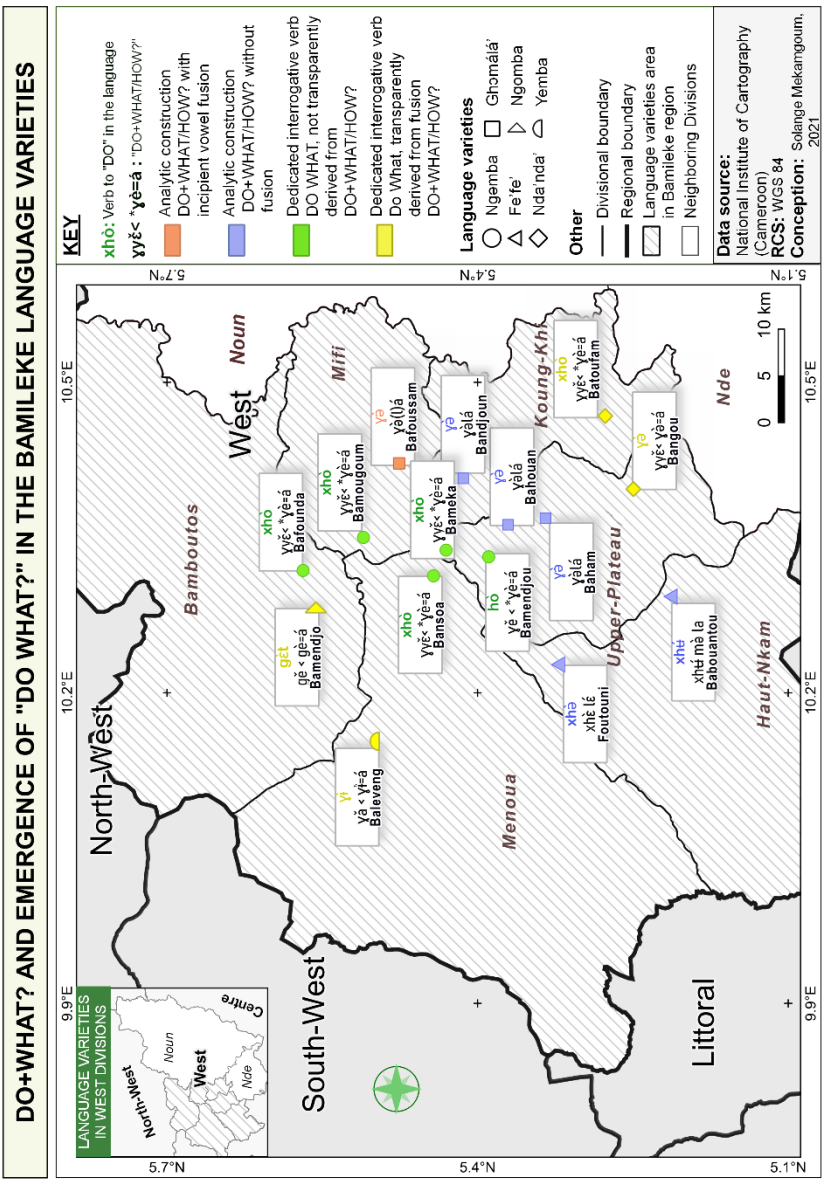

Figure 2. Geographical distribution of the interrogative verb and its equivalents

DOI 10.15460/auue.2023.96.1.273

"in a single unanalysable unit, instead of using a succession of two very frequent elements, meaning, respectively, 'do' and 'what'" (Hagège 2008: 30).

While Hagège (2008: 8) seems to assume an origin of interrogative verbs in a process of grammaticalization from two distinct elements, he does not provide a clear case in point. The present contribution attempts to remedy this situation by a case study that allows for fleshing out a historical model that accounts for the rise of interrogative verbs. The Ngəmba evidence shows that an interrogative verb such as *ghě* 'do what?' may actually arise from an erstwhile analytical construction by contraction and fusion of a prior independent action verb meaning 'do' and an interrogative complement meaning 'what'. Comparative evidence from neighbouring Eastern Grassfields Bamileke varieties attest to various intermediary stages of reduction and coalescence of both components in the course of the emergence of a single synthetic interrogative verb.

In generalizing on typological properties of interrogative verbs and their possible socio-historical motivations, Hagège 2008 points out that most languages with interrogative verbs had a late exposure to contact with European colonial languages and observes a trend for them to retain complex derivational morphology. While Ngəmba clearly belongs to the group of languages that have been in contact with European colonial languages relatively late, i.e. definitely not before the 17th century, it is certainly not a language that preserves "complex and relatively conservative derivational and/or compositional morphology" (Hagège 2008: 36). As member of the Ghomala' cluster of Bamileke Eastern Grassfields it has rather gone a long way to reduce morphological complexities of inherited noun class and verbal derivational systems (Hyman & Voeltz 1971, Hyman, Voeltz & Tchokokam 1970, Hyman 2017, 2018). In sum, the Ngəmba case study confirms Hagège's structural source model for interrogative verbs, while it provides counterevidence for his assumptions about the sociohistorical conditions of their emergence.

Abbreviations

APPL applicative, AQ alternative question, CONT continuative, CS consecutive, DU dual, EXCL exclusive, F0 immediate future, F1 hodiernal future, F2 crasternal future, F3 distant future, FRQ frequentative, HAB habitual, IMP

DOI 10.15460/auue.2023.96.1.273

imperative, INCL inclusive, INF infinitive, IPF imperfective, LOC locative, NH near hearer demonstrative, NEG negative, O object, P0 immediate past, P1 hodiernal past, P2 hesternal past, P3 distant past, PF perfective, PL plural, PLUR pluractional, POT potential, PROX near speaker-proximal demonstrative, QEQ question marker echoing question, QES question marker echoing statement, QINT question intonation, QT quotative, S subject, SG singular

References

Deeh Ségallo, Gabriel. 2015. *Dictionnaire ŋgə̂mba-français-anglais*. Douala: Kamkwop.

Deeh Ségallo, Gabriel. 2016. *Dictionnaire français-anglais-ŋgə̂mba*. Douala: Kamkwop.

Dieu, Michel & Patrick Renaud. 1983. *Atlas linguistique du Cameroun (ALCAM)*. Paris & Yaounde: ACCT, CERDOTOLA-DGRST.

Eberhard, David M., Gary F. Simons & Charles D. Fennig (eds.). 2022. *Ethnologue: Languages of the World.* Twenty-fifth edition. Dallas: SIL International. http://www.ethnologue.com.

Fossi, Achille. 2015. The determiner phrase internal structure in Ngêmbà. *International Journal of Linguistics* 7(1). 42–54. https://doi.org/10.5296/ijl.v7i1.7149.

Fossi, Achille & Adrienne Ouafo. 2012. Cultural and linguistic hybridizations in Cameroon: English loanwords in ngə̂mba. *International Journal of Linguistics* 4(1). 267–286. https://doi.org/10.5296/ijl.v4i1.1148

Hammarström, Harald, Robert Forkel, Martin Haspelmath & Sebastian Bank, (eds.). Glottolog 4.7. https://glottolog.org/resource/languoid/id/ngem1253.

Hagège, Claude. 2008. Towards a typology of interrogative verbs. *Linguistic Typology* 12(1). 1–44.

Harro, Gretchen. 1989. Les extensions verbales en yemba (Bamiléké-Dschang). In Daniel Barreteau & Robert Hedinger (eds.), *Description de langues camerounaises*. Paris: ORSTOM. 239–269.

Hyman, Larry M. 2017. Multiple argument marking in Bantoid: From syntheticity to analyticity. In Walter Bisang & Andrej Malchukov (eds.), *Unity and diversity in grammaticalization scenarios*. Berlin: Language Science Press. 67–95. https://zenodo.org/record/823230#.Y-yvsq2ZM2x

Hyman, Larry M. 2018. Common Bantoid verb extensions. In John R. Watters (ed.), *East Benue-Congo: Nouns, pronouns, and verbs*. Berlin: Lan-

guage Science Press. 173–198. https://langsci-press.org/catalog/view/190/1080/1263-1

Hyman, Larry M. & Erhard Voeltz. 1971. The linguistic status of Bamileke. In Chin-Wu Kim & Herbert Stahlke (eds.), *Papers in African Linguistics*. Carbondale & Edmonton: Linguistic Research Inc. 55–70.

Hyman, Larry M., Erhard Voeltz & Georges Tchokokam. 1970. Noun class levelling in Bamileke. *Studies in African Linguistics* 1. 185–209.

Idiatov, Dmitry & Johan van der Auwera. 2004. On interrogative pro-verbs. Proceedings of the Workshop on the Syntax, Semantics and Pragmatics of Questions, 17–23. Europan Summer Schoolin Logic, Language and Information (ESSLLI) 16, Nancy, France.

Joshua project. Bamileke-Bamenjou in Cameroun. https://joshuaproject.net/people_groups/10623/CM.

Kießling, Roland. 1994. *Eine Grammatik des Burunge*. Köln: Rüdiger Köppe.

kĕ ŋgə̂mba. 2014. *Ttɔ́ mbí ŋwà'á nághă ŋgə̂mbà - Lis et ecris la langue ŋgə̂mbà*. Yaoundé: Éditions Ifrikiya.

Mba, Gabriel. 1997. Les extensions verbales en ghomala'. *Journal of West African Languages* 26(1). 77–101.

Meeussen, Achille E. 1959. *Essai de grammaire rundi*. Tervuren: Musée Royal du Congo Belge.

Mekamgoum, Solange. 2013. *Nàtʃə́k* (rebuking) in Ŋgə̂mbà: A study in face-work across the age and social power ladders. University of Yaoundé I: M.A. thesis.

Mekamgoum, Solange. 2021. Phasal polarity in Ŋgə̂mbà. In Raija L. Kramer (ed.), *The expression of phasal polarity in African languages*. Berlin & Boston: Mouton de Gruyter. 215–236.

Mekamgoum, Solange. 2022. Soliciting, giving, and responding to face-to-face every day's TƏ́K 'ADVICE' in Ngəmba (Western Cameroon): A linguistic and sociocultural perspective. University of Hamburg: PhD.

Mekamgoum, Solange & Roland Kießling. 2022. Ngəmba numeral classifiers. Paper presented at the "First Conference on Bantoid Languages (Banto1d)", 23rd–25th March 2022, Hamburg.

Mensah, Eyo & Solange Mekamgoum. 2017. The communicative significance of Ngə̂mbà personal names. *African Identities* 15(4). 398–413.

Siemund, Peter. 2001. Interrogative constructions. In Martin Haspelmath, Ekkehard König, Wulf Oesterreicher & Wolfgang Raible (eds.), *Language typology and language universals: An international handbook, Vol. 2*. Berlin: Walter de Gruyter. 1010–1028.

DOI 10.15460/auue.2023.96.1.273

Soh, Jean Philippe. 2008. Description morpho-syntaxique du verbe en ŋgə̂mbà. Mémoire de DEA, Université de Yaoundé I.

Soh, Jean Philippe. 2017. *Dictionnaire ŋgə̂mbà - Anglais - Français*. Saarbrücken: OmniScriptum Publishing Group.

Tadajeu, Maurice & Etienne Sadembouo. 1984. *Alphabet général des langues Camerounaises*. Yaoundé: Université de Yaoundé.

Tadjo Fongang, Leonel. 2020. Polar questions in Ŋgə̂mbà (Grassfields Bantu): A cartographic approach. *Italian Journal of Linguistics* 32(2). 99–130.

Ultan, Russell. 1978. Some general characteristics of interrogative systems. In: Joseph H. Greenberg (ed.), *Universals of human language 4: Syntax*. Stanford: Stanford University Press. 211–248.

Watters, John R. 2003. Grassfields Bantu. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*. London & New York: Routledge. 225–256.

Welmers, William E., 1973. *African language structures*. Berkeley: University of California Press.

DOI 10.15460/auue.2023.96.1.273

On the conceptual nature of hybrid adverbials in Isu

Ronald P. Schaefer[a] *& Francis O. Egbokhare*[b]

Southern Illinois University Edwardsville[a] & University of Ibadan[b]
rschaef@siue.edu
francis.egbokhare@gmail.com

Abstract
We review Kießling's (2011) assessment of the emergence of hybrid adverbials from serial verb constructions in Isu of Bantoid and the Narrow Grassfield group of East Benue Congo. He posits two paths, preverbal and postverbal, that coverb elements follow as they abandon verbal properties pertaining to syntax, morphology, and tone. Our focus rests on whether this impressive array of grammatical change might reflect a particular system of semantic concepts. We contend that one lens through which to view such a system consists of a merger of Dixon's secondary concept types and Nuyts' hierarchy of categories conveying clausal modification. To support our contention, we apply the resulting system of semantic concepts to Isu preverbal hybrid adverbials, finding eight conceptual types oriented toward characterization of grammatical subject. Despite the highly tentative nature of this effort, results align with a similar range of conceptual types that occur as preverbs in West Benue Congo Yoruboid and Edoid, which have also grammaticalized from verbs.

Keywords: Isu, Bantoid, hybrid adverbials, preverbs, Benue Congo

1 Introduction

Kießling (2004, 2011) has invigorated serial verb studies in Bantoid (Rolle & Hyman 2016), particularly for the construction type initially identified as modifying by Bamgbose (1974) and later as asymmetric in Aikhenvald (2006, 2018). From his study of Isu (East Benue Congo), Kießling concludes that some verbs in serial verb constructions are evolving into a class of word forms that he identifies as hybrid adverbials (HA).

For this paper, we will suggest that a particular system of conceptual meanings may underlie preverbal HAs. In the linguistics litera-

DOI 10.15460/auue.2023.96.1.289

ture such meanings are sometimes referred to as secondary concepts (Dixon 1991) or clausal modifications (Nuyts 2005). They include concepts pertaining to modality and aspect, although not of the type typically associated with traditional auxiliary or TAM categories. Many of the concepts identified by Dixon and Nuyts appear to characterize a grammatical subject rather than the speaker of an utterance. We will suggest that a system of meanings similar to those of some HAs can be discerned in languages of West Benue Congo and that the meanings of Isu HAs might usefully be compared to preverbs of West Benue Congo.

Isu is spoken in the Northwestern Province of Cameroon by roughly 10,400 speakers. It is a typical member of the West Ring cluster of the Narrow Grassfield group. Isu is SVO with verbal inflection that articulates contrastive viewpoint (perfective/imperfective aspect) and tense (four degrees of past and two degrees of future). It has prefixes that establish twelve nominal form classes as well as agreement on adposition forms. Verbal extension morphology, however, is unproductive. Phonologically, Isu is marked by a 9-vowel inventory as well as labio-velar consonants, and labial and dental affricates. It exhibits tone at high, low, and downstep high values.

As for HAs, Kießling identifies 37 forms that either precede or follow a core verb and manifest some loss of their verbal properties. He concludes that Isu HAs constitute a word class distinct from their verbal origin.

2 Properties of Isu hybrid adverbials

Kießling's analysis of serial verbs follows to some extent the tradition of Aikhenvald (2006). It finds that HAs emerge from asymmetrical serial verb constructions (A-SVC), which show a minor coverb and a major core verb. A core item in an A-SVC is a major element since it belongs to an open class of verbs. It contrasts with a coverb, which is a minor element since it aligns with a closed class of verb forms.

Kießling highlights specific properties that become abandoned as Isu forms shift their status from coverb to HA. These include functioning as core verb of a verbal predication and as base for nominalization by class 5 prefix *i-*. Additional properties pertain to verb as locus of a derivational pattern concerning pluractionality, an aspectual distinction between suffix *Ø/-i* for perfective (PFV) versus *-ə* for

DOI 10.15460/auue.2023.96.1.289

imperfective (IPFV), a tonal distinction in which a prefixed floating low tone in the imperfective occurs on non-initial position verbs in series, and a mark for clause subordination signaled by a prefixed combination of LH tone.

Some of these properties are illustrated in (1–2), where HA forms, respectively, *màŋ* 'just, only' and *mbvámi* 'just, right then' occur. In (1a–b) *màŋ* is differentially marked for viewpoint aspect by perfective (PFV) zero suffix *-Ø* and imperfective (IPFV) suffix *-ə̀*. Each clause shows that *màŋ* agrees with aspect marking on main verb *zɪ̀bì* 'fix.'

(1) a. *ù* *màŋ* *tiálí* *zɪ̀bì* *ŋwɔ̀.*
3SG just carelessly fix CF
'He has just fixed it carelessly.'

b. *ù* *kì* *màŋ-ə̀* *tiál-ə̀* *zɪ̀b-ə̀* *ŋwɔ̀.*
3SG F1 just-IPFV carelessly-IPFV fix-IPFV CF
'He will just fix it carelessly.'

In (2), HA *mbvámí* exhibits more than one morphological mark. It displays subordination (SO) via a floating tone prefix HL, which surfaces as H$^{\downarrow}$H, as well as imperfective (IPFV) suffix *-á*.

(2) *yə́$^{\downarrow}$* *ù* *mbvá$^{\downarrow}$m-á* *zê* *bê.*
as 3SG SO:just-IPFV SO:go:IPFV SO:come:IPFV
'[…] as he was just coming out.'

Not all HAs in Isu shift from coverb to HA in the same way. According to Kießling, two paths are evident: Path A and Path B. Under Path A, a HA is distinct from a coverb in an A-SVC only in one respect. Path A HAs lack syntactic autonomy; they do not predicate on their own. Members retain most verbal morphosyntactic properties. Path A HAs nominalize with *i-*, show segmentally distinct stems for PFV/IPFV, mark inflectional IPFV by a prefixed floating low tone in non-initial position of a verb series, and signal subordination by inflectional prefix HL tone.

Under Path B, HAs abandon more but not all coverb properties. Path B HAs retain limited verbal morphology expressed by tone, since they mark IPFV by inflectional prefix LH floating tone in non-initial position of a verb series and indicate subordination by an inflectional prefix combination of LH tone. Nonetheless, Path B HAs lack syntactic autonomy since they do not predicate on their own. Also, they

DOI 10.15460/auue.2023.96.1.289

neither nominalize with *i-* nor exhibit segmentally distinct stems for PFV and IPFV.

In addition to these different paths characterizing loss of verb properties, HAs appear within a clause in either a preverbal or a postverbal position. Of the 25 Path A forms, 20 are preverbal and five are postverbal (Tables 1 and 2).

Table 1. Preverbal Path A hybrid adverbials

bɔ̀ʔ	'earlier'
kád	'exceptionally, exclusively'
kàm	'again, at all, somehow'
kúŋí	'however, instead, but'
kwáʔí	'extremely reduced'
màŋ	'just, only'
mbáb	'fast, quickly'
mbáŋ	'really, clearly, evidently'
mbɔ̀ŋ	'nevertheless, all the same, even though'
mbvámí	'just, right then, exactly'
nám	'still'
ɲáŋ/ɲáʔí	'a bit, a little'
ndɔ̀ʔ	'deliberately, intentionally, with effort'
ndáŋ/ndʌŋ	'very much'
ndwàm	'hesitantly, at all, absolutely'
ndzə̀m	'truly'
ntwámí /twámí	'at once, immediately, just then'
tsɨ́m	'seriously, even, definitely'
tsə̀ŋ	'always, habitually'
tyìmì	'not properly, wrongly'

Table 2. Postverbal Path A hybrid adverbials

kʰè	'without effect, failingly, in vain'
kiábí	'about, around'
kwài	'successfully, fortunately'
kwú	'enough'
táŋ	'readily, totally, forever, once and for all'

DOI 10.15460/auue.2023.96.1.289

Exemplars of Path B HAs total twelve. They are evenly split between preverbal and postverbal positions (Tables 3 and 4).

Table 3. Preverbal Path B hybrid adverbials

bánə́	'enough'
káŋə́	'never'
ŋgé	'very much'
ŋgɔ́ŋə́	'as well, equally'
sɨ̀ə̀	'then, consequently'
tàʔà	'probably'

Table 4. Postverbal Path B hybrid adverbials

dzɨ̀	'actually, evidently, clearly, for a moment'
kə́	'only'
sɔ̀ʔɔ̀	'also'
tsə̀/tsə̀ŋ	'always, habitually'
wɔ̀	'hither (bu)'
yə̀	'thither'

What we find in these examples besides an interesting list of forms and their associated meanings is the outcome of a grammaticalization process whereby verbs and their lexical meanings become reanalyzed as forms exhibiting grammatical meanings. The question we ask is whether underlying this grammatical reformulation of HAs there might be a system of semantic meaning types.

3 Conceptual types of Dixon and Nuyts

To proceed, we concentrate on Isu hybrid adverbials (HAs) that precede a verb and assess their relation to meaning types identified in Dixon (1991, 2006, 2010) as secondary concepts (SC) and in Nuyts (2001, 2005, 2006, 2016) as clausal modifications (CM).

Dixon identifies a class of linguistic concepts informed by comparison of verb and non-verb structures among indigenous languages of Australia and the Pacific Region as well as Standard Average European. Across languages, members of this class are realized as either verbs or grammatical forms. In contrast is another class of concepts that tend to be realized more exclusively as verbs. In addition, those concepts realized more often as verbs take noun phrases as subject

DOI 10.15460/auue.2023.96.1.289

and direct object. Concepts that show more flexibility, when coded as verbs, tend to take complement clauses as subject and/or direct object. Dixon refers to the more rigidly verbal items as primary concepts and the less rigidly verbal items as secondary concepts. For a language like English, primary concepts are realized by verbs that take noun phrases as subject and direct object. Secondary concepts, also coded by verbs, semantically modify a primary verb, and tend to take some type of complement clause as subject and/or direct object.

Among the secondary concept classes identified in Dixon (1991: 168–204, 2010: 401) are the following four types (Table 5).

Table 5. Secondary concept classes

Secondary A Class
1 NEGATORS
2 SEMI-MODAL & MODAL
3 PHASAL (BEGINNING-ENDING)
4 HURRYING
5 DARING
6 TRYING

Secondary B Class
1 WANTING
2 POSTPONING

Secondary C Class
1 MAKING
2 HELPING

Secondary D Class
1 SEEM
2 MATTER/HAPPEN

Our chief interest is with non-modal Class A secondary concepts. They are illustrated with English meanings in Table 6.

Table 6. Non-modal Class A secondary concepts

Negators:	‘lack,’ ‘without NP’
Semi-Modals:	‘can, be able’(cf. modals: ‘will,’ ‘must,’ ‘might’)
Phasal:	‘start,’ ‘begin,’ ‘continue,’ ‘cease,’ ‘finish’
Tryings:	‘try,’ ‘succeed,’ ‘fail’
Hurryings:	‘hurry,’ ‘hasten,’ ‘dawdle’
Darings:	‘dare,’ ‘venture’

DOI 10.15460/auue.2023.96.1.289

A somewhat similar range of meanings has been examined within the domain of clausal modification. Nuyts (2005: 20) offers a hierarchical schema of categories that encompass clausal modification. He bases his hierarchy, shown below in Fig. 1, on order and scope relations among clausal modifiers in a subclass of Germanic languages.

Evidentiality
Epistemic modality
Deontic modality
Time
Space
Quantificational aspect
Qualificational aspect
Parts of States of Affairs

Figure. 1 Schema of hierarchically ordered categories of clause modification

Our primary interest in the Nuyts schema concerns two categories at the lower end of the hierarchy, although not necessarily with their suggested order of occurrence within a clause. "Qualificational Aspect" is concerned with the internal constitution of a state of affairs, its internal phases, e.g. notions like 'start,' 'finish,' 'continue'. "Quantificational Aspect" of a state of affairs, on the other hand, pertains to quantitative relations reflected in such notions as 'together'. Moreover, Nuyts holds that modality of the dynamic type is a subcategory of "Quantificational Aspect". "Dynamic modality" is concerned with the inherent capacity or internal potential of a subject participant to do something.

4 Conceptual types among Isu hybrid adverbials

Using the full schema of Nuyts we have undertaken a preliminary assessment of Kießling's HAs. We find that the only clausal qualifications from the Nuyts schema not found in Kießling's database are Evidentials, Deontics, Time, Space, and Parts. There are two instances of tense (*mbvámí* 'right then', *sɨə̀* 'then') for which we posit a relative tense status rather than one of absolute tense. A larger number of exemplars (six) fall to Epistemic Modality (*mbáŋ* 'evidently', *ndwàm* 'absolutely', *tàʔà* 'probably', *nám* 'still, despite conditions', *mbɔ̀ŋ* 'even though', *ndzə̀m* 'truly'), which is neither Qualificational nor Quantificational. Obviously, these initial category assignments are highly ten-

DOI 10.15460/auue.2023.96.1.289

tative, based solely on translations of Isu offered by Kießling. Some assignments surely require further investigation, e.g., *sɪà* as relative tense 'then, later on' or epistemic 'certainly'.

Beyond this simple matching of Kießling's Isu data with conceptual types from Nuyts, we have attempted to forge a union of Dixon's secondary concepts (SC) of Class A and Nuyts' clausal modification (CM) concepts of Quantificational Aspect and Qualificational Aspect. The result is eight conceptual types that tend to be oriented toward the grammatical subject along a range of dimensions, including negators (NEG), participant quantification (QUAN), aspectual quantification (ASP), phasal qualification (PHA), temporal (TEMP), manner demonstrative (MAN), volitional/ability (VOLA), and capacity (CAP).

We find that of these eight possible conceptual types that overlap among SCs and CMs, seven are evident in Kießling's analysis of Isu. These category types and exemplars are shown in Table 7.

Table 7. Conceptual types and exemplars found among preverbal Isu HAs

CAT	HAs from Isu
NEG	*káŋá* 'never' *tyìmì* 'improperly'
QUAN	*bánà* 'enough' *kwáʔí* 'reduced extent' *ɲáŋ* 'a bit' *ndáŋ* 'very much' *ŋgé* 'very much' *ŋgɔ́ŋá* 'equally'
ASP	*kàm* 'again'
PHA	[e.g. 'start,' 'cease']
TEMP	*bɔ̀ʔ* 'earlier' *mbáb* 'quickly' *ntwámíat* 'just then'
MAN	*yà* 'thither'
VOLA	*ndɔ̀ʔ* 'deliberately'
CAP	*tsɨ́m* 'seriously'

Relative to Table 7, we can entertain the possibility that for some HAs in Isu their original coverb meanings have begun to evolve toward conceptual types aligned with Dixon's secondary concepts and Nuyts' clause-level modifications. To illustrate further several of these con-

DOI 10.15460/auue.2023.96.1.289

ceptual types and their associated HAs, we present the sentences in (3–5), where we find, respectively, HA *bɔ̀ʔ* 'earlier on,' *kàm* 'again,' and *ndɔ̀ʔ* 'deliberately.' In (3), *bɔ̀ʔ*, which we have assigned to the temporal conceptual type, occurs with imperfective suffix -ɔ̀. Other grammatical markers in this sentence correspond to near future F1 and immediacy IMM.

(3) *wɔ̀* *kì* *bɔ̀ʔ-ɔ̀* *líáa* *kʰɛ̀* *tsə́* *dzɨ̀*
2SG F1 earlier-IPFV look-IPFV in.vain IMM actually
ŋwɔ̌ *ˡwé.*
CF 3SG
'You still first of all look down on him.'

In (4), *kàm* from the aspectual type appears with verbal noun (VN) prefix *-í-* and preceding that a P3 (distant past) tense marker.

(4) *ú* *ˡkʰú* *áˡn-í-kàm* *fàʔ* *fórí.*
3SG.P3 have to-VN-again work increase
'So he had to work again.'

Relative to the conceptual type capacity, HA *ndɔ̀ʔ* is shown in (5) with a preceding grammatical form that combines immediate past (P1) with focus (FOC).

(5) *mə́* *mə́* *ndɔ̀ʔ* *twɔ́ŋɔ́* *ˡwé.*
1SG P1.FOC deliberately call 3SG
'I have intentionally called for him.'

5 Conceptual types in West Benue Congo

Despite the highly preliminary nature of our findings, we can begin to glimpse the potential value of comparative-historical research that would employ elements of the Dixon-Nuyts conceptual framework and apply them not only to Bantoid of East Benue Congo but also to West Benue Congo (WBC). Such a comparative framework might center on verb series elements and their form/function evolution toward categories realizing secondary concepts and clause level modification (perhaps postverbal modification as well).

To this end, we briefly consider the relation of HAs to a word class identified in West Benue Congo as preverb (Bamgbose 1967: 18). Various Yoruba scholars, among them Bamgbose (1966, 1967),

DOI 10.15460/auue.2023.96.1.289

Rowlands (1969), Awobuluyi (1978), have each identified Yoruba preverb forms and their respective meanings. In Table 8 we present samples of Yoruba preverbs arranged tentatively according to our modified conceptual framework from Dixon-Nuyts.

Table 8. Yoruba preverb forms from Bamgbose (B), Rowlands (R), and Awobuluyi (A) in our modified Dixon-Nuyts conceptual framework

CAT	Preverb B ’66/’67	Preverb R ’69	Preverb A ’78
NEG	*dédé* ‘by chance’ *kúkú* ‘in fact’ *sáà* ‘just’ *tiè* ‘even’ *mà/máa* ‘emphatic’	*dédé* ‘by chance’ *kúkú* ‘in fact, rather’ *sá* ‘at least, any rate’ *tilè/tèè* ‘in fact’ *wulè* ‘for no reason’ *dára* ‘not good’	*dédé* ‘suddenly’ *kúkú* ‘had better’ *sáà* ‘no purpose’ *tilè/tiè* ‘even’ *mà* ‘in fact’ *wulè* ‘in vain’ *jɛ́* ‘had better’ *kàn* ‘simply’ *tètè* ‘no delay’
QUAN	*jùmɔ̀* ‘together’ *túnbɔ̀* ‘further’ *nìkan/kàn* ‘alone’ *nìkɔn/kɔ̀n* ‘alone’ *fi* ‘with’ *ba* ‘with, for’	*jumɔ/jɔ* ‘together’ *túbɔ̀* ‘further’ *gidigidi* ‘very much’	*jùmɔ̀ jɔ* ‘together’ *nìkan* ‘only, alone’
ASP	*tún* ‘again’ *shì* ‘still’ *máa* ‘continue’	*sì* ‘still’ *sálɔ* ‘away’	*túbò/tún* ‘again’ *shìn* ‘still’ *pàpà* ‘still’
PHA	*fɛ́rèɛ́* ‘almost’ *sábàá* ‘usually’ *jàjà* ‘managed to’	*fɛ́rèɛ́* ‘almost’	
TEMP	*kɔ́kɔ́/kɔ́* ‘first’ *sèsè* ‘have just’ *tètè* ‘quickly’	*kɔ́kɔ́/kɔ́ɔ́* ‘first, early’ *sɛ̀sɛ̀* ‘just then’ *tètè* ‘early’ *ha* ‘then’ *rɔra* ‘gently, quietly’ *yára* ‘quickly’	*kɔ́kɔ́/kɔ́* ‘first’ *sèsè* ‘just now’ *jàjà* ‘at last, finally’ *bá* ‘then’

DOI 10.15460/auue.2023.96.1.289

MAN		*báyǐí* ‘like this’ *báun* ‘like that’ *béé* ‘like that, so’	
VOLI	*lè* ‘can, be able’ *mɔ̀ɔ́mɔ̀* ‘intentional’	*lè* ‘can’ *mɔ̀ɔ́mɔ̀* ‘deliberately’ *kàn* ‘merely, just’	*lè* ‘be able’ *mɔ̀ɔ́mɔ̀* ‘intentional’ *dìídì* ‘intentional’
CAP	*Ø*		

Preverbs also occur in Edoid Emai (Schaefer & Egbokhare 2017). They differ from auxiliaries in their interaction with imperatives. Imperatives allow preverbs but reject auxiliaries. Preverbs also differ from verbs. While verbs are lexically toneless and receive grammatical tone from aspect and tense values, preverbs have a fixed lexical tone that is affected further by grammatical tone values. A sample of preverbs from Emai appears in Table 9.

Table 9. Preverb samples from Edoid Emai

CAT	Preverb
NEG	*dùù* ‘without reason’ *kùkù* ‘without fail’
QUAN	*gbà* ‘together’ *zèmì* ‘very / very much’ *zèzè* ‘a bit, not quite’
ASP	*chè* ‘again’ *gbò* ‘too, also’ *sè* ‘continue to, still’
PHA	*yà* ‘nearly started’ *mɔ̀* ‘nearly completed’
TEMP	*bòbɔ̀* ‘promptly’ *kpàò* ‘earlier’ *guè* ‘unexpectedly’ *tuà* ‘hurriedly’
MAN	*ìyɔ́* ‘that way’ *ìná* ‘this way’
VOLI	*dábɔ̀* ‘deliberately’ *dóbɔ̀* ‘mistakenly’ *dúdà* ‘defiantly’ *mìtì* ‘ability’

DOI 10.15460/auue.2023.96.1.289

CAP	*dègbè* ‘cautiously’ *gbùdù* ‘courageously’ *tòtóbɔ̀* ‘intensely’ *kàkégbè* ‘by persevering’

What these Emai preverbs have in common is an orientation toward grammatical subject. Each preverb item relates to some dimension of a grammatical subject that is involved in event expression. A selection of preverbs with qualitative or quantitative associations to grammatical subject are presented in sentences (6–9).

Preverbs from the negator and phasal conceptual types are shown in (6) and (7), respectively. Ingressive (ING) *yà* appears in (6) with the distributed tonal pattern for proximal (PRX) past (PST), as does the ‘no reason’ form *dùù* in (7).

(6) *ɔ́lí ɔ́mɔ̀hè yà é ɔ́lí émàè.*
ART man:PRX PST:ING eat ART food
‘The man almost started eating the food.’

(7) *ɔ́lí ɔ́mɔ̀hè dúù gbé ɔ́lí ófè.*
ART man:PRX PST:naught kill ART rat
‘The man killed the rat for no reason.’

In (8) and (9) preverbs from the quantitative and volitive conceptual types are exemplified. Collective (COL) *gbà* in (8) occurs with the distributed tonal pattern for distal (DST) past (PST), as does volitive *mìtì* in (9).

(8) *élí ímɔ́hé ˩gbá híán ɔ́lí óràn.*
ART men:DST PST.COL cut ART wood
‘The men cut the wood together.’

(9) *ɔ́lí ɔ́mɔ́hé ˩mítì gbé ɔ́lí ɛ́wè.*
ART man:DST PST.able kill ART goat
‘The man was able to kill the goat.’

6 Conclusion

Kießling has identified an emerging class of forms in the Bantoid language Isu. Formally, they have occurred as coverbs in asymmetric serial verb constructions, where they preceded a core or major verb.

DOI 10.15460/auue.2023.96.1.289

They also manifested different stages of grammaticalization leading to adverb status. Kießling identifies this class of forms as hybrid adverbials. Functionally, their conceptual meanings bear on clause level modification.

It is our contention that HAs reveal conceptual similarity to preverbs that are found among West Benue Congo languages. Like HAs, preverbs provide evidence of previous or concurrent verb status, perhaps most clearly in Edoid, and manifest conceptual meanings that by their nature modify clausal elements, as suggested by our review of the Dixon-Nuyts conceptual framework.

It may thus prove fruitful to compare preverbs in WBC and HAs in EBC Bantoid more extensively. They provide a natural test for the conceptual framework provided by Dixon and Nuyts (and perhaps others). Ultimately, we may gain additional insight into the emergence of non-verb categories of clausal modification and secondary conceptualization from the way verbs in series are structured and evolve.

In this regard, we have one final comment on Kießling's overall stages of the grammaticalization path from verb to HA. According to Kießling there are four stages (I–IV) in the reanalysis of HAs.

I Verb undergoes semantic extension: result is polysemy with full verb and coverb.
II Full verb is dropped: result is coverb remains and retains all verbal properties, producing HA of Path A.
III Coverb loses verbal properties coded by segmental markers: result is retention of verbal properties marked exclusively by tone, producing HA of Path B.
IV Coverb loses tonal relics of verbal status: result is prototypical adverbs, which are maximally distinct from verbs.

We appreciate the complexity and detail of these stages. But we also wish to note that Stage II, dropping of a full verb in favor of its HA, does not occur with the same immediacy in West Benue Congo. Preverbs and the verbs or verb phrases from which they derive most often co-exist in our database for Edoid (and other WBC languages). It is not that the verbs do not drop out, they may eventually do so. But in Edoid, verbs seem content to co-exist with their related preverbs.

DOI 10.15460/auue.2023.96.1.289

Abbreviations

ꜜ downstep, 2 second person, 3 third person, ART definite article, ASVC symmetrical serial verb construction, ASP aspectual quantification, CAP capacity, CF clause focus, CM clausal modification, COL collective, DST distal, F1 immediate future, FOC focus, H high tone, HA hybrid adverbial, IMM immediacy, ING ingressive, IPFV imperfective, L low tone, MAN manner demonstrative, NEG negation, P1 immediate past, P3 distant past, PFV perfective, PHA phasal qualification, PRX proximal, PST past, QUAN participant quantification, SC secondary concept, SG singular, SO subordination, SVO subject, verb, object; TAM tense, aspect, modality; TEMP temporal, VN verbal noun, VOLA volational/ability, WBC West Benue Congo.

References

Aikhenvald, Alexandra Y. 2006. Serial verb constructions in typological perspective. In Alexandra Y. Aikhenvald & Robert M. W. Dixon (eds.), *Serial verb constructions: A cross-linguistic typology*. New York: Oxford University Press. 1–68.

Aikhenvald, Alexandra Y. 2018. *Serial verbs*. New York: Oxford University Press.

Awobuluyi, Oladele. 1979. *Essentials of Yoruba grammar*. Ibadan: University Press Limited.

Bamgbose, Ayo. 1974. On serial verbs and verbal status. *Journal of West African Languages* 9(1). 17–48.

Bamgbose, Ayo. 1966. *A grammar of Yoruba*. Cambridge: Cambridge University Press.

Bamgboṣe, Ayo. 1967. *A short grammar of Yoruba*. Heinemann Books: Ibadan.

Bendor-Samuel, John. (ed.) 1989. *The Niger-Congo languages*. New York: University Press of America.

Dixon, Robert M. W. 1991. *A new approach to English grammar, on semantic principles*. Oxford: Clarendon Press.

Dixon, Robert M. W. 2006. Serial verb constructions: Conspectus and coda. In Alexandra Y. Aikhenvald & Robert M. W. Dixon (eds.), *Serial verb constructions: A cross-linguistic typology*. New York: Oxford University Press. 338–350.

Dixon, Robert M. W. 2010. *Basic linguistic theory*. Vol. 2. New York: Oxford University Press.

DOI 10.15460/auue.2023.96.1.289

Kießling, Roland. 2004. The giraffes burst throw emerge climb pass through the roof of the hut: Verb serialization in the West Ring languages (Isu, Weh, Aghem). In Akinbiyi Akinlabi & Oluseye Adesola (eds.), *Proceedings of the 4th world congress of African linguistics, New Brunswick 2003*. Köln: Rüdiger Köppe Verlag. 225–235.

Kießling, Roland. 2011. *Verb serialisation in Isu (West-Ring)*. Köln: Rüdiger Köppe Verlag.

Nuyts, Jan. 2001. *Epistemic modality, language, and conceptualization.* Amsterdam: John Benjamins.

Nuyts, Jan. 2005. The modal confusion: On terminology and the concepts behind it. In Alex Klinge & Henrik Høeg Müller (eds.), *Modality: Studies in form and function*. London: Equinox. 5–38.

Nuyts, Jan. 2006. Modality: Overview and linguistic issues. In William Frawley (ed.), *The expression of modality*. Berlin: Mouton De Gruyter. 1–26.

Nuyts, Jan. 2016. Surveying modality and mood: An introduction. In Jan Nuyts & Johan van der Auwera (eds.), *The Oxford handbook of modality and mood*. New York: Oxford University Press. 1–8.

Rolle, Nicholas & Larry M. Hyman. 2016. Review of Verbal serialization in Isu (West-Ring) – a Grassfields language of Cameroon, by Roland Kießling, 2011, Köln: Köppe. *Linguistic Typology* 20(3). 675–685.

Rowlands, Evan C. 1969. *Yoruba.* London: Hodder and Stoughton.

Schaefer, Ronald P. & Francis O. Egbokhare. 2017. *A grammar of Emai.* (Mouton Grammar Library Series). Berlin: Mouton de Gruyter.

DOI 10.15460/auue.2023.96.1.289

In memoriam

In memoriam Alexander Neil Skinner 13. November 1921–7. März 2015

Wir alle brauchen Ankerplätze im Meer unserer Lebensreise. Orte und Menschen, die unser Vertrauen haben, wo wir das seltene Geschenk der Geborgenheit erfahren dürfen. Immer wieder steuern wir sie an, verweilen ein wenig voller Freude über das Wiedersehen und stechen beglückt und dankbar wieder in See. Zu diesen besonderen Orten und Menschen gehörte für mich das Heim von Neil und Meg (Margaret) Skinner. Immer wenn ich in die Vereinigten Staaten reiste, meist zum Besuch eines American Oriental Society Kongresses oder einer North American Conference on Afroasiatic Linguistics (NACAL), machte ich auch einen Abstecher zu Skinners nach Madison. Neil erzählte oft aus seinem ereignisreichen Leben, und wir pflegten Stunden und Tage herzlicher Freundschaft. Am 7. März 2015 ist Neil im Alter von 93 Jahren gestorben. Diese meine Gedanken und Erinnerungen gelten dem unvergesslichen Kollegen und Freund.

Geboren wurde Alexander Neil Skinner am 13. November 1921 in Hankou, China. Die Schule besuchte er in England. Dabei zeichnete er sich vor allem durch besondere Leistungen in den klassischen Sprachen Griechisch und Latein aus. Das Studium in Cambridge musste er 1941 – es herrschte Krieg – abbrechen. Seinem Wunsch, für den Kolonialdienst auf der Insel Fiji eingesetzt zu werden, wurde nicht entsprochen; das Colonial Office sah dafür aber Nordnigeria vor, wo er dann u.a. als District Officer in Gombe und Bauchi tätig war, bevor er in die Dienste der Northern Region Literature Agency (NORLA) wechselte. In all diesen Jahren erwarb er sich gute Kenntnisse nicht nur des Hausa, sondern auch des Fulfulde und Arabischen. NORLA war dazu bestimmt, Schriften in einheimischen Sprachen, vor allem aber Lehrmaterialien zur Hausa-Sprache, zu veröffentlichen und in den Schulen zum Einsatz zu bringen. Hier war Neil Skinner in seinem Element. Zwischen 1958 *(Hausa for beginners)* und 2001 publizierte er mehr als fünfzig Monographien und Artikel, die vor allem dem Hausa und seiner praktischen Verwendung an den Schulen Nordnigerias gewidmet sind. So erschien z.B. 1977 *A grammar of Hausa* "for Nigerian secondary schools and colleges". Im selben Jahr publizierte Skinner außerdem *An anthology of Hausa literature in translation*. Neben Hausa galt sein Interesse aber auch den beiden anderen

DOI 10.15460/auue.2023.96.1.337

Hauptsprachen Nordnigerias, Fulfulde und Kanuri. 1979 erschien unter Mitarbeit von Corinne A. Pelletier *Adamawa Fulfulde. An introductory course* und 1981, zusammen mit John P. Hutchinson, *A reference grammar of the Kanuri language*.

Eine kleine Episode aus dem Privatleben, die Neil gerne erzählte, sei hier wiedergegeben. Seine junge Frau Philippa war in ihrer ersten Zeit in Nordnigeria noch nicht des Hausa so mächtig, dass ihr gewisse Feinheiten der Sprache bewusst gewesen wären. So sagte sie eines Tages dem Hausdiener: "*Ka shirya ruwan tsafi!*" Was sie sagen wollte, war, dass er (für den Herrn des Hauses) heißes Wasser zu dessen Rückkehr vom Dienst bereiten sollte. Dabei hatte sie *tsafi* ‚Zauber' und *zafi* ‚Hitze, heiß' verwechselt. Es war nur natürlich, dass der Junge die Zumutung, für den Herrn Zauberwasser bereiten zu sollen, entrüstet ablehnte! So fand schließlich Neil bei seiner Heimkehr kein heißes Badewasser vor, dafür eine zornige Ehefrau und einen trotzigen Hausjungen.

Im Jahre 1970, nach der Trennung von seiner Frau Philippa, die Neuseeland nicht verlassen wollte, heiratete Neil Margaret (Meg) Gardner. Ihr gemeinsamer Sohn Benjamin, der 1976 geboren wurde, wurde später bekannt durch die bedeutende Schrift *A crime so monstrous: Face-to-face with modern-day slavery*.

In den 70er Jahren wandte sich Neil, zusammen mit seiner Frau Margaret, der Erforschung eines bis dahin wenig beachteten Teilbereichs des Westtschadischen, den Nordbauchisprachen, zu, woraus vor allem der wichtige Beitrag *North Bauchi Chadic languages: Common roots* in der Zeitschrift *Afroasiatic Linguistics* resultierte.

Wie vielseitig und flexibel Neil Skinner sprachlich war, zeigt sich auch an der Tatsache, dass er während seiner Tätigkeit in Neuseeland sehr schnell Maori lernte und bald in der Lage war, Unterricht zur Grammatik der Sprache der Maori zu erteilen.

1963, als in den Vereinigten Staaten im Zusammenhang mit den afrikanischen Unabhängigkeitsbewegungen Afrika in den Fokus rückte, erhielt Neil Skinner einen Ruf an die UCLA – ein wohl einmaliges Ereignis, hatte Neil doch an akademischen Graden nur einen B.A. vorzuweisen, den er 1961 an der University of London erworben hatte. 1966 ging er an die Universität Madison, wo er bis 1989 am African Languages and Literature Department wirkte. Er lehrte und forschte in diesen Jahren vor allem zu bzw. in den Sprachen Hausa,

DOI 10.15460/auue.2023.96.1.337

Fulfulde und Arabisch. 1983 war er an der Erstellung des ersten Wörterbuchs Hausa-Chinesisch in Beijing beteiligt.

Neils Gesamtpersönlichkeit spiegelt sich in den beiden autobiographischen Büchern *Burden assumed: the making of a colonial Candide* und *Burden at sunset: last days of empire* wieder. Darin kommt auch seine humanistische Bildung, sein historisch-kritischer Sinn, seine weise Art, das Leben mit einer Prise Ironie zu nehmen, vor allem aber auch seine unzerstörbare Liebe zum Leben und zu den Menschen, die ihm nahestanden, zum Ausdruck. Requiescat in pace.

Herrmann Jungraithmayr

Bibliographie

Skinner, Alexander Neil. 1958. *Hausa for beginners*. Zaria: Northern Nigeria Publishing Company Limited.

Skinner, Alexander Neil. 1977. *An anthology of Hausa literature in translation*. Madison: African Studies Program, University of Wisconsin-Madison.

Skinner, Alexander Neil. 1977. North Bauchi Chadic languages: Common roots. *Afroasiatic Linguistics* 4(1). 1–49.

Skinner, Alexander Neil. 1985. *Burden assumed: the making of a colonial Candide*. Madison: selfpublishing.

Skinner, Alexander Neil. 1996. *Burden at sunset: last days of empire*. Madison: African Studies Program, University of Wisconsin-Madison.

Skinner, Alexander Neil & Corinne A. Pelletier. 1979. *Adamawa Fulfulde. An introductory course.* Madison: African Studies Program, University of Wisconsin-Madison.

Skinner, Alexander Neil & John P. Hutchinson. 1981. *A Reference grammar of the Kanuri language*. Madison: African Studies Program, University of Wisconsin-Madison.

Skinner, E. Benjamin. 2008. *A crime so monstrous: face-to-face with modern-day slavery*. New York: Free Press.

DOI 10.15460/auue.2023.96.1.337

Jürgen Zwernemann (1929–2022)

Mit dem Tode von Jürgen Zwernemann am 3. Oktober vergangenen Jahres beklagen wir das Ende einer bedeutsamen Ära der wissenschaftlichen Annäherung an die Menschen in Afrika, an ihre Kulturgeschichte und ihre Sprachen. Sie war einst von Diedrich Westermann begründet worden.

In Bremen geboren und aufgewachsen, studierte Jürgen Zwernemann Ethnologie (mit Anglistik und Geografie im Nebenfach) in Mainz und Hamburg und wurde 1954 in Mainz promoviert; 1966 folgte die Habilitation in Tübingen. Er war zunächst an der Staats- und der Universitätsbibliothek in München tätig, um sich dann hauptamtlich der Museumsarbeit zu widmen, erst am Linden-Museum in Stuttgart (von 1960 an), seit 1971 als Direktor des Völkerkunde-Museums in Hamburg, wo er 1992 in den Ruhestand ging. Lange Zeit, beginnend mit Band 55 (1971/72) und endend mit Band 82 (1999), unterstützte Jürgen Zwernemann *Afrika und Übersee* in der Redaktion und als Mitherausgeber. Über viele Jahre hinweg wirkte er darüber hinaus als Gutachter der DFG.

Wie Jürgen Zwernemann mehrfach betonte, war er in erster Linie Ethnologe, geprägt vor allem durch seine Lehrer Adolf Friedrich und Hermann Baumann. Zeit seines Lebens jedoch war er auch Afrikanist. So ist dieser Nachruf im Wesentlichen dieser Seite seines wissenschaftlichen Lebens gewidmet. Noch zu Beginn seiner Studienzeit in Mainz hatte ihn Ludwig Rapp in das Swahili eingeführt; das eigentliche Rüstzeug zu afrikanistischer Forschung aber erwarb er sich in Hamburg bei Johannes Lukas und vor allem bei Emmi Kähler-Meyer. Er war stets einem gesamtheitlichen Forschungsansatz verpflichtet: Wie kaum ein anderer deutscher Ethnologe seiner Generation näherte er sich auch wissenschaftlich den Sprachen der Menschen, deren Lebensweise(n) und Weltsichten zu erkunden und zu beschreiben er sich als Ziel gesetzt hatte. Dies tat er mit gleicher bewunderungswürdiger Akribie und Ausdauer auf beiden Feldern, der Ethnologie wie der Afrikanistik.

Methodologisch der teilnehmenden Beobachtung verpflichtet, ergänzt durch nicht-standardisierte Interviews, heben sich seine ethnologischen Arbeiten von vielen anderen seiner Zeit insbesondere dadurch ab, dass er Berichte und Zeugnisse aus dem Munde seiner afrikanischen Mitarbeiter möglichst wortgetreu wiederzugeben

DOI 10.15460/auue.2023.96.1.334

suchte. Sorgfältig notierte er Namen und den sozialen Hintergrund aller seiner Informanten. Ebenso selbstverständlich fügte er jedem Begriff (und den entsprechenden Tätigkeiten) den jeweiligen Sprachausdruck hinzu, nicht nur in einfacher Zitierform, sondern möglichst auch mit grammatischen und etymologischen Anmerkungen versehen; wie er auch stets bemüht war, die Arbeiten früherer Autoren mitzuberücksichtigen. So betont er in einer Buchbesprechung: „Für die Geschichte eines Faches ist es wichtig, die geistigen Wurzeln wegweisender Persönlichkeiten zu kennen“ (Zwernemann 1991: 297). Dieser in jeder Hinsicht umfassende Ansatz zieht sich von Anfang an durch all seine Veröffentlichungen.

Seine afrikanistischen Arbeiten (s. Bibliographie) erschienen vor allem zu Beginn seiner Publikationstätigkeit. Dies ist u.a. dem Umstand geschuldet, dass Kunz Dittmer, den er 1954/55 auf einer Forschungsreise in den Süden des damaligen Obervolta begleiteten durfte, ihm ‚nur die Linguistik‘ zur selbständigen Feldforschung überließ, und er später zunehmend von seiner Tätigkeit in den Museen in Anspruch genommen wurde.

In einer Zeit, als André Prost gerade begonnen hatte, die sprachlichen Aufzeichnungen seiner Missions-Mitbrüder zu bearbeiten und in systematisch identisch strukturierten Einzelbeschreibungen zu veröffentlichen, und noch bevor Gabriel Manessy seine großen vergleichenden Studien zu den Gur-Sprachen vorgelegt hatte, lieferte Jürgen Zwernemann also wichtige Beiträge zur Grundlagenforschung in den Gur-Sprachen, insbesondere für die Gurunsi-Sprachen Kasim, Lyele und Nuni. Er nahm regelmäßig an den Konferenzen (damals noch zur ‚Linguistique Négro-africaine‘) der französischen Afrikanisten teil, wo er z.B. auf einen dritten Verbstamm (neben einem imperfektiven und perfektiven Aspekt) innerhalb der Verbsysteme des Kasim und Nuni aufmerksam machte (1963), oder er trug eine vergleichende Übersicht zu den Nominalklassensystemen der Gurma-Sprachen vor (1967b). So wurde ihm, dem Ethnologen, auch die Aufgabe übertragen, die in Koelles *Polyglotta Africana* (1854) enthaltenen Kasim-Dialekte zu identifizieren (1967a), als man in den 60er Jahren daran ging, diese wichtige frühe Quelle aufzuarbeiten. Alle übrigen Sprachgruppen waren erfahrenen Afrikanisten zur Bearbeitung übergeben worden. Zur gleichen Zeit etwa beschäftigte sich Jürgen Zwernemann mit einem weiteren Fund aus einer beinahe vergessenen ethnographischen Quelle (Nina Rodrigues *Os Africanos no*

DOI 10.15460/auue.2023.96.1.334

Brasil, auf die laut Zwernemann nur Greenberg aufmerksam gemacht hatte). Es handelt sich um eine 166 ‚Gurunsi'-Wörter umfassende Liste, die Zwernemann mit Hilfe der entsprechenden Sammlungen von Koelle (1854), Westermann (1913/14) und Rattray (1932) und seinen eigenen Erhebungen eindeutig als Buli identifizieren konnte, das heute nicht dem ‚Gurunsi', sondern dem Oti-Volta-Zweig als weiteren Zweig des ‚Zentral-Gur' zugeordnet wird. Zwernemann veröffentlichte diese Studie im Jahre 1968. Schon zuvor hatte er seinen historisch-vergleichenden Ansatz dokumentiert, indem er die teilweise erodierten nominalen Klassensysteme der ihm bekannten Gurunsi-Sprachen verglich und eine innerhalb des Gurunsi nur noch im Lyele (aber im weiteren Oti-Volta-Vergleichsrahmen häufiger) bewahrte Nominalklasse identifizieren konnte (1958a).

Immer wieder (und teils deutlich verärgert über die mangelnde Sorgfalt anderer Autoren) setzte er sich mit orthographischen Problemen und abweichenden Schreibweisen der afrikanischen Ethno- und Glottonyma auseinander (1958b, 1959). In einem weiteren Beispiel (1964b) für seine akribische, die linguistische wie auch die ethnologische Ebene berücksichtigende, Arbeitsweise zeigt er am Beispiel der Begriffe ‚Gehöft' und ‚Erde', wie die inhaltlichen Füllungen der jeweiligen indigenen Wörter die Wortfeldgrenzen auflösen, indem sie gleichsam mäandernd durch diese hin- und her wandern; er betont: „Ich möchte … aufzuzeigen versuchen, wie wichtig möglichst umfassende Angaben zu scheinbar einfachen und selbstverständlichen Wortbedeutungen sind" (1964b: 284f.). Und nicht zu vergessen, seine Vokabulare, aufbewahrt in den (berühmten) Schuhkartons!

Dank seines langen Lebens konnte Jürgen Zwernemann seinen wissenschaftlichen Nachlass wohl ordnen und aufbereiten: Im Jahre 2014 erschien sein ethnologisches Vermächtnis in Form einer 622 Seiten umfassenden Monografie *Ethnologische Afrikaforschung vor 60 Jahren. Bei den Kassena und Nuna in Burkina Faso und Ghana.* Einige Jahre zuvor hatte er seine letzten linguistischen Zettelkästen zur Sprache der Schmiede im Südwesten von Burkina Faso (1996) und zum Kasim (2003) zur Veröffentlichung gebracht.

Jürgen Zwernemann hat mit seinem wissenschaftlichen Werk, das in der Sorgfältigkeit seiner Erhebung und Beschreibung einmalig zu nennen ist, eine Epoche afrikanischer Lebenswelt dokumentiert, die inzwischen schon einer fernen, fast vergangenen Zeit anzugehören scheint.

DOI 10.15460/auue.2023.96.1.334

Unser Gedenken gilt darüber hinaus einem überaus liebenswerten Menschen, der uns, die Jüngeren, stets ermunterte und unterstützte.

Gudrun Miehe

Bibliografie

Koelle, Sigismund Wilhelm. 1854; 1963. *Polyglotta Africana*, or a comparative vocabulary of nearly three hundred words and phrases in more than one hundred distinct African languages. (Unveränd. Nachdr., verm. durch eine historische Einführung von P. E. H. Hair und einem Wortindex von David Dalby). London (Repr. Graz): Church Missionary House.

Rattray, Robert Sutherland. 1932. *The tribes of Ashanti hinterland*. 2 vols. - With a chapter by Professor D. Westermann. Oxford: Clarendon Press.

Rodrigues, Nina. 1935. *Os Africanos no Brasil*. (Bibliotheca Pedagogica Brasileira Serie 5, Vol. 9). Sao Paulo: Companhia Editora Nacional.

Westermann, Diedrich. 1913–14; 1915–16. Die Grussisprachen im westlichen Sudan. *Zeitschrift für Kolonialsprachen* 4. 161–80, 312–32; 5: 45–76.

Zwernemann, Jürgen. 1991. Buchbesprechung von Melk-Koch, Marion. Auf der Suche nach der menschlichen Gesellschaft: Richard Thurnwald. Berlin: Dietrich Reimer Verlag. *Afrika und Übersee* 74(2). 297–298.

Zwernemann, Jürgen. 2014. *Ethnologische Afrikaforschung vor 60 Jahren. Bei den Kassena und Nuna in Burkina Faso und Ghana.* Hamburg: Museum für Völkerkunde.

Die afrikanistischen Publikationen von Jürgen Zwernemann

1957 Untersuchungen zur Sprache der Kasena. *Afrika und Übersee* 41(1/2; 3). 3–26; 97–116.

1958a Remarques sur la structure classificatoire et sur une ancienne classe nominale du lyélé. *Bulletin de l'Institut Français/Fondamental d'Afrique Noire* 20. Série B: Sciences humaines. 215–224.

1958b Shall we use the word "Gurunsi"? *Africa* 28(2). 123–125.

1959 Zum Problem der afrikanischen Stammesbezeichnungen. *Anthropos* 54. 570–573.

1961 Les notions du dieu-ciel chez quelques tribus voltaïques. *Bulletin de l'Institut Français/Fondamental d'Afrique Noire* 23. Série B: Sciences humaines. 243–272.

DOI 10.15460/auue.2023.96.1.334

1961 Notizen über das Verbum des Nuna. *Afrika und Übersee* 45(4). 258–271.
1963 Remarques préliminaires sur le verbe du kasem et du nuna. In Maurice Houis et al. (eds.), *Actes du Second Colloque International de Linguistique Négro-africaine, Dakar, 12–16 avril, 1962*. Dakar: Université de Dakar. 191–199.
1964a Personennamen der Kasena. *Afrika und Übersee* 47(1/2). 133–142.
1964b Zum Bedeutungsinhalt soziologischer und religiöser Termini in einigen Gur-Sprachen. *Afrika und Übersee* 48(4). 284–288.
1967a Kasem dialects in the Polyglotta Africana. *African Language Review* 6. 128–152.
1967b Versuch einer Analyse der nominalen Klassifizierung in einigen Gur-Sprachen. In Gabriel Manessy (ed.), *La classification nominale dans les langues négro-africaines*. Paris: Éditions du CNRS. 75–97.
1968 Ein „Gurunsi"-Vokabular aus Bahia. *Tribus* 17. 147–156.
1972 Personennamen der Moba. *Afrika und Übersee* 55(4). 245–257.
1996 Documents kpeego. *Gur Papers / Cahiers Voltaïques* 1. 147–164.
2003 Vokabular Kasim-Deutsch. In Gudrun Miehe & Clarissa Dittemer (eds.), *Gur Papers / Cahiers Voltaïques, Special Issue* 3.
Girault, Louis R. P., Manessy, Gabriel & Jürgen Zwernemann. 1990. Vocabulaires comparatifs de quatre langues voltaïques. Édité par Gabriel Manessy, avec une introduction de Jürgen Zwernemann. *Afrika und Übersee* 73(2). 183–221.

Texteditionen

1969 La fondation de Po: essai d'interprétation des traditions orales d'une ville kasena. *Notes et Documents Voltaïques. Bulletin trimestriel d'information scientifique* 2(2). 3–15.
1977 Mündliche Überlieferung zur Geschichte der Moba (Togo). *Afrika und Übersee* 60(1/2). 86–116.
1985 *Erzählungen aus der westafrikanischen Savanne (Gurma, Moba, Kassena, Nuna)*. (Studien zur Kulturkunde 81). Stuttgart: Steiner.

DOI 10.15460/auue.2023.96.1.334

Book review

Gehrmann, Susanne. 2021. Autobiographik in Afrika. Literaturgeschichte und Genrevielfalt. (Literaturen und Kunst Afrikas, Band 14). Trier: WVT Wissenschaftlicher Verlag Trier.

Uta Reuster-Jahn, Universität Hamburg

This book by Susanne Gehrmann, Professor of African Literatures at the Humboldt University of Berlin, Germany, provides an overview of autobiographical writing in Africa. The presentation of the genre's diverse forms in their historical contexts reflects the author's extensive scholarly engagement with self-referential writing on the continent. The intended target audience includes both scholars and interested general readers, which is why the book offers not only scholarly discourse, but also an exciting and stimulating read. Gehrmann's detailed discussion of the works of individual authors, as well as the manifold cross references she points out particularly contribute to this.

In the introduction (p. 1–11) Gehrmann outlines the development of scholarly discourse regarding autobiographical writing in Africa. While Eurocentric positions marginalized or even negated the genre until the second half of the 20th century; poststructuralist, feminist, and postcolonial literary theories have led to the recognition of its diversity on the continent and in the diaspora. Gehrmann's survey impressively demonstrates the rich forms of autobiographical writing in Africa. She also shows how strongly many authors' fictional work is intertwined with the autobiographical, and she also includes autofiction in her consideration.

Recent scholarly debate regarding autobiography in Africa has focused on the question of individual versus collective identities of the authors, as well as on the further validity of a teleologically oriented autobiographical paradigm that is increasingly being dismantled by authors. Anglophone literary scholars use alternative genre terms such as "life writing" for this reason. Gehrmann instead argues for an opening of the concept of autobiography and speaks of "autobiographical forms". With her book, she aims to provide an overview of the diversity of autobiographical writing in Africa, but at the same time she points out an unavoidable gap: neither does her text map the entire diversity of forms nor the diversity of languages. She

Published by Hamburg University Press
DOI 10.15460/auue.2023.96.1.309

focuses on Anglophone and Francophone texts by writers originating in sub-Saharan Africa.

The first two chapters provide a concise overview of autobiographical forms in pre-colonial and colonial Africa. In Chapter 1 (p. 12–30), the author emphasizes that self-referential oral forms in the realm of praise poetry, epics, and narratives belong to the continuum of autobiographical forms. She further points to pre-colonial autobiographical texts written in African languages in Arabic script *(ajami)* and often in lyrical form. Finally, she addresses the genre of slave narratives written outside of Africa and related auto-ethnographic accounts by African-born authors. These date back to the 18th century and established an early counter-discourse to European discourses of race and domination.

In Chapter 2 (p. 31–54), Gehrmann shows how autobiographical forms diversified during the colonial period and how written prose autobiography, despite its beginnings as a colonial educational project, increasingly developed into a prominent medium of expression through which authors could "inscribe themselves in history as colonized subject[s] in defiance of existing power relations" (p. 53)[1] and revalorize African cultures. During this period, authors such as Camara Laye, Robert W. Cole, and Bernard B. Dadié also wrote about their experiences in Europe.

The third chapter addresses central themes of postcolonial African autobiography through a close reading of the works of prominent authors (p. 55–131). In the first part, Gehrmann looks at texts by Cheikh Hamidou Kane (Senegal), Amadou Hampâté Bâ (Mali), and Wole Soyinka (Nigeria), whose childhoods date back to the colonial era. In her discussion, she shows how these authors inscribe themselves as subjects in history and construct their identities within the framework of cultural hybridity. The second part, "Postcolonial autobiographies of African women", highlights the close connection between fictional works and self-referentiality of female authors, such as in the work of Nigerian author Buchi Emecheta. Gehrmann is particularly concerned with the fragmentarily narrated autobiographical novels of the Senegalese writer Ken Bugul, which she has studied since the publication of Bugul's *Le baobab fou* (1982). She argues that Bugul's works are more aptly termed autofiction as "the fictional portions become increasingly dominant as the autobiographical series progresses, without ever entirely losing touch with dealing

DOI 10.15460/auue.2023.96.1.309

with self-referential experience and trauma" (p. 80, footnote 112)[2]. The self-therapeutic moment of the writing, typical of autofiction, also speaks in favour of this classification. Gehrmann concludes that the migrant experience in the European metropolises stimulated and often even made writing possible for many women, especially in the second half of the 20th century.

In the third part of Chapter 3, Gehrmann focuses on autobiographical essays. This genre, in which autobiographical writing and scholarly or socio-political reflection merge, has gained prominence in the African diaspora since the 1990s. These texts often explicitly address the issue of the relationship between the individual and the collective, which is present throughout the autobiographical continuum in Africa – a term introduced by Gehrmann. She shows that in contrast to Wole Soyinka's childhood autobiography *Aké* in his later essay *You must set forth at dawn. A memoir*, the author combines an analysis of political crises in Nigeria with a narrative of his years in exile in the United States. Gehrmann goes into detail about the essay *Les corps glorieux des mots et des êtres* by V.Y. Mudimbe, which she highlights as a masterpiece because of its virtuoso play with metatextuality and hybridity. The section on essays is rounded out with Manthia Diawara's scholarly, analytical travel essays. In summary, Gehrmann notes that autobiographical writing in Africa often involves the abandonment of linear narratives of identity in favour of a subjective historicity, a fictionalization of the self, and a focus on its collective dimension.

In the fourth part, Gehrmann discusses political memoirs, prison accounts, and testimonies. These include the memoirs of Kwame Nkrumah and Kenneth Kaunda from the generation of the first postcolonial presidents, those of the first female president of an African country, Ellen Johnson Sirleaf, and others of human rights and environmental activists. Prison accounts have their beginnings in the colonial era, but the genre flourished under repression in postcolonial conditions, Ngugi wa Thiong'o's and Wole Soyinka's accounts gaining the greatest prominence. Gehrmann points out that autobiographical poetry is also a widespread branch of African prison literature, as evidenced by Jack Mapanje's anthology (2002).

Chapter 3 concludes with an interesting excursus into the multifaceted South African autobiography published during and after apartheid, in which autobiographical practices were part of a cul-

DOI 10.15460/auue.2023.96.1.309

ture of resistance and reappraisal in which men and women alike participated. This section discusses testimonial and prison accounts of South African political activists. The abolition of apartheid and transition to democracy led to a new flourishing of autobiographical literature, in which testimonial texts dating back to the apartheid regime have played a major role. The number of autobiographical texts by white South African women has increased significantly since the 1990s, and these texts deal with their identity constructions and learning processes during and after apartheid.

In Chapter 4, devoted to medial extensions of the autobiographical (p. 140–75), Gehrmann once again turns to V.Y. Mudimbe and Ken Bugul, whose work she has dealt with most thoroughly in her research to date. With regard to V.Y. Mudimbe's essayistic text *Les corps glorieux des mots et des êtres*, which is supplemented by a photographic appendix, she elaborates on intermedial references that function as textual strategies. In some cases, the photographs reinforce memory or iconize specific people and symbolically significant moments in the autobiographical narrator's life. In other cases, they fill voids in the text. In the second part of the chapter, Gehrmann discusses film adaptations of autobiographical texts and then specifically addresses Silvia Voser's film Ken Bugul - *Personne n'en veut* (2013), which she interprets as a medial extension of Ken Bugul's autofiction and whose interconnections with Ken Bugul's texts she elaborates in detail.

The fifth and final chapter of the book (p. 176–194) focuses on East Africa, first providing an overview of published autobiographies written in English and in Swahili. Gehrmann then contrasts Ngugi wa Thiong'o's autobiographical trilogy with Binyavanga Wainaina's autobiography. Through his writing, Ngugi wa Thiong'o inscribes himself in history as an African subject and bears witness to the collective resistance to colonialism in Kenya. At the same time, in this classic postcolonial ensemble of texts, the autobiographical narrator constructs himself as a hybrid subject who, informed by local culture, appropriates the tools of colonial rule in order to criticise it and reconcile the two systems. In contrast, Wainaina's text addresses the individual identity formation of a subject who perceives himself as an outsider, focused on global culture rather than local politics, and is more subject-centered and individualistic in nature. His text there-

DOI 10.15460/auue.2023.96.1.309

fore points beyond the conventions of "classic" postcolonial autobiography.

Gehrmann's monograph is an important overview and reference work, as well as a highly stimulating read that highlights the importance of self-referential writing in African literary production. The extensive bibliographical index of African autobiographical sources (p. 195–204) allows readers to engage further with such texts. Secondary literature is listed in 20 pages and is followed by a filmography. The book concludes with a useful index of names. Despite the absence of Lusophone and Afrophone autobiographical writing in the book it is an important contribution to the field and should be available in English translation to reach a wider readership.

DOI 10.15460/auue.2023.96.1.309