A grammar of Lumun : a Kordofanian language of Sudan
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Abbreviations and symbols

NB: Abbreviations used in interlineair glosses are in small capitals.

1	first person singular
12	first and second person singular
1A	first person plural exclusive
12A	first person plural inclusive
2	second person singular
2A	second person plural
3	third person singular
3A	third person plural
a.o.	amongst others
ABS	absolute form
adj.	adjective
ASS	associative element
ALLOW	particle expressing allowance (-**na**)
app.	appendix
ATT	particle claiming the attention of the hearer (-**a**)
BEN	benefactive suffix
C	concord
C	consonant
CAUS1	causative suffix -**ɛ**
CAUS2	causative suffix -**ɪɛ**
cf.	compare with (confer)
COMPL	completive TAM-stem
CONJ	conjunctive partice (**á**-)
COP	copula (C-**á**)
DEP	dependent verb form
DEPCOMPL	dependent completive TAM-stem
DEPINCOMPL	dependent incompletive TAM-stem
DEPPRFV	dependent perfective TAM-stem
DIM	diminutive prefix (**ŋa**-)
DIST	distal
e.g.	for example (Latin: exempli gratia)
e.o.	each other
excl	exclusive
fr.	from

g.	gemination
HRT12	hortative pronoun, first and second person singular
HRT12A	hortative pronoun, first person plural inclusive
i.e.	that is (Latin: id est)
IMP	imperative TAM-stem
incl	inclusive
INCOMPL	incompletive TAM-stem
intr.	intransitive
INTS	intensifying
IRR	irrealis
IT	itive
ITVEN	itive or ventive (depending on context)
k.o.	kind of
lit.	literally
LOC	pragmatic locative proclitic (**cík-**)
LOCAPP	locative applicative suffix
n.	noun
N	nasal consonant
NEARSP	near speaker
NEARADDR	near addressee
NEG	negation marker
NOM	nominalization
NP	noun phrase
num	numeral
O1	first person singular object
O12 (etc.)	first and second person singular object
O$_2$2 (etc.)	second person singular as second object
obj.	object
PASS1	passive suffix -**(a)kɔ**
PASS2	passive suffix -**(V)tta**
PASS3	passive suffix -**(ʊ)ra**
PCL	pronoun clitic
PERS	persona prefix (**ɔ́-**)
pl.	plural
PL	plural suffix (-**ŋɔ̂n**)
PLC	plural noun class prefix
PLR	plural agreement marked through reduplication
PLUR	pluractional

POSS1	first person possessor
POSS12 (etc.)	first and second person singular possessor
PPC	prepositional proclitic
PR	present TAM-stem
p.redup	partial reduplication
PRO	common noun subject pronominal clitic
PROBS	pronominal base
PROP	particle expressing proposal (-**mɛ́**)
PST	past TAM-stem
Q	polar question particle (-**ɪ**)
QW	question word marker (-**ṭa**)
REC1	reciprocal suffix -(**a**)**rɔ**
REC2	reciprocal suffix -**ttɔ**
RECOV	information recovery particle (-**a**)
RECOVINF	informal information recovery particle (-**ɛ**)
REDUP	reduplication
REL	relative word
RES	restrictor (**í**-)
sg.	singular
SGC	singular noun class prefix
sp.	species
SUBJ	subjunctive particle (**â**-)
subj.	subject
Sud. Ar.	Sudanese Arabic
TAM	tense, aspect, mood
tr.	transitive
UNCERT	interjection expressing uncertainty (**cʊŋ**)
URG	particle expressing urgency (-**mɛ**)
v.	verb
V	vowel
VEN	ventive
VREF	vague reference particle **cɪk**
vs.	versus

/ /	phonemic presentation
[ ]	phonetic presentation
< >	orthographic presentation
*	ungrammatical; unattested item; item in protolanguage

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Some further explanation about glossing conventions is provided in chapter 1.13.

13. Pluractionals

Pluractional verbs share a grammatical function: they denote, in one way or another, event plurality. In Lumun, all non-Pluractional verbs have one or more Pluractional counterparts. There is not one single morpheme, nor one single process that derives Pluractional verbs from non-Pluractionals. Instead, non-Pluractionals and Pluractionals relate to each other in different ways. These relationships, however, display patterns, and the far majority of Pluractionals share one or more formal features that are typically (but not exclusively) found in Pluractionals.

I will call those verbs Pluractionals that are in a paradigmatic relationship to a non-Pluractional counterpart and express event plurality as part of their lexical meaning. Semantically, I distinguish between non-habitual pluractionality and habitual pluractionality. I use the label Pluractional for both, since there are no clear morphological divisions between the two semantic types.

Non-habitual Pluractionals are a restricted set. Habitual Pluractionals on the other hand, can in principle be productively (and creatively) be made on the basis of a non-Pluractional or a non-habitual Pluractional. Also habitual Pluractionals themselves often serve as a basis for a further habitual Pluractional, particularly along the lines of certain patterns that will be exemplified in this chapter.

In the first part below, I explore the formal characteristics of Pluractionals, in the second part I address their meaning and use.

13.1. Form

In virtually all cases, the same root appears in the non-Pluractional and the Pluractional stems. Pluractional stems have certain formal characteristics. The far majority contain one or more of the following features:

• a geminated consonant (CC)
• a nasal-consonant sequence (NC)
• a (underlyingly) long initial vowel and a L-tone pattern
• a reduplicated part
• a final or last vowel ɛ.

The table below gives an overview of formal relations between non-Pluractional and Pluractional stems. The table presents patterns of generation of CC and NC sequences and of partial reduplication. Length of the initial vowel (relationship 12) is in most cases not audible in the isolated stem, but comes to the surface when the initial vowel receives a H-tone, because the H-tone is realized as falling. Some relationships between non-Pluractionals and Pluractionals seem more frequent than others: partial reduplication and gemination (6) and final or last vowel ɛ (13). The latter however, is rare as the only feature distinguishing between non-Pluractional and Pluractional. Attested combinations are listed in the last column.

Table 92 Form features of Pluractionals

characteristic form features of Pluractionals		*relationship Pluractional/non-Pluractional*	*combines with[1]:*
CC	1	Gemination of ṭ, **k**, a nasal or a rhotic	12, 13
	2	insertion of **ll** between vowels	13
	3	insertion of (V)**tt** before the final or last vowel	13
	4	insertion of ʋ**kk(w)** before the final or last vowel	12
	5	addition of **ccɛ** after the final or last vowel	
reduplicated part and CC	6	partial reduplication and gemination: VC ⇒ VC-VCC, or VNC ⇒ VNC-VCC	

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[1] Still further combinations are attested, but verbs with such combinations are labelled 'further Pluractionals': Pluractionals based on already Pluractional stems (see 13.1.1).

NC	7	insertion of a homorganic obstruent (**p**, **t**, **c**) after a nasal (**m**, **n**, **ɲ**)	12, 13
	8	insertion of a homorganic nasal (**ŋ**) before **k**	12
	9	insertion of **ɲc** between vowels	13
	10	addition of **ɛnt** before final or last vowel **ɛ**	12
reduplicated part	11	partial reduplication: VC ⇒ VC-VC, or VCC ⇒ VCC-VCC	
initial VV (or V at surface) + all-low tones	12	lengthening of the initial vowel and application of an all-low tone pattern	1, 4, 7, 8, 10, 13
final or last vowel **ɛ**	13	final or last vowel **ɛ** where counterpart has final or last **ɔ**	1, 2, 3, 7, 9, 12

Non-habitual and habitual meanings are distributed across the patterns, though for a few minor patterns, and one larger pattern (pattern 12) only the one or the other is attested.

Examples of the different formal relationships follow here. Habitual Pluractionals are translated with 'habitually x', the others are non-habitual. I have used the term 'plural' ('pl.') in translations of non-habitual Pluractionals ('pl. subject participants' and 'pl. object participants'), but in several of these cases 'plural' refers to 'many' rather than to 'more than one', moreover distributive semantics may be involved as well. Some non-Pluractional verbs have several Pluractional counterparts that are formed through different procedures, as can be seen in the list below. Examples are 'say' (relationship types 2 and 6 from the table above), 'be' (2 and 6), 'steal' (6 and 11) and 'descend' (9 and 11). In the case of 'say' the different Pluractionals have different meanings.

Relationship type 1. Gemination of **ṯ**, **k**, a nasal or a rhotic.

Gemination of [**r**] between vowels can give **rr** but also **tt**. The first is the case if **r** is the phoneme /**r**/, the latter if **r** is the intervocalic

allophone of /**t**/. Occasionally **r** geminates as **ll**. In such cases, it is likely that **r** has formerly been **ɽ**. Geminated **ɽɽ** is not attested: gemination of **ɽ** results most often in **ll**, but sometimes in **rr**.

ɔt̪ə́kat cɪk 'swell'	**ɔtt̪əkat cɪk** 'swell (pl. subject participants)' (also 12)
ɔkâ 'be'	**ɔkka** 'habitually be' (also 12)
ɔmákɔt 'follow'	**ɔmmakɔt** 'habitually follow' (also 12)
ɔnâ 'bring'	**ɔnnâ** 'habitually bring'
ɔrâ 'cultivate'	**ɔrra** 'habitually cultivate' (also 12)
ɔkérɔ 'trade'	**ɔkéttɛ** 'trade (pl. object participants)' (also 13)
ɔɲúrɔ 'eat (a paste substance)'	**ɔɲúllɛ** 'habitually eat (a paste substance)' (also 13)
aɽɔ cɪk 'sleep, spend night'	**allɛ cɪk** 'habitually sleep, spend night' (also 13)
ɔɽə́tta 'be eaten'	**ɔrrə́tta** 'be eaten (pl. subject participants)'

I mention here also a case in which there is a change from **ɽ** to **r**, though the Pluractional verb does not contain a geminate. Note also that the initial vowels differ.

ɪɽɛ 'say'	**ɛrɛ** 'say, speak (a longer stretch of speech)'

Relationship types 2-4. Insertion of **ll** between vowels (2); insertion of (V)**tt** before final or last vowel (3); insertion of **ʊkk(w)** before final or last vowel (4).

ɪɔ 'die'	**ɪllɛ** 'die (pl. subject participants)' (also 13)
ɔt̪íɔt 'send'	**ɔt̪íllɛt** 'send (pl. object participants)' (also 13)
ɔŋáɛ̃ 'urinate'	**ɔŋállɛ** 'urinate (pl. subject participants), urinate repeatedly' (also 13)

aŋwɔt 'guard'	**aŋʊttɛt** 'habitually guard' (also 13)
ɔŋwô 'sing'	**ɔŋúttɛ** 'habitually sing' (also 13)
ɔkákɔ 'grind'	**ɔkákəttɛ** 'habitually grind' (also 13)
ɔkkɔ̂t 'do, make'	**ɔkkə́ttɛt** 'habitually do, make' (also 13)
ɔkkɔ̂ 'pass, reach'	**ɔkkə́ttɛ** 'habitually pass, reach' (also 13)
ɔppɔ̂ 'pass, appear'	**ɔppə́ttɛ** 'habitually pass, appear' (also 13)

apɔ 'fall'   apʊkk(w)ɔ 'fall with several bumps'
aɔ 'come'   aʊkk(w)ɔ 'come (pl. subject participants)'
ɔkέkɔ 'be shaved'   ɔkɛʊkk(w)ɔ 'habitually be shaved' (also 12)

In ɔkɛʊkk(w)ɔ 'habitually be shaved' (last example above) ʊkk(w) replaces the second **k** of ɔkέkɔ which is part of the Passive marker -**kɔ** (ɔkɛ̂ 'shave'/ɔkέkɔ 'be shaved')

Relationship type 5. Addition of **ccɛ** after final or last vowel.

ɔkə́t̪a 'look'   ɔkə́t̪a**ccɛ** 'watch'
ɔɔ 'cry'   ɔɔ**ccɛ** 'habitually cry'

Relationship types 6 and 11. Partial reduplication and gemination: VC ⇒ VC-VCC, VNC ⇒ VNC-VCC (6); Partial reduplication VC ⇒ VC-VC, VCC ⇒ VVC-VCC (11). Partial reduplication of VC without gemination (VC ⇒ VC-VC) is a relatively rare process.

In the reduplicated part the high vowels (i̧, ɪ, **u**, ʊ) are often copied, but not in all cases. The vowel ə is mostly copied, but can also be **ɛ** in reduplication. **ɛ** and **a** can be copied, but can also appear as ə. The vowel ɔ is never copied. Instead, one often finds ə in the reduplicated part, but other vowels also appear.

VC ⇒ VC-VCC

ɪt̪a 'cook'   ɪt̪a**t̪t̪**a 'habitually cook'
ɪɽɪkɔ 'enter'   ɪɽɪkɪ**kk**ɔ 'enter (pl. subject participants)'
i̧ɽi̧kɔ 'tie'   i̧ɽi̧ki̧**kk**ɔ 'tie with several windings, tie (pl. object participants)'
ɔkəɽɔ̂ 'bite'   ɔkə́ɽ**ɛll**ɔ 'bite repeatedly, eat (hard foods), bite (pl. subject participants)'
ɔɽíkɪɛ 'make not see'   ɔɽíl**lɪ**kɪɛ 'make not see (pl. (causee) object participants)'
ɪɽɛ 'say (one utterance)'   ɪɽɪ**ll**ɛ 'habitually say (one utterance)'
ɔkwárɪkɔt 'recall instantly' ɔkwárə**tt**ɪkɔt 'remember, think'
ɔrέkɔ 'work'   ɔrə́**tt**ɛkɔ 'habitually work'

In ɪ̧taṭṭa the vowel ɪ corresponds to **a** in the reduplicated part. In ɔkə́ɾɛllɔ the H-tone occurs one mora to the left as compared to its non-Pluractional counterpart.

VNC ⇒ VNC-VCC

unta 'fall and spread out (for example of water)'
   untu̱tta 'fall and spread out (pl. subj. participants, scattering)'
ɔnṭɔma 'become dry' ɔnṭə̱ṭṭɔma 'habitually become dry'

VCC ⇒ VVC-VCC

ɔppât 'become full'   ɔppə́ppat 'become full (pl. subject participants)'
ɪttat 'become fat'   ɪttɪ̱ttat 'become fat (pl. subject participants)'
ɪttɛ 'escort'   ɪttɪ̱ttɛ 'escort, help walk (requiring repeated effort)'
ɔccɔ́kɔt 'catch'   ɔccíc̱cɔkɔt 'catch (pl. object participants, typically thrown one by one and then caught one by one)'
akkarɔ 'call'   akkə̱kkarɔ 'call repeatedly, read'
ɔccɨkkarɔ 'plant'   ɔccɨkkɨ̱kkarɔ 'habitually plant'
ɪmma 'see'   ɪmmɪ̱mma 'habitually see'

A case is also attested of reduplication followed by degemination of the root part (assuming that reduplication operates to the right):

ɨkkɔ 'drink'   ɨkɨ̱kkɔ 'habitually drink'

VC ⇒ VC-VC (far less frequent then VC ⇒ VC-VCC).

ɔṭɔ̂ 'pull'   ɔṭú̱ṭɔ 'pull repeatedly'
ɔkê 'shave'   ɔkə̱́kɛ 'habitually shave'
ɔmúɲɛ 'steal'   ɔmúɲu̱ɲɛ 'habitually steal'

Relationship types 7-10. Insertion of a homorganic obstruent (**p**, **t**, **c**) after nasal (**m**, **n**, **ɲ**) (7); insertion of a homorganic nasal (**ŋ**) before **k** (8); Insertion of **ɲc** between vowels (9); insertion of **ɛnt** before a final

or last vowel **ɛ** (10). The latter case could also be interpreted as addition of **ntɛ** after a final or last vowel **ɛ**.

Pluractional **ɔŋwɔ̂** 'kill (pl. object participants)', which relates to non-Pluractional **ɔkkwɔ̂t** 'kill', may be a case of insertion of **ŋ** before **kk** and subsequent deletion of **kk**. The pair is a rare example of presence versus absence of final **t**. Generally, final **t** is either present or absent in both.

ɔmɔ́nɛ 'miss'	**ɔmpɔnɛ** 'habitually miss' (also 12)
ʊnɔ 'pour'	**ʊnt̪ɛ** 'pour repeatedly' (also 13)
ɔŋánɔ 'say a name'	**ɔŋant̪ɛ** 'enumerate, count' (also 12)
ʊnɔ 'build'	**ʊnt̪ɛ** 'habitually build' (also 13)
ɔkíɲɔ 'defecate'	**ɔkíɲc̪ɛ** 'habitually defecate' (also 13)
ɔkə́ɽɪɔt 'squeeze'	**ɔŋkəɽɪɔt** 'squeeze repeatedly' (also 12)
ɔkə́nɛ 'show'	**ɔŋkənɛ** 'show (pl. object participants), teach' (also 12)
ɔkkwɔ̂t 'kill'	**ɔŋwɔ̂** 'kill (pl. object participants)'
ɪɔt 'find'	**ɪɲc̪ɛt** 'find (pl. object participants)' (also 13)
ɔɽɔ 'throw (a stone) at'	**ɔɽʊɲcɔ** 'throw (plural stones) at'
ɛɔ̂ 'go'	**ɔíɲcɛ** 'habitually go' (also 13)
ɔínɛ 'go to'	**ɔíɲcɪnɛ** 'habitually go to'
ʊɔ 'descend'	**ʊɲc̪ɛ** 'habitually descend' (also 13)
ɪmɛ 'wash'	**ɪmɛnt̪ɛ** 'habitually wash'
ɔmɛ̂ 'tell, say'	**ɔmɛnt̪ɛ** 'habitually tell, say' (also 12)

In the case of **ɛɔ̂** 'go'/**ɔíɲcɛ** 'always go' (insertion of **ɲc** between vowels) the initial vowels differ.

Relationship type 11. See above, under *Relationship types 6 and 11*

Relationship type 12. (Underlying) length of the initial vowel and application of an all-low tone pattern.

Length of the initial vowel is not always audible. It is usually audible when it is the only feature distinguishing between the non-Pluractional and the Pluractional stem. In other cases, length of the vowel may only be recognized when it receives a H-tone: this H-tone is realized as a falling tone, reflecting the vowel's bimoraicity. I write a long vowel when it is the only distinguishing feature between a non-Pluractional and a Pluractional (or between a Pluractional and a further Pluractional).

ʊa 'rise'	ʊʊ̠a 'habitually rise every'
ʊɔ 'descend'	ʊʊ̠ɔ 'habitually descend'
ɔmʊ́ɲɛ 'steal'	ɔ̠mʊɲɛ 'habitually steal'
ɔkâ 'be'	ɔ̠ka 'habitually be'

ɔmʊ́ɲɛ 'steal' also has a Pluractional with partial reduplication (relationship 11, see *6 and 11*).

Relationship type 13. Final or last vowel ɛ where the counterpart has final or last ɔ. Only one case is attested for which this is the only difference:

ɔkkwɔ̂ 'hit'   ɔkkwɛ̠̂ 'beat, hit repeatedly'

Some further, occasional relationships are attested between Pluractionals and non-Pluractionals; several of these are suppletive.

ɛɛ̂ 'stab, blow'	ɔkɔ́ntɔ 'blow repeatedly'
ɔkɪɔ 'cut'	ɔkéccɛ 'cut repeatedly'
ɔppɔ̂ 'take an amount'	ɔppɔ́r̠ɛ 'take an amount repeatedly'
ɛt̪ɛ̂t 'give'	ɪkkɛt 'give (pl. object participants)'
ʊmmɔ 'take, pick up'	ɔcʊ́mɔ 'take, pick up (pl. object participants)'
ɪpɔ 'dig, collect'	ɪttɛ 'habitually dig, habitually collect'

Note that the Pluractional ɔcʊ́mɔ does not have any of the formal features that are typically found in Pluractionals.

13.1.1. Further Pluractionals: Pluractionals based on Pluractional
        stems

In many cases, one or more further Pluractionals can be formed on
the basis of an already Pluractional verb, in particular along the lines
of partial reduplication VCC ⇒ VCC-VCC (11) (sometimes VC ⇒ VC-
VC), and partial reduplication and gemination VNC ⇒ VNC-VCC (6).
Another process that often applies is (underlying) lengthening of the
initial vowel and change from a L.H.L* tone pattern to an all-low
tone (12). Relationship types 11 and 12 can occur together. Still
more relationships are occasionally attested. Relationships between
Pluractionals and further Pluractionals are exemplified below. The
most common relationships (the reduplicating patterns 11 and 6,
depending on the shape of the Pluractional base verb, and pattern 12
(lengthening of the initial vowel and application of a L-tone pattern)
are presented first.

Relationship type 11: Partial reduplication VCC ⇒ VCC-VCC

Table 93 Pluractionals and Further Pluractionals

Pluractionals (non-habitual and habitual meaning)	*Further Pluractionals (habitual meaning)*
ɔppə́ppat 'become full (pl. subj. participants)'	**ɔppə́ppəppat** (11), also: **ɔppəppat** (12) / **ɔppəppəppat** (11, 12)
ɔppɔ́rɛ 'take an amount repeatedly'	**ɔppə́ppɔrɛ** (11)
ɔkə́ttɛ 'trade several items'	**ɔkə́ttəttɛ** (11)
ɔkákəttɛ 'habitually grind'	**ɔkákəttəttɛ** (11)
ɪttɛ 'habitually dig, habitually collect	**ɪttɪttɛ** (11)
ɔkwárəttɪkɔt 'remember, think'	**ɔkwárəttəttɪkɔt** (11), also: **ɔkwarəttɪkɔt** (12) / **ɔkwarəttəttɪkɔt** (11, 12)
aŋʊttet 'habitually guard'	**aŋʊttʊttet** (11)
ɔŋállɛ 'urinate (pl. subj. participants)	**ɔŋ́álləllɛ** (11), also: **ɔŋallɛ** (12) / **ɔŋalləllɛ** (11, 12)
ɔtị́llɛt 'send (pl. obj. participants'	**ɔtị́llịllɛt** (11), also: **ɔtịllɛt** (12) / **ɔtịllịllɛt** (11, 12)

apʊkk(w)ɔ 'fall with several bumps'	**apʊkkʊkk(w)ɔ** (11)

In **apʊkkʊkk(w)ɔ** 'habitually fall with several bumps' **kkw** is delabialized before **ʊ: apʊkk-ʊkk(w)-ɔ**.[2]

In the following cases it is the pluractional ending **ccɛ** that is reduplicated. The case of **ɔkɛ́ccɛ** 'cut repeatedly' and **ɔkɛ́ccɛccɛ, ɔɔkɛccɛccɛ** 'habitually cut' could also be interpreted as involving reduplication of **ɛcc**.

ɔɔccɛ 'habitually cry'   **ɔɔccɛccɛ** (partial redup)
ɔkə́t̪accɛ 'watch'   **ɔkə́t̪accɛccɛ** (partial redup)
          also: **ɔkət̪accɛ** (12) and **ɔkət̪accɛccɛ** (partial redup, 12)
ɔkɛ́ccɛ 'cut repeatedly'   **ɔkɛ́ccɛccɛ** (partial redup)
          also: **ɔkɛccɛ** (12), and **ɔkɛccɛccɛ** (partial redup, 12)

Partial reduplication VC $\Rightarrow$ VC-VC

ɔt̪ʊ́t̪ɔ 'pull repeatedly'   **ɔt̪ʊ́t̪ʊt̪ɔ** (11)
          also: **ɔt̪ʊt̪ɔ** (12) and **ɔt̪ʊt̪ʊt̪ɔ** (11, 12)
ɔkə́kɛ 'habitually shave'   **ɔkə́kəkɛ** (11)
          also: **ɔkəkɛ** (12) and **ɔkəkəkɛ** (11, 12)

Though there is no restriction on sequences of the type VCC-VCC, there is degemination of the first part in some cases: VCC $\Rightarrow$ VC-VCC:

ɪkkɛt 'give (pl. object participants)'   **ɪkɪkkɛt**
ɔkkwê 'beat, hit repeatedly'   **ɔkʊ́kkwɛ**

The same type of relationship was seen between **ɪ̧kkɔ** 'drink' and **ɪ̧kɪ̧kkɔ** 'habitually drink'.

Relationship type 6: partial reduplication and gemination on the basis of a stem with NC combination (VNC $\Rightarrow$ VNC-VCC)

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[2] That is, in the speech of JS, possibly not in the speech of NaA (see 2.1.2).

ɔmpɔnɛ 'habitually miss'   ɔmpəppɔnɛ (6)
ɔŋantɛ 'enumerate, count'   ɔŋantəttɛ (6)
ɛrɛntɛ 'habitually speak'   ɛrɛntəttɛ (6)
ʊntɛ 'habitually build'   ʊntʊttɛ (6)
ɪɲcɛt 'find (pl. object participants)'   ɪɲcɪccɛt (6)
ɔɽʊɲcɔ 'throw (plural stones) at'   ɔɽʊɲcʊccɔ (6)
ɔŋkənɛ 'show (pl. obj. participants), teach'   ɔŋkəkkənɛ (6)

In the following case relationship 6 is applied as VC ⇒ VC-VCC:

ɔɽíllıkıɛ 'make not see (pl. object (causee) participants)'   ɔɽíllıkıkkıɛ
(6)
                    also: ɔɽıllıkıɛ (12) / ɔɽıllıkıkkıɛ (6, 12)

Relationship type 12: lengthening of the initial vowel and all-low tone
pattern. Further examples are found under relationship 11 and 6.

ɔmúɲʊɲɛ 'habitually steal'   ɔmʊɲʊɲɛ (12)
ɔkíɲcɛ 'defecate (pl. subject participants)
                ɔkıɲcɛ (12)
                also: ɔkíɲcɪccɛ (6) and ɔkıɲcɪccɛ (6, 12)
ɔʈíllɛt 'send (pl. object participants)'
                ɔʈıllɛt (12)
                also: ɔʈíllḭllɛt (11) and ɔʈıllḭllɛt (11, 12)
ɔnnâ 'habitually bring'   ɔnnənna (11, 12)
ɔkéɽɛllɔ 'bite repeatedly, eat (hard foods), bite (pl. subject
participants)'   ɔkəɽɛllɔ (12)
                also: ɔkéɽɛllʊttɔ (3) and ɔkəɽɛllʊttɔ (3, 12)

Relationship type 3 (insertion of **Vtt** before final or last vowel) must
be combined with 13 (final or last **ɛ**) in the following case:

ɔŋwɔ̂ 'kill (pl. object participants)'   ɔŋʊttɛ (3, 13)
                            also: ɔŋʊttʊttɛ (3, 13, 11)

Relationship type 1: gemination of **ʈ**, **k**, a nasal or rhotic:
ɔka 'habitually be'   ɔkka (1)
        also: ɔkakka (6) (VC ⇒ VC-VCC)

Relationship type 10: addition of **ntɛ** after a final or last vowel **ɛ**.

ɛrɛ 'speak (a longer stretch of speech)'   ɛrɛntɛ (10)
                                             also: ɛrɛntɛttɛ (10, 6)

The following case is a case of suppletion. It is reminiscent of relationship 10 since it ends in **ntɛ**, but instead of coming after a final or last vowel **ɛ** the element **ntɛ** replaces part of the stem:

ɔcʊ́mɔ 'take, pick up (pl. object participants)'   ɔcʊ́<u>ntɛ</u> (suppletion)
                                                   also: ɔcʊ́nt<u>ʊttɛ</u> (6, VNC ⇒ VNC-VCC)

13.2. Meaning

Lumun Pluractionals can be divided into non-habitual and habitual Pluractionals. The non-habitual ones express plurality within the (bounded) context of an event. The habitual ones express (unbounded) habitual events or repeatedly reoccurring events.

Further Pluractionals (Pluractionals based on an already Pluractional stem) have habitual meaning, regardless of whether the Pluractional base verb has habitual or non-habitual meaning.

Non-habitual Pluractionals can express different types of plurality. They typically denote that an action or event consists of many sub-actions or sub-events, rather than just two or three. This is a tentative list of types of semantics of non-habitual Pluractionals:

1. Verbs that express repetition within one activity. They can be intransitive, or transitive with action upon a single object participant;

2. Verbs that inherently take some time due to continued effort, particularly sensory or mental processes;

3. Verbs that express action upon (distributed) plural object participants;

4. Verbs that express action carried out or undergone by (distributed) plural subject participants.

Examples follow here. Some verbs can, in the right context, express more than one sub-type of non-habitual plurality. The type numbers are mentioned between parentheses.

1. Verbs that express repetition within one activity. When transitive, they express repetitive action, typically upon a single object participant. Both the subject and object participants can have singular reference.

i̱ṟ̣ika 'tie'	**i̱ṟ̣iḳikka** 'tie sth. while winding the rope several times' (1), also: 'tie several things' (3)
ɔkkwɔ̂ 'hit'	**ɔkkwɛ̂** 'beat, hit repeatedly' (1)
ɔt̪ɔ̂ 'pull'	**ɔt̪ʊ́t̪ɔ** 'pull repeatedly' (1)
ɛ̂ 'stab, blow'	**ɔkɔ́ntɔ** 'stab repeatedly, blow repeatedly' (1)
ʊnɔ 'pour'	**ʊntɛ** 'pour repeatedly' (1) (for example water or tea, often locational distribution)
akkarɔ 'call'	**akkəkkarɔ** 'call repeatedly' (1), also: 'read' (2)
ɔkəṟ̂ɔ̂ 'bite'	**ɔkɔ́ṟɛllɔ** 'bite repeatedly in a hard or crisp item' (1), also: 'bite on several small, hard or crisp items' (3), also: 'bite in a hard or crisp item (pl. subject participants)' (4)

2. Verbs that inherently take some time due to continued effort, particularly sensory or mental processes.

ɔkɔ́t̪a 'look'	**ɔkɔ́t̪accɛ** 'watch' (2)
ɔkwárɪkɔt 'recall instantly'	**ɔkwárəttɪkɔt** 'remember, think' (2)
ɪṟɛ 'say (one utterance)'	**ɛrɛ** 'speak (a longer stretch of speech)' (2)

3. Verbs that express action upon (distributed) plural object participants.

ɔŋánɔ 'say a name'	**ɔŋantɛ** 'enumerate, count' (3)
ɔkɔ́nɛ 'show'	**ɔŋkənɛ** 'show (pl. object participants), teach' (3)

ɔʈɔ 'throw at (typically in order to chase away)'

           ɔʈʊɲcɔ 'throw at (pl. object participants, typically stones, one by one)' (3)

ɔkkɔ̂t 'kill'   ɔŋwɔ̂ 'kill (pl. object participants)' (3)

ɔʈíɔt 'send'   ɔʈíllɛt 'send (pl. object participants: one by one or group by group)' (3)

ɔkérɔ 'trade'   ɔkéttɛ 'trade (pl. object participants: one by one or group by group, involving several transactions)' (3)

4. Verbs that express action carried out or undergone by (distributed) plural subject participants. These verbs are intransitive. They include some (inchoative) state verbs and verbs that refer to processes concerning the body, but also others. Use of the Pluractional verb in case of a plural participant in not strictly obligatory in these cases (this will be explained further below).

ɪttat 'become fat'   ɪttɪttat 'become fat (pl. subj. participants)' (4)

ɔppât 'become full'   ɔppə́ppat 'become full (pl. subj. participants)' (4)

ɔppêt 'get pregnant'   ɔppə́ppɛt 'get pregnant (pl. subj. participants)' (4)

ɪɔ 'die'   ɪllɛ 'die (pl. subj. participants)' (4)

ɔŋáɛɔ̃ 'urinate'   ɔŋállɛ 'urinate once (pl. subj. participants)' (4), also: 'urinate repeatedly' (1)

aɔ 'come'   aʊkkɔ, aʊkkwɔ 'come (pl. subj. participants: one by one or group by group)' (4)

The different uses of non-habitual Pluractionals can be illustrated by means of the verb 'bite'. The non-habitual Pluractional of 'bite', **ɔkə́rɛllɔ**, expresses plural (sub-) events of biting. It is used for eating hard and dry food which requires repeated (audible) biting, as does the very hard *cʊpɔ̂*-fruit:

m-p-ɔkəʈéllɔ́.t   **cʊ́pɔ̂**
1-C-bite.PLUR:COMPL   fruit(k.o.)

I have eaten a *cʊpʊ*-fruit (requiring many bites, since the fruit is extremely hard)

Having pain is expressed as the involved body part repeatedly biting its owner:

wɛk **w-a.ɪk** **w-a.kə́ɽɛllɔ́-n**
leg C-be:PR C-bite.PLUR:INCOMPL-O1

my foot hurts (lit.: my foot is biting me repeatedly or continuously)

ɔkə́rɛllɔ is also used when a singular subject bites in plural object participants and when plural subject participants bite in one object. In the latter case (verb with plural subject and a singular object) the Pluractional verb is not used because of plurality of the subject, but because of the plurality of the event as undergone by the object. For comparison, two examples with non-Pluractional verbs are given first. The examples show that use of the Pluractional verb is not a matter of (semantic) number agreement with the subject or the object, but expresses plurality of the bites.

ţʊk **ţ-ɔkəɽɔ.t** **úkʊl**
dog C-bite:COMPL child

the dog has bitten the child (one bite)

lʊk **l-ɔkəɽɔ.t** **úkʊl**
dogs C-bite:COMPL child

the dogs have bitten the child (the non-Pluractional implies that the child got bitten once. The dogs were in a group when it happened and it is unclear which dog did it)

ţʊk **ţ-ɔkəɽéllɔ́.t** **ɲúkʊl**
dog C-bite.PLUR:COMPL children

the dog has bitten the children (several children got bitten)

ɔɽɛk **w-ɔkəɽéllɔ́.r-ín**
ants(sp.) C-bite.PLUR:COMPL-O1

the ɔɽɛk-ants have bitten me (several ants biting once)

The use of a non-habitual Pluractional relating to plural participants depends on how the event or situation is conceptualized. Non-habitual Pluractionals with semantics of type 3 and 4 can present the plural subject or object participants as consisting of individuals or

subgroups performing or undergoing the action in a distributed way: individually or as separate subgroups. For example, in the case of 'give', use of the Pluractional (ɪkkɛt) or the non-Pluractional (ɛt̪êt) presents a different picture of the scene. The Pluractional expresses that the plural objects are handed over one by one, or group by group while the non-Pluractional is not concerned with the (semantic) plurality of the object, nor with distributional aspects, but treats it as a group.

ɪkkɛt̪-ɔk	aɽəpʊ	ɛn-n-ərɪk	áppɪk
give.PLUR:IMP-O3	things	DEM-C-NEARSP	all

give him all those things (one by one)

ɛt̪-ɔk	aɽəpʊ	ɛn-n-ərɪk	áppɪk
give:IMP-O3	things	DEM-C-NEARSP	all

give him all those things (not concerned with how the items are handed over)

A similar situation is found in the following phrases with 'send':

ɔ-kakká	p-ɔt̪ɪllɛ́t̪.ɛ́	ɲʊ́kʊ́l	kɛccôk
PERS-Kakka	C-send.PLUR:COMPL	children	market

Kakka has sent the children to the market (as separate groups or individuals, each with his own task)

ɔ-kakká	p-ɔt̪ɪ̯ɔt̪.ɛ́	ɲʊ́kʊ́l	kɛccôk
PERS-Kakka	C-send:COMPL	children	market

Kakka has sent the children to the market (as a group, with a shared task)

Explicit distribution over different locations can induce the use of a Pluractional. In the example below Pluractional ʊntɛ 'pour' must be used because the situation involves several actions of pouring due to locational distribution of the object (the sorghum):

anákka	ɔ-kín	t̪-ɔká.t	cɪk	a-kín	ʊntɛ	mɪ́l
and.that	PERS-3A	C-be:COMPL	VREF	CONJ.PERS-3A	pour.PLUR:DEPINCOMP	sorghum

n.tɪ	ɪ-aɽʊ́k ...
from	in-bags

and when they were pouring the sorghum out of the bags …

The subject in the sentence below is the mass noun **ŋʊcʊl** 'sauce'. Its distribution over several calabashes is expressed with a Pluractional verb (**ɔppə́ppat** 'become full').

ŋʊcʊl ŋ-ɔppə́ppaṭ.ɛ   ɪ-lɔntərɔ̂
sauce   C-become_full.PLUR:COMPL   in-calabashes

the calabashes were full with sauce (lit.: the sauce was full in the calabashes)

In the examples below, both the non-Pluractional and the Pluractional can be used. When the non-Pluractional is used, the subjects are conceptualized as a group.

ɔ-kín   appɪk   ṭ-ɔppəppéṭ.ɛ   / ɔ-kín   appɪk   ṭ-ɔppéṭ.ɛ
PERS-3A   all   C-get_pregnant.PLUR:COMPL / PERS-3A   all   C-get_pregnant:COMPL

they are all pregnant (each of them is pregnant) / they are all pregnant

ɔ-kín   ṭ-ɔŋallê.t   / ɔ-kín   ṭ-ɔŋaɛɔ̂.t
PERS-3A   C-urinate.PLUR:COMPL   / PERS-3A   C-urinate:COMPL

they have urinated (each of them) / they have urinated

For the verbs 'die' and 'kill' the undergoer-event of dying is central. These verbs do not present the possibility to choose between a non-Pluractional and a Pluractional in case of multiple events of dying. Here pluractionality relates to plurality of the subject in the case of 'die' and to plurality of the object in the case of 'kill': several persons dying is a plural event of dying and one or more persons killing several persons is also a plural event of dying. However, several persons killing one person is a single event of dying. This goes for any creature that dies, and even when relatively indistinguishable creatures such as ants die as a group the Pluractional must be used. However, according to my consultant (JS), when two or perhaps three persons die, it is not entirely impossible to use the non-Pluractional. I do not think that the near-obligatory use of the Pluractionals of 'kill' and 'die' makes these verbs essentially different from other Pluractionals that (can) express event-plurality due to

participant plurality. Rather, for some verbs, more than for others, use of the Pluractional is conventionalized more strongly.

The verbs in the example below are **ɪɔ** 'die' and **ɪllɛ** 'die (PLUR)', and **ɔkkwɔ̂t** 'kill' and **ɔŋwɔ̂** 'kill (PLUR)'.

pʊl   p-ɪ.át̪ɛ
person C-die:PST

the person died

ʊl   w-ɪllɛ.kát̪ɛ
people C-die.PLUR:PST

the people died

m-p-ɔkwɔt̪.ɛ́   t̪ɪk   nɔ́-lʊra-lúra   ana   l-íllɛ.kát̪ɛ
1-C-ignite:COMPL   fire on-insects(sp.)-REDUP and   PRO.C-die.PLUR:PST

I set fire to the insects (an ant species?) and they died (dry grass is put on the insects and set fire to)

ɔ-kín   t̪-ɔkkwɔt̪.ɛ́   i̠mít
PERS-3A   C-kill:COMPL   goat

they have killed the goat

ɔ-kín   t̪-ɔŋwɔ.t   li̠cɔ́k
PERS-3A   C-kill.PLUR:COMPL   goats

they have killed the goats

m-p-ɔŋwɔ.t   ɔɾɛk   n-t̪ĭk
1-C-kill.PLUR:COMPL   ants   with-fire

I have killed the ants with fire

Pluractionality and Reciprocal verbs

Reciprocal verbs are verbs that involve at least two actions (an action from X upon Y and from Y upon X, with the subject referring to both X and Y). Some Reciprocals are based on a Pluractional verb (see also section 14.5 about Reciprocals). Two examples:

ɪkkɛttɔt 'give each other'   < **ɪkkɛt** 'give (several items)'
ɪɲcɛttɔt 'find each other, meet each other' < **ɪɲcɛt** 'find (several persons or items)'

(Non)-use of Pluractionals in certain collocations

The choice of a non-Pluractional or a Pluractional verb may (partly) depend on fixed collocations. For example, cutting in one movement takes the non-Pluractional verb **ɔkɪɔ**, whereas cutting with several cutting movements takes the Pluractional verb **ɔkɛ́ccɛ** (for example onions, or somebody's hair).

m-p-a.ɪk	**p-a.kɛ́ccɛ**	**ʈûn**
1-C-be:PR	C-cut.PLUR:INCOMPL	onion

I am cutting the onions

However, cutting sorghum is expressed with the non-Pluractional **ɔkɪɔ**, even though the event involves more actions of cutting since it is normally not just one sorghum stock that is cut. The Pluractional **ɔkɛ́ccɛ** can be used in combination with sorghum, but then it expresses 'cutting sorghum during several days'. The first example below states what the speaker is doing at the moment of speech, the second, with the Pluractional verb, could be an answer to the question: 'what are you doing these days?'

m-p-a.ɪk	**p-á.kɪɔ**	**mɪ̂l**
1-C-be:PR	C-cut:INCOMPL	sorghum

I am cutting the sorghum

m-p-a.ɪk	**p-a.kɛ́ccɛ**	**mɪ́l**	**tɔ.pɔ̂n**
1-C-be:PR	C-cut.PLUR:INCOMPL	sorghum	at_farming_field

I am cutting sorghum in the field (implication: the cutting takes several days, it needs repeated going there)

Verbs with formal characteristics and semantics of Pluractionals, but without non-Pluractional counterpart

There are also verbs that inherently (or usually) express repeated actions or events and have one or more of the typical formal characteristics of Pluractionals, but lack a counterpart that expresses one (sub) action or (sub-) event. Some examples:

ɔɔcɔ 'press oil' (done with a repeated movement) (long initial vowel)

ɔllá cɪk 'sweep'	(gemination)
ʊɽʊllɔ 'cough'	(partial reduplication and gemination)
anṭeṭṭərɛ 'roll sth.'	(partial reduplication and gemination)
ɔṭṭʊɔṭṭa 'swim'	(partial reduplication)
ɔkákɔ 'grind'	(partial reduplication)
accɛ 'lick'	(ending in **ccɛ**)

Habitual Pluractionals

Habitual Pluractionals express habitual actions or repeatedly reoccurring events. Examples:

non-Pluractional	*Pluractional*
ɔínɛ 'go to'	**ɔíɲcɪnɛ** 'habitually go'
ɪɽɛ 'say (one utterance)'	**ɪɽɪllɛ** 'habitually say (one utterance)'
ɪpɔ 'dig, collect'	**ɪttɛ** 'habitually dig, collect'
ɔkkɔ̂t 'do, make'	**ɔkkɔ́ttɛt** 'habitually do, make'
ɔmɛ̂ 'tell'	**ɔmɛntɛ** 'habitually tell'
ɔɔ 'cry'	**ɔɔccɛ** 'habitually cry'
ɔmúɲɛ 'steal'	**ɔmʊɲɛ** 'habitually steal'

Further Pluractionals that are based on Pluractionals with non-habitual meaning do not necessarily retain the pluractional meaning of their counterpart, for example:

apʊkkwɔ 'fall with several bumps' **apʊkkʊkkwɔ** 'habitually fall'

Some examples with Pluractionals with habitual meaning follow here. Habitual Pluractionals can easily be combined with the adverb **ɛppɪnɛppɪn** 'always', but **ɛppɪnɛppɪn** does not need to be present in order to get the reading 'always do x'. Habitual Pluractionals cannot

be combined with adverbs that express a specific, bounded time frame, such as **mamân** 'this morning'.

a-kín　　**ɔ́ɲcɪnɛ**　　　　**ɪ-ṭɪpâ**
CONJ.PERS-3A　go_to.PLUR:DEPINCOMPL　in-marriage

and they always went to her for marriage (fr. written story)

a-kín　　**ɔ́ɲcɪnɛ**　　　　**ɪ-ṭɪpá**　　**ɛppɪn-ɛppɪn**
CONJ.PERS-3A　go_to.PLUR:DEPINCOMPL　in-marriage　always-REDUP

and they always went to her for marriage

*a-kín　　**ɔ́ɲcɪnɛ**　　　　**ɪ-ṭɪpá**　　**mámân**
CONJ.PERS-3A　go_to.PLUR:DEPINCOMPL　in-marriage　this_morning

*and they always went to her for marriage this morning

Some more examples:

ɔ-paɾɪ　**p-aŋ**　**p-a.kkə́ttɛt**　**ŋúcʋl**　**ŋ-ɔ́-ín-ṭa**
PERS-wife　C-POSS2　C-do.PLUR:INCOMPL　sauce　C-of-what-QW

what does your wife always make the sauce of? (App. IV, 12)

caɽɪ　**c-əɾɛk**　**c-ɔká.t**　**cɪk**　**a-ɲúkʋl**　**ɲ-ɔ-kəmən**　**k-ɔ́-nɔ-cəruk**
day　C-some　C-be:COMPL　VREF　CONJ-children　C-of-houses　C-of-on-opening

ɲ-ɔká.t　**cɪk**　**a-ɲ-ɔ̂mʋɲɛ**　　　**áɽəpʋ**　**w-ɔ-rua**
C-be:COMPL　VREF　CONJ-PRO-steal.PLUR:DEPINCOMPL　things　C-of-hair

there was a time that there were youngsters from the neighbourhood who were stealing cattle time and again (fr. written story)

Notably, presence of **ɛppɪnɛppɪn** 'always' does not always lead to the use of a Pluractional verb, as in the following example:

ɔ-lɔ́ttɪ　**p-ákkarɔ́-k**　　**ɛppɪn-ɛppɪn**
PERS-Lɔttɪ　C-call:INCOMPL-O3　always-REDUP

Lɔttɪ always calls him

As mentioned earlier, non-habitual Pluractionals can serve as a basis for further Pluractionals with habitual meaning. The examples below contrast related non-habitual and habitual Pluractionals.

with non-habitual **ɔkə́ɽɛllɔ**:

ɔ-kín	**ṱ-á.ík**	**ṱ-á.kə́ɽɛllɔ**	**áppɛnṱína**
PERS-3A	C-be:PR	C-bite.PLUR:INCOMPL	groundnuts

they are eating groundnuts

with habitual **ɔkəɽɛllɔ** or **ɔkəɽɛllʊttɔ**:

ɔ-kín	**ṱ-á.ík**	**ṱ-â.kəɽɛllɔ /**	**ṱ-â.kəɽɛllʊttɔ**	**áppɛnṱína**
PERS-3A	C-be:PR	C-bite.PLUR:INCOMPL /	C-bite.PLUR:INCOMPL	groundnuts

they are always eating groundnuts

with non-habitual **ɔŋwɔ̂**:

ɔ-kʊkkú	**p-ɔŋwɔ.t**	**lị̇cɔ́k**
PERS-Kʊkkʊ	C-kill.PLUR:COMPL	goats

Kʊkkʊ has killed the goats

with habitual **ɔŋʊttɔ** or **ɔŋʊttʊttɔ**:

ɔ-kʊkkú	**p-ɔŋɔ̂ttɛ.t / p-ɔŋɔ̂ttʊttɛ.t**	**lị̇cɔ́k**
PERS-Kʊkkʊ	C-kill.PLUR:COMPL / C-kill.PLUR:COMPL	goats

Kʊkkʊ used to kill the goats (but now he has stopped doing this)

with non-habitual **ɔppə́ppɛt**:

ɔ-kín	**ṱ-ɔppəppéṱ.ɛ**
PERS-3A	C-get_pregnant.PLUR:COMPL

they are pregnant

with habitual **ɔppəppɛt**:

ɔ-kakká	**p-ɔppə́ppɛṱ.ɛ**
PERS-Kakka	C-get_pregnant.PLUR:COMPL

Kakka used to get pregnant (but this has stopped)

Expressivity

Pluractionals in general have a certain expressivity, but further Pluractionals based on a habitual Pluractional stem are particularly expressive.

The following line is from the opening of the story 'Tortoise and bird'. The activity of the bird is contrasted with the inertia of the tortoise. The verb **ɪttɪttɛ** 'habitually dig, habitually collect' is based on **ɪttɛ** 'habitually dig; habitually collect', which again relates to **ɪpɔ** 'dig, collect' (NB: there is no verb which refers to one single digging movement). The use of the Pluractional reflects the very busy nature of the bird.

ŋaṭṭəṭṭápɛ	**ŋ-ɪkkɔ́.t**	**cɪk**	**a-íttɪttɛ**	**aôn**
bird(sp.)	C-sit:COMPL	VREF	CONJ-(PRO-)collect.PLUR:DEPINCOMPL	bees

the *ŋaṭṭəṭṭapɛ*-bird was always collecting honey (App. IV, 2)

14. Verbal derivation

In this chapter I discuss verbs derived from other verbs: Benefactives, Locative-applicatives, Causatives, Passives and Reciprocals. In the last section of the chapter I present some verbs with combinations of derivational suffixes.

(Inchoative) state verbs very often have a final or last vowel **a**. Unlike the verbal "default" final or last vowel ɔ, this **a** has an association with (inchoative) stative meaning. (Inchoative) state verbs have an undergoer subject while their Completive typically expresses a present state and/or a change of state. They are not derived from other verbs, but in some cases relate to adjectives. Derivational relationships between verbs and adjectives are mentioned in chapter 10; examples of inchoative (state) verbs with Completives can be found in 12.5.7.

Noun-to-verb derivation is a very small-scale phenomenon. It is discussed in chapter 4.

Glossing

In the glossing in this chapter, verbal derivational suffixes are separated from the lexical stem of the base verb, or from another suffix, through a hyphen, where possible. The colon preceding the tense/aspect/mood meaning of the verb comes after the (last) derivational gloss, but must be understood as having scope over the (main) verb as a whole, i.e. over the lexical root with derivational suffix(es). An example:

ʊl   **w-a.rέk-ɪnɛ**   **pʊl**
people   C-work-BEN:INCOMPL   person

the people will work for the person

Order of derivational suffixes

Derivational suffixes come after the verbal root in the following order:

root-REC1-CAUS2-CAUS1-REC2-PASS(1/2/3)-BEN-LOCAPP

The reciprocal suffixes can be reduplicated and a sequence REC2-REC1 is possible as well. A few items allow for a sequence CAUS2-CAUS1 and occasionally, what looks like CAUS2, may be analysed as a reduplicated CAUS2. If the base verb has a high tone, the high tone remains on the same mora in the derived verb. When the base verb has a final falling tone and the derivation adds a moraic unit, the falling tone is realized as a high tone (in accordance to the Contour Simplification Rule).

In this chapter I gloss the derivational suffixes, using BEN, LOCAPP, CAUS1, CAUS2, PASS1, PASS2, PASS3, REC1, REC2 and separating them from the root of the base verb, and from each other, by a hyphen. In the rest of the book, I do not gloss the derivational suffixes separately, but incorporate them in the lexical meaning of the verb. In case of Locative-applicative derivations with a locative or positional phrase as object, I add 'at' to the lexical meaning of the verb, in order to make clear that the derivation is present (or that I expect the derivation to be there, as it is not always apparent from the form).

Verbal derivation has implications for the verbal argument structure, i.e. for the relationship between verb and nominal constituents in the clause as well as for the semantic roles of verb complements. Before describing the various verbal derivations, I therefore first address the issue of determining the grammatical status of nominal constituents. For this, I make use of some general ideas concerning objects, as well as diagnostics for establishing objecthood in Bantu languages.

The basic word order of Lumun is SVO. Modifiers come after the noun, adjuncts tend to come at the end of the clause, and adpositional marking is proclitic. In view of Lumun's SVO word order, its verbal derivational system and its ability to have a series of nouns following the verb —resembling the way semantic/grammatical relations are expressed in Bantu languages—, looking at Bantu object diagnostics does not seem far-fetched.

Nominal constituents are commonly divided (primarily) into subjects, objects and adjuncts.

Establishing the clausal subject is straightforward in Lumun. The (pro)noun or noun phrase preceding the verb or verbal complex is the subject. Moreover, non-dependent and non-focus-marked verbs agree with the noun class of the subject or carry the concord that corresponds with the subject pronoun (clitic). An example of the first:

pəlla p-ɔɽəkɔ́.t   aʋn
cat   C-eat:COMPL   rats

the cat has eaten the rats

No cases were found of post-verbal subjects. The example below (also cited in chapter 8.1.4), with the focused verb 'have, need' may seem to have a post-verbal subject (**pʋl ɪpɔ́ɲɪ̧** 'human being'), but this is not the case. The subject of the verb 'have, need' is the food, not the human being. The verb expresses here that food is what 'keeps' (or 'holds') the human being:

ṭʋɽít ɪ-ṭ-ên   akk-ɔnʋ́   pʋ́l   í-p-ɔ́ɲɪ̧   cənɛ   nɔ́-capʋ́
food   RES-C-DEM FOC-have   person   RES-C-black here   on-ground

food is the one that keeps/holds (lit. 'has') a human being here on earth (i.e. food is what a human being needs here on earth)

For comparison, the following was found not acceptable (making no sense). The sorghum can only be understood as the subject and the people as the object; the sentence does not allow for a reading as 'sorghum is what people cultivate here'.

*mɪ̧l   ɪ-m-ên   akk-ará   ʋl   cənɛ́
sorghum   RES-C-DEM FOC-cultivate:INCOMPL persons   here

To distinguish between object and adjunct, the criterion can be applied that the semantic role realized by an object argument is required by the verb, while the semantic role of an adjunct is not. An object is thus part of the argument structure of the verb and must be

present, though not necessarily overtly. Because of the absence of pronominal markers for non-person non-subjects (see chapter 6.4), an object can have a ∅ realization. Out of context, however, it must be overtly present. The verb **ɛ̠t̪êt** 'give' requires, apart from an agent (realized as subject argument), a patient and a receiver. The patient and receiver are realized as object arguments, though not of equal status as will be argued further below. Out of context, these examples with only one object argument are not well-formed:

*m-p-ɛ́t̪ɛt ɔ-cɛccɛ̂   'I gave (to) Cɛccɛ'
*m-p-ɛ́t̪ɛt a̠t̪ám   'I gave (to) the book'

Adjuncts are not semantically required by the verb and thus not part of its argument structure. This means that adjuncts can freely be present or absent.

Lumun allows for a series of adjacent post-verbal nominal constituents. It will be shown that access to the immediate post-verbal position differentiates between objects, and that, on the other hand, adjuncts share some properties with objects that are typical for the latter in Bantu languages. Before turning to Bantu object characteristics, I briefly look at case marking and the presence of prepositional proclitics in relation to objecthood.

Case marking

In several languages of the world (certain) objects are case-marked, i.e. segmentally and/or tonally marked for their grammatical relationship to the verb. In Niger-Congo languages, however, this is not common, though, interestingly, it is found in languages of the Heiban group of Kordofanian, notably Ebang (Schadeberg & Kossmann 2010, p. 83), Koalib (Boychev 2013) and Moro (Ackerman, Malouf & Moore 2017, p. 8). Lumun does not have case marking, nor has case marking been found in other languages of the Talodi group (Dimmendaal 2015, p. 48).

Prepositional proclitics

Cross-linguistically, nominal constituents marked by an adposition are often adjuncts. In Lumun, a nominal constituent preceded by one of the locative prepositional proclitics ɪ-, nɔ-, tɔ- and t̪ɔ- can be an adjunct, but also an argument of the verb, in the latter case the verb requires the expression of its semantic role. I regard such locative/positional constituents required by the verb as objects, though the prepositional marking itself already makes them somewhat different from other objects.

In Bantu languages, three criteria are generally applied for the establishment of objecthood, as well as for differentiating between objects, i.e. for establishing primary objecthood (a.o. Hyman & Duranti 1982, Bresnan & Moshi 1993, Kioko 2000). An object:

- has access to the immediate post-verbal position;
- can become subject upon passivization;
- can be cross-referenced on the verb by a prefixal object concord.

Lumun has no agreement marking of objects on the verb, but the first and second criterion can be tested.

Schadeberg (1995) suggests some further properties that may be worth looking at upon examining grammatical relations between verb and nominal constituents in the Bantu clause. Three of these properties (object case marking by tone, shortened verb forms (i.e. conjunctive vs. disjunctive verb forms), and transitive agent nouns) do not play a role in Lumun. The fourth, metatony of verb forms, could be present in Lumun and will briefly be considered first.

Metatony

Some of the basic TAMs have a floating high tone: in prepausal position these verbs have a final low tone (not allowing for a rising-tone realization), while in non-prepausal situation a high tone appears on the following item (provided that the tonal make-up of the following item allows for this).

This phenomenon resembles what, since Meeussen (1967), has been called metatony in Bantu languages. The term was originally used for Low – High tonal alternations on the final vowel of class 15 (*ku-*) infinitives corresponding with absence resp. presence of a following object (Meeussen 1967, p. 111), but became extended to other verb forms displaying the same alternation before all kinds of constituents Hyman & Lionnet (2011). Hyman & Lionnet report that in languages with metatony in infinitive verb forms only, the phenomenon has been found only before objects, whereas in languages with metatony in various verb forms, it has only been found before any word. They consider it likely that there are also languages which have metatony only in infinitive verbs forms, but before any word, as well as languages with metatony in various verb forms, but before an object only (2011, p. 181).

In languages in which metatony only occurs before an object, the phenomenon can indeed serve as a diagnostic for objecthood. What I have described as a floating high tone (+H) associated with some of the basic TAMs, notably the Dependent Incompletive, the Incompletive and the Dependent Perfective, though not with verbs of all tone classes (see 12.5.3, 12.5.4 and 12.5.6) could probably be regarded as metatony, even though the high tone does not surface on the verb, but on the following constituent. However, Lumun, like several Bantu languages, falls in the category of "metatony in various verb forms before any word". I have not found that certain constituents do not give rise to the high tone, I only found that metatony treats objects and adjuncts alike.

Subjectivization

Various non-subject constituents can become subject of a passivized clause. For example, subjectivization is possible for both the recipient and the patient object of the non-derived ditransitive verb ɛṱɛ̂t 'give'; for both objects (beneficiary and patient) of a benefactive derivation of a transitive verb (for example ɔnɛ́kɪnɛ 'carry for'); and for the beneficiary object and the prepositional phrase required by a benefactive verb with fixed preposition (for example arəttɪnṱɛt nán 'add on sth. for sb.'). Examples with these verbs are provided in 14.4.

The same section provides a case of subjectivization of a prepositionally marked locative argument (required by a verb with locative-applicative derivation) as well as a case of subjectivization of a locative adjunct (a constituent not required by the verb). Examples are also provided of subjectivization of instrumental adjuncts.

Various non-subject constituents are thus able to take up subject function in a passive construction, though some further testing would need to be done. This means that the criterion of subjectivization does not help to distinguish between different kinds of objects, nor even between objects and nominal adjuncts. Interestingly, also in Moro (Heiban group), objects realizing different semantic roles, including instrumental and locative roles, as well as locative and instrumental adjuncts can assume subject function in a passive construction (Ackerman & Moore, 2013).

In the type of grammatical construction below, however, two adjacent nouns coming after the verb are not both open to subjectivization. Such cases involve 'possessor raising'. Compare the following examples:

ʊl   w-ɪmmá.t   pʊl   cá
people   C-see:COMPL   person   head

the people saw the head of the person

pʊl   p-ɪmm-akɔ́.t   ca   n-ûl
person   C-see-PASS1:COMPL   head   with-people

the head of the person was seen by the people (the person was seen by the people as to the head)

*ca   c-ɪmm-akɔ́.t   pʊl   n-ûl
head   C- see-PASS1:COMPL   person   with-people

In this type of construction the noun with possessor role can be the subject of a passive verb, but the noun with the role of possessee cannot. The verb **ɪmma** 'see' assigns two semantic roles: an agent/undergoer realized as subject, and a patient realized as object. Though semantically the head (of the person) is the actual patient, it

is not treated as an object, which can be seen from the fact that it cannot be subjectivized. It is instead the possessor that is "raised" to the function of (primary) object.

Access to the immediate post-verbal position

Objects differ as to their ability to access the immediate post-verbal position. For the non-derived ditransitive verb 'give' this was shown in chapter 6.4, where the following example was presented:

k-kw-ɛ́ṱɛt	**ɔ-kakká**	**ɔ-cɛccɛ̂**
3-C-give:COMPL	PERS-Kakka	PERS-Cɛccɛ

s/he gave Cɛccɛ to Kakka

The sentence above, which has two objects that are equal in terms of the person scale (see 6.4), allows for only one interpretation: the first object has the semantic role of recipient, the second the semantic role of patient. Thus, for the verb 'give', in case of equality on the person scale, the recipient is the primary object, the patient the secondary. However, as illustrated in 6.4, differences between objects of 'give' with respect to the semantic factor of person/animacy override the hierarchy of semantic roles, leading to ambiguity. The person hierarchy mentioned in 6.4 is repeated here:

> *first person pronouns*
> *second person pronouns*
> *third person pronouns*
> *humans*
> *non-humans*

Examples of derived verbs with double objects with an equal value on the person scale show that there, too, a semantic role hierarchy is at work on the one hand, while, on the other hand, a higher value on the person scale will override the semantic role hierarchy.

The example below, with the Double Causative verb **ịcịɛt** 'make sb. lay sb. down' illustrates the semantic role hierarchy for a derived verb through objects equally high on the person scale: only the

causee-object (Cɛccɛ) can occur immediately post-verbally, not the patient of the caused action (Kakka):

ɔ-t̪ʊt̪t̪ú	p-i̦c-í̦-ɛt̪.ɛ	ɔ-cɛccɛ́	ɔ-kakká	cɪk
PERS-T̪ʊt̪t̪ú	C-lie_down-CAUS2-CAUS1:COMPL	PERS-Cɛccɛ	PERS-Kakka	VREF

T̪ʊt̪t̪ú has made Cɛccɛ lay Kakka down (T̪ʊt̪t̪ʊ has made Cɛccɛ make Kakka lie down)

The next example illustrates the semantic role hierarchy for a Benefactive + Locative Applicative derivation of a transitive verb ('eat') through objects equally low on the person scale. **ŋɪnt̪a** 'what' is the Benefactive object and comes immediately after the verb, followed by the patient object of the base verb. The Locative-applicative object, which here is a constituent with positional semantics, comes last:

ana	ŋ-kw-ɔɾək-ánt̪ét	ŋín-t̪á	ŋúɾú	kapɪk
and	2-C-eat-BEN.LOCAPP:DEPPRFV	what-QW	asida	upright

but why were you eating asida while standing?

These 'why'-constructions with Benefactive derivation are further examplified in 14.1. For the discussion about object properties here, it is important to note that, as soon as an object higher on the person scale is present, **ŋɪnt̪a** 'what' as Benefactive object no longer has access to the immediate post-verbal position. In such cases, **ŋɪnt̪a** does not just move further away from the verb, as would other objects, but recourse is taken to a different construction. While retaining the Benefactive derivation, **ŋɪnt̪a** is fronted before the verb and combined with **akka** 'that', giving **ŋínt̪akka** (see also chapters 19.2 and 20.1.2).

The personal object pronoun in the example below is the patient argument of the transitive base verb **ɔŋɔt** 'like, want, love'. Because of its higher value on the person scale than **ŋɪnt̪a** it is realized as the primary object of the verb:

ŋín-t̪-akka   ŋ-kw-ɔŋ-ínt̪-ín
what-QW-that   2-C-like-BEN:COMPL-O1

why do you love me?

Notably, 'why' can also be stated entirely outside of the verbal argument structure, in such case there is no Benefactive derivation (20.1.2).

Locative and positional objects of a Locative-applicative derivation never occupy the immediate post-verbal position (unless of course when the only object), but come in last position. Locative applicative derivations, however, can also require an argument expressing the semantic role of addressee, a role typically realized by a noun denoting a human. A human locative-applicative object will be drawn closer to the verb, as illustrated below, where Kakka is the object of the Locative-applicative derivation. It will however not surpass a human Benefactive object (the child).

m-p-ípɪtt-ɪnt̪ɛt   ʊ́kʊl   ɔ-kakká   ŋʊ́í
1-C-ask-BEN.LOCAPP:INCOMPL   child   PERS-Kakka   milk

I will ask Kakka for milk for the child

The nouns referring to the child and to Kakka in the example above cannot be reversed without a change of semantic roles, which means that the common noun **ʊkʊl** and the personal name (kinship term) **ɔkakkâ** are equal on the person scale.

It should also be noted that the primary object can be ∅. In the example below, with the Benefactive verb **ɔkkínt̪ɛt** 'do for, make for', the Benefactive object is **kwɔcán**, the grass mentioned in the preceding clause. **kwɔcán** cannot be overtly referenced, since there are no object pronouns for non-humans. **antɔkkínt̪ɛt ŋʊ́cul** means that they 'made a sauce for it' (for the boiled grass), not that they 'made a sauce' and **ŋʊcʊl** 'sauce' is not the primary object.

... a-kín   **anɔ**   **kwɔcán**
CONJ.PERS-3A   boil:DEPINCOMPL   grass(k.o.)

a-kín   **ant-ɔkk-ínt̪ɛt**   **ŋúcul**
CONJ.PERS-3A   can:DEPINCOMPL-do-BEN:DEPINCOMPL   sauce

and they boiled grass (k.o.) and they made a sauce for it (i.e. for the boiled grass. In times of hunger people ate boiled grass as if it were asida).

The case described above of **ŋɪnt̪a** 'what' as Benefactive object in a 'why'-construction can be seen as a case in which the object, due to its position on the person hierarchy, was not only unable to hold the immediate post-verbal position assigned to it on the basis of its semantic role, but also could not remain within the post-verbal object sequence. Another deviating case, though in a different way, is the following. The abusive nouns **pənan** '(on) his/her mother' and **kənɛ́** '(on) your mother' must be used together with a Benefactive derivation. The abusive word can immediately follow the verb, which is expected, but it can also come last, even after a non-animate noun. Compare:

m-p-a.nɛ́k-ɪnt̪ɛt   **pə́nan**   **ɔ-kakká**   **kərɛt**   **á-n-ákɔ**
1-C-take-BEN.LOCAPP:INCOMPL   mother   PERS-Kakka   cloth   SUBJ-1-wear:DEPINCOMPL

I will take Kakka's dress, on her mother, and wear it (myself)

m-p-a.nɛ́k-ɪnt̪ɛt   **ɔ-kakká**   **kərɛt**   **pə́nan**   **á-n-ákɔ**
1-C-take-BEN.LOCAPP:INCOMPL   PERS-Kakka   cloth   mother   SUBJ-1-wear:DEPINCOMPL

I will take Kakka's dress, on her mother, and wear it (myself)

It seems that in this case, the semantic role of abusive term can take priority over the high animacy value of **pənan**, directing the noun to the last position. This semantic role may allow it to function much like an interjection (as abusive words do in many languages, relatively unbound to syntactic positions), even though it is an argument of the verb.

I conclude that, in a Lumun clause, all objects are not equal, but one is the primary object. The primary object, in principle, occupies the immediate post-verbal position. Access to this position, however, is blocked if an object is present that is higher on the person hierarchy.

Which object is the primary object seems determined by a hierarchy in semantic roles of objects. The number of objects and their semantic roles are determined by the lexical verb (including its derivational suffixes). For example, a recipient or beneficiary is higher in the semantic hierarchy than a patient.

14.1. The Benefactive

Benefactive verbs are transitive verbs that are derived from an intransitive or a transitive base verb through addition of the suffix (ɪ)**nɛ**. Benefactives have increased valency as compared to their base verb. The added argument typically has the semantic role of beneficiary, but can have other semantic roles as well. The suffix is very productive.

Form

The Benefactive suffix is (ɪ)**nɛ**. **ɪnɛ** replaces a stem-final **ɔ**, the shorter variant **nɛ** is attached after a stem that ends in **a** or **ɛ**. When attached to a stem with +ATR vowels (i.e. containing **i̠** or **u**) the suffix is realized as [ine] or [ne]. Examples:

aɔ 'come'   **a-ɪnɛ** 'come to'
unɔ 'pour'   **un-i̠nɛ** [un-ine] 'pour for'
ɔrékɔ 'work'   **ɔrék-ɪnɛ** 'work for'
ɛrɛ 'speak'   **ɛrɛ-nɛ** 'speak to'
ɔnâ 'bring'   **ɔná-nɛ** 'bring for, to'

Derivations adding a moraic unit based on verbs with L.L.HL tones are the exception to the rule that a high tone stays in place. The high tone moves one mora to the left:

ɔʈəkɔ̂ 'eat'   **ɔʈə́k-ɪnɛ** 'eat for'

When replacing the **ɔ** of the Reciprocal suffix **arɔ**, the Benefactive suffix is realized with a reduced vowel, as **ənɛ**:

ɪkkɔ 'sit, stay'   **ɪkk-ar-ənɛ** 'stay for each other' (**ɪkkɔ** + **arɔ** + **ɪnɛ**)

The combination Benefactive (ɪ)nɛ + Locative-applicative t is realized as (ɪ)nt̪ɛt, not *(ɪ)nɛt. Benefactives derived from t-final verbs end in (ɪ)nt̪ɛt, irrespective of whether the t functions as a productive suffix or is part of a lexicalized verb. Examples:

ɔkkɔ̂t 'do, make'   ɔkk-ínt̪ɛt 'do for, make for'
aɽantɔt 'collect'   aɽant-ɪnt̪ɛt 'collect for'
ɔt̪íɔt 'send'   ɔt̪í-ənt̪ɛt 'send to'
ɔkúccɛt 'prepare'   ɔkúccɛ-nt̪ɛt 'prepare for'
ɔŋat 'like, love'   ɔŋa-nt̪ɛt 'like for, love for'

Note in the examples above that in 'send to', after the vowel i̲ the suffix is realized as ənt̪ɛt. After the Reciprocal suffix aɽɔ, too, the combined suffix ɪnt̪ɛt is realized as ənt̪ɛt:

ɔkkɔ̂t 'do, make'   ɔkk-áɽ-ənt̪ɛt 'do for e.o., make for e.o.'

The verb ɛɔ̂ 'go' has a suppletive Benefactive form: ɔ-ínɛ 'go to'.

Argument structure of Benefactive verbs

Benefactives can be based on intransitive and transitive stems. The Benefactive suffix increases the valency of the verb. The first example below, with the non-Benefactive verb ɪt̪a 'cook', has two arguments: a subject and an object. The second, with the Benefactive verb ɪt̪anɛ 'cook for', has three arguments. The Benefactive object is the primary object, occupying the immediate post-verbal position.

ɔ-kakká	p-ɪt̪á.t	ŋúɽû
PERS-Kakka	C-cook:COMPL	asida

Kakka has cooked asida

ɔ-kakká	p-ɪt̪á-nɛ.t	ɔ-kʊmáŋ	ŋúɽû
PERS-Kakka	C-cook-BEN:COMPL	PERS-Kʊmaŋ	asida

Kakka has cooked asida for Kʊmaŋ

Semantic roles of the added argument

The added argument for which the verb is marked as Benefactive can have a beneficiary (or maleficiary) semantic role, it can express a non-locative goal and it is used in certain 'why'-constructions. With the verb **ɛrɛ** 'speak' it allows for expression of the addressee. Possessors are also attested as arguments of Benefactive verbs. Some examples with a beneficiary argument:

ɔránɛ 'cultivate for'

ŋ-kw-ânṭan	**á-rɪt**	**ɔrá-nɛ**	**áləpaccôṭ**
2-C-come:INCOMPL	PERS.SUBJ-12	cultivate-BEN:DEPINCOMPL	jackal

you come so that we cultivate for the jackal ('The story of the jackal')

aɲɪnɛ 'open for'

ɔ-kakká	**p-aɲ-á.nṭɛt**	**ʊkʊl**	**kəṭət**
PERS-Kakka	C-open-BEN:PST	child	door

Kakka opened the door for the child

Sometimes the added argument has a maleficiary role:

ɔɽəkɪnɛ 'eat for'

lị̂cɔk	**l-a.ɽə́k-ɪnɛ**	**púl**	**p-əɽɛk**	**mị̂l**
goats	C-eat-BEN:INCOMPL	person	C-some	sorghum

the goats will eat somebody's sorghum

When used with a human goal, verbs like **aɔ** 'come', **ɛɔ̂** 'go', **ɔṭị́ɔt** 'send', **ɔnâ** 'bring' and **ɔnékɔ** 'take', are constructed with a Benefactive:

ɔ-cɛccɛ́	**p-á-ínɛ**	**ɔ-nné**
PERS-Cɛccɛ	C-go-BEN:INCOMPL	PERS-your_mother

Cɛccɛ will go to your mother

m-p-a.nɛ́k-ɪnɛ	**kəllán**	**kʊmmʊk**
1-C-take-BEN:INCOMPL	old_woman	pot

I will take the pot to the old woman

Coming or going to a place is expressed without Benefactive derivation, as in the following example. 'The church' is marked by the prepositional proclitic (PPC) **tɔ-** '(up) at':

ɔ-cɛccɛ́	**p-á.ɛ́ɔ́**	**tɔ-man**	**m-ɔ́-kapık**	**cıpın**	**ɛ́ɲ-c-í**
PERS-Cɛccɛ	C-go:INCOMPL	up_on-house	C-of-God	evening	DEM-C-NEARSP

Cɛccɛ will go to the church this evening

It is possible to have the Benefactive of 'go' with 'the church' as Benefactive object, but now the sentence has a different meaning:

ɔ-cɛccɛ́	**p-á-ínɛ**	**man**	**m-ɔ́-kapık**
PERS-Cɛccɛ	C-go-BEN:INCOMPL	house	C-of-God

Cɛccɛ will go and take charge of the church (Cɛccɛ will run the church)

The Benefactive is used in certain 'why' ('for what') constructions. The added argument questions purpose, reason or cause:

m-p-a.múɲɛ-nɛ	**ŋín-ţa**
1-C-steal-BEN:INCOMPL	what-QW

why will I steal?

ŋín-ţ-akka	**kəmən**	**ɛ́ŋ-k-í**	**k-úntá-nɛ.t**
what-QW-that	houses	DEM-C-NEARSP	C-collapse-BEN:COMPL

why have these houses collapsed?

The expression **ılên akka** +H 'that's why' combines with a Benefactive. The derivation is based on **ɔŋat** 'like, love':

ı-l-ên	**akka**	**úl**	**w-ɔŋá-nţɛt**	**ıttı**	**w-íkkɔ**	**cık**	**ţaɾʊ**
RES-C-DEM	that	people	C-like-BEN:COMPL	that	PRO.C-sit:INCOMPL	VREF	Ţaɾʊ

that is why people like to live in Ţaɾʊ

The verb **ɛrɛ** 'speak' takes a direct object such as **lɔn** 'words' or **karrɔ̂** 'mother tongue'. It does not allow for the addressee to be expressed unless the Benefactive suffix is present:

ɛrɛ-nɛ.t	ɔ-páppa	ɪttɪ	ɔ-nɪ̤n	ṭ-a.ɪk	ṭ-ɔpərɔ̂t
speak-BEN:IMP	PERS-my_father	that	PERS-1A	C-be:PR	C-good

tell my father that we are fine!

The Benefactive also allows for 'external possessor' constructions. In such constructions, possessee and possessor noun are not together in a single NP (with the possessor modifying the possessee). The possessor is the Benefactive object and occupies the immediate post-verbal position. Comparable constructions are found in several other languages, for example in Citumbuka (Chavula 2016, p. 118-120).

The two examples with Benefactives below can alternatively be expressed with a non-Benefactive verb and a single object argument with possessor and possessee in a connexive construction. The Benefactive in the first example is derived from ɔŋɔt 'like, want, love':

ʊkʊl	w-ɔŋ-ínṭet	ɔ-paŋ	ŋuɽû
child	C-like-BEN:COMPL	PERS-sibling	asida

the child likes his sister's asida (made by his sister)

ʊkʊl	w-ɔŋɔṭ.ɛ́	ŋúɽú	ŋ-ɔ́-páŋ
child	C-like:COMPL	asida	C-of.PERS-sibling

the child likes the asida of his sister (made by her)

ṭɪ̤	ṭ-ɔccɔk-ínṭet	ʊkʊl	kərét
thorn	C-catch-BEN:COMPL	child	cloth

a thorn has caught the shirt of the child

ṭɪ̤	ṭ-ɔccɔkɔ́ṭ.ɛ	kərɛt	k-ɔ́-kkʊl
thorn	C-catch:COMPL	cloth	C-of-child

a thorn has caught the shirt of the child

The earlier given example of a maleficiary role of the Benefactive object (repeated below) is also a case of external possession. It could alternatively be expressed with a non-Benefactive verb and a connexive construction:

lįcɔk	l-a.ɽə́k-ɪnɛ	púl	p-əɽɛk	mį̂l
goats	C-eat-BEN:INCOMPL	person	C-some	sorghum

the goats will eat somebody's sorghum

lįcɔk	l-a.ɽəkɔ	mį́l	m-ɔ-pʊl	p-əɽɛk
goats	C-eat:INCOMPL	sorghum	C-of-person	C-some

the goats will eat somebody's sorghum

It seems that there may be some semantic difference between the alternatives, in the sense that the external possessor construction presents the possessor-noun somewhat more as an 'affectee' (which is either positively or negatively affected) than as (just) a 'possessor'. This was, however, not confirmed by my consultant (JS).

As mentioned earlier, expressions with an abusive word such as **pənan** (related to **ɔnnân** 'his/her mother') must be combined with a Benefactive verb. The second example is given for comparison. It lacks an abusive word and the verb is not a Benefactive.

ámmá	ɔ́-kákká	p-á-ínɛ.t	pənan	ana	k-kw-á.pɔkɔ
if	PERS-Kakka	C-come-BEN:COMPL	mother	and	3-C-be_beaten:INCOMPL

when Kakka comes, on her mother, she will be beaten

ámmá	ɔ́-kákká	p-aá.t	ana	k-kw-á.pɔkɔ
if	PERS-Kakka	C-come:COMPL	and	3-C-be_beaten:INCOMPL

when Kakka comes, she will be beaten

Verbs without a non-Benefactive counterpart

Verbs that seem to contain a Benefactive suffix but lack a non-Benefactive counterpart are rare. The only cases attested are **ɔkə́nɛ** 'show' and its Pluractionals **ɔŋkənɛ** and **ɔŋkəkkənɛ**. Apart from the absence of a non-Benefactive counterpart, these verbs behave morphologically different from Benefactives. The examples below show that the Passive suffix (**V**)**tta** is attached after, not before, the ending **nɛ**. Attachment before **nɛ** would be expected when the verbs were Benefactives:

ɔkə́nɛ 'show'   **ɔkə́nɛ-tta**
ɔŋkənɛ 'show (pl. obj. participants), teach'   **ɔŋkənɛ-tta**
ɔŋkəkkənɛ 'habitually show, habitually teach'   **ɔŋkəkkənɛ-tta**

Moreover, the Benefactive suffix can be added after (**V**)**tta**:

ɔŋkənɛ-tta 'be shown, be taught'   **ɔŋkənɛ-tta-nɛ** 'be shown for, be
                                            taught for'

It is, however, likely that **ɔkə́nɛ** historically derives from a verb with
the Benefactive suffix, hence its ditransitive argument structure:

ɔ-kín	**t̪-ɔkəné.r-ín**	**pápê**
PERS-3A	C-show:COMPL-O1	fish

they have shown me the fish

14.2. The Locative-applicative

The Locative-applicative suffix is **t**. If it is present, it occurs in stem-
final position, after the final vowel of the stem. A verb that already
ends in **t** cannot undergo Locative-applicative derivation. When the
suffix is added to a verb with the Benefactive suffix (**ɪ**)**nɛ**, the ending
of the verb changes into (**ɪ**)**nt̪ɛt**, not *(**ɪ**)**nɛt**.

The Locative-applicative is, semantically and syntactically, a complex
derivation. It has different applications with different valency effects
and different degrees of productivity. The suffix signals spatial
information and/or affectedness of its complement. Several verbs
with the suffix have lexicalized semantics.

When the suffix is productively applied, the derived verb requires the
expression of a locative or positional semantic role. In such cases, a
spatial object must be present for the expression to be grammatical,
though this presence may have a ∅ surface realization. This spatial
object is realized, for example, as a prepositional proclitic (PPC) +
noun, or as an adverb. The suffix can also license an 'affectee' object,
an entity that is being touched at or being affected, and that is
realized without a prepositional proclitic. This function of the suffix

does not allow for productive application. With some verbs, the suffix does not increase the valency of the verb, but changes the semantic role of its object: from full patient or undergoer to 'affectee'.

In some derivational pairs the verb with **t**-suffix has developed lexicalized semantics. There are also several **t**-final verbs that lack a counterpart without the suffix. Both types of verbs do not require the presence of a locative constituent.

Finally there is a small set of verbs (apart from **t**-final verbs) that do not take the Locative-applicative suffix at all.

Form

Synchronically the Locative-applicative suffix is **t**. This is evidenced by its change into **r** before an element that begins with a vowel. The verb used for illustrating this is **ɪpɪttɔt** 'ask sb.', which is the Locative-applicative derivation of **ɪpɪttɔ** 'ask'.

m-p-ípɪttɔ-t   **ɔ-kakkâ**   [mbíβɪtɔɾ ɔɰakâ]
1-C-ask-LOCAPP:INCOMPL   PERS-Kakka

I will ask Kakka

The **t**-suffix probably developed from an older form **ṭV**. Loss of the final vowel of this suffix changed **ṭ** into **t**, as in word-final position **ṭ** is not allowed. The older form **ṭ** is retained in forms with a vowel-initial pronoun enclitic (first example below), as well as in some TAM-forms (second and third example below). In these cases the suffix is realized as **ð**, the intervocalic allophone of **ṭ**.

m-p-ípɪttɔ-ṭ-ɔ̂k   [mbíβɪtɔðɔ̂k˺]   (< **m-p-ípɪttɔ-t** +H + **ɔk**)
1-C-ask-LOCAPP:INCOMPL-3:O

I will ask her

m-p-ɪpɪttɔ́-ṭ.ɛ   **ɔ-kakkâ**   [mbɪβɪtɔ́ðɛ]
1-C-ask-LOCAPP:COMPL   PERS-Kakka

I have asked Kakka

ɪpɪttɔ-ṭ.ɛ   **ɔ-kakkâ**   [ɪβɪtɔðɛ]
ask-LOCAPP:IMP   PERS-Kakka

ask Kakka!

The Locative-applicative suffix as a pragmatic device

The derivation establishes a connection between verb and spatial constituent. With productively derived verbs, the spatial constituent is not a mere adjunct, but functions as an object argument, which cannot just be left out.

The Locative-applicative suffix tends to be applied productively in order to signal spatial information in the clause, unless

- (specific) spatial information is already presupposed by the verb without the derivation;
- the suffix would put undue focus on the (connection between verb and) locative constituent.

The use of the derivation as a productive tool signalling spatial information is thus driven by a combination of semantics of the verb and pragmatics of the communication. It is considered obligatory in some contexts, optional in others (putting different focus in the clause), not felicitous in again others, and in some contexts not possible.

Constituents expressing the spatial information demanded by the Locative-applicative verb can be place names, place question words, spatial adverbs such as **kapɪk** 'upright', place deictics, prepositional phrases with **ɪ-** 'in', **nɔ-** 'on, at', **tɔ-** '(up) on, (up) at' or **ṭɔ-** 'at', or a compound preposition that starts with one of these. By contrast, a locative constituent preceded by the prepositional proclitic (PPC) **ń-** 'with, by, (away) from', cannot function as the argument that relates to the **t**-suffix.

Verbs that already end in **t** cannot take the derivation. An example is the verb **ɪɔt** 'find':

m-p-ɪɔṭ.ɛ́ **kə́llân**
1-C-find:COMPL   old_woman

I found/met the old woman

m-p-ɪɔṭ.ɛ́ **kə́llán**   **nɔ-kaṭə́r**
1-C-find:COMPL   old_woman   on-road

I found/met the old woman on the road

Obligatory, optional and not-felicitous use of the derivation signalling spatial information will be exemplified below, as well as verbs that cannot take the derivation due to their semantics.

The verb in the first example below does not have the Locative-applicative suffix. On the verbs in the other two examples, with locative constituents, the Locative-applicative suffix is obligatorily present. (Specific) spatial information is not already presupposed by the verb without the derivation, nor is there context that asks for the connection verb-locative constituent to be downplayed.

ɔ-kín   **ṭ-ín-arɔ**   **acín-ṭa**
PERS-3A   C-know-REC1:INCOMPL   when-QW

when will they get to know each other?

ɔ-kín   **ṭ-ín-arɔ-t**   **kárə-ṭa**
PERS-3A   C-know-REC1-LOCAPP:INCOMPL   where-QW

where will they get to know each other?

ɔ-kín **ṭ-ín-arɔ-t**   **kárəṭṭôm / cənɛ́ / ɪ-man m-ɔ́-kapɪk**
PERS-3A C-know-REC1-LOCAPP:INCOMPL Khartoum   here   in-house C-of-God

they will get to know each other in Khartoum / here / in the church

In the next example, the Benefactive derivation of **ɔɽəkɔ̂** 'eat', **ɔɽə́kɪnɛ** 'eat for' is used in the 'why'-construction. The Locative-applicative **t** is present, giving **ɔɽə́kɪnṭɛt**, because of **kapɪk** 'upright, in upright position'.

ŋín-ṭ-akka **a-ɽə́k-ɪnṭɛt**   **ŋuɽú kapɪk**
what-QW-that   CONJ-(2-)eat-BEN.LOCAPP:DEPINCOMPL asida   upright

why do you eat asida while standing?

The next examples include two cases (the second and the fifth) with a constituent preceded by the PPC **ń-** 'with, by, (away) from'. **ntɪ** 'from' in the second example contains **ń-** 'with, by, (away) from' (see chapter 16.5). The verb **ɔllɔ̂** 'run' (here: 'leak') does not imply a locative constituent to be present (nor does the Pluractional verb **ɔkɛ́ccɛ** 'cut'). Compare:

ŋəʈɪ	**ŋ-a.ɪk**	**ŋ-a.llɔ́-t**		**nɔ-capʊ́**
water	C-be:PR	C-run-LOCAPP:INCOMPL		on-ground

the water is leaking onto the ground

ŋəʈɪ	**ŋ-a.ɪk**	**ŋ-a.llɔ**	**n.tɪ**	**ɪ-páka**
water	C-be:PR	C-run:INCOMPL	from	in-jerrycan

the water is leaking out of the jerrycan

m-p-a.kɛ́ccɛ-t	**ʈún**	**nɔ.ppǎn**
1-C-cut.PLUR-LOCAPP:INCOMPL	onion	inside

I will cut the onions inside

m-p-a.kɛ́ccɛ-t	**ʈún**	**nɔ-cáʈʈak**
1-C-cut.PLUR-LOCAPP:INCOMPL	onion	on-calabash

I will cut the onions into the bowl

m-p-a.kɛ́ccɛ	**ʈún**	**ŋ-kəʈɪttaŋ**	**k-âŋ**
1-C-cut:INCOMPL	onion	with-knife	C-POSS2

I will cut the onions with your knife

Also in the following two examples the derivation must be used. The examples illustrate that absence or presence of the **t**-suffix does not depend on deixis (movement towards or away from the speaker as the deictic centre):

ɔʈɔ-ʈ.ɛ	**kʊrrɛt**	**cənɛ́**
pull-LOCAPP:IMP	line	here

draw a line (up to) here!

ɔʈɔ-ʈ-ɛ	**kʊrrɛt**	**cɪt-téntərɛ**
pull-LOCAPP:IMP	line	LOC-over_there

draw a line right (up to) there!

A case of optional use of the **t**-suffix, with the same verb as in the examples above, follows here. The Imperative based on the verb with **t**-suffix (second example) is not as pressing as the one based on the verb without it (first example). This is because the **t**-suffix directs the focus away from the action itself to the location where it must be carried out. This conveys a lesser urgency for the action to be performed immediately. In the translations I use italics to try and capture the differences in informational focus. In the second, there may be contrastive focus (but not necessarily).

ɔt̪.ʊ	**kʊrrɛt**	**nɔ́-kamʊ́r**
pull:IMP	line	on-sand

draw a line in the sand (do it now!)

ɔt̪ɔ-t.ɛ	**kʊrrɛt**	**nɔ́-kamʊ́r**
pull-LOCAPP:IMP	line	on-sand

draw a line *in the sand!* (the focus on the place takes away some of the urgency that the action should be carried out at once)

Use of the Locative-applicative **t** is generally not felicitous in the following situations:

• the specific place follows from the semantics of the verb itself or is evident from the type of action;
• the relationship between the action and the place of action is not relevant in the context.

The first example below has the verb **ɔt̪ɔ̂** 'pull' again. Lines are typically drawn on the ground (with a stick) to mark pieces of land for making terraces for cultivation. The location (the ground) thus often follows more or less naturally from the action. Use of the **t** would put undue focus here on the ground as the location:

ɔ-kakká	**p-á.ɪ́k**	**p-á.tɔ́**	**kʊ́rrɛ́t**	**nɔ́-capʊ́**
PERS-Kakka	C-be:PR	C-pull:INCOMPL	line	on-ground

Kakka is drawing a line on the ground

The verb **ɔrɛ́kɔ** 'work' refers in the first place to farming. In the first example below, the place follows naturally from the verb itself. Use of the **t**-suffix in this example would imply that the man is not farming, but doing other work in his field. In the second example the **t**-suffix is present because now the spatial constituent represents information that is not implied by the verb.

ṭɔmɔccɔ	**ṭ-a.ɪk**	**ṭ-a.rɛ́kɔ**	**ɪ-kkwɔ́n**	**t-ʊ́ŋ**
old_man	c-be:PR	c-work:INCOMPL	in-farming_field	c-POSS3

the old man is working in his field (he is farming)

ṭɔmɔccɔ	**ṭ-a.ɪk**	**ṭ-a.rɛ́kɔ-t**	**nɔ-ppǎn**
old_man	c-be:PR	c-work-LOCAPP:INCOMPL	on-room

the old man is working in the room

The next pair contrasts two where-questions. The first, without the derivation, asks for the type of place that, in this context, is naturally implied by the verb (namely a body part). The second, with the derivation, asks for the place that, in this context, would not naturally be understood as the place asked for, namely the place where the event took place (for example, on the road to the market). The verb is **ɛɛ̂** 'stab, blow', with derivation **ɛɛ̂t. camʊ** is a sharp piece of dead wood fixed in the ground that has remained after a small tree or bush has been cut.

camʊ	**c-ɛɛ.r-ʊ́ŋ**	**kárɔ́-ṭâ**
piece_of-wood	c-stab:COMPL-O2	where-QW

where did the piece of wood prick/pierce you? (for example: in my left foot)

camʊ	**c-ɛɛ-ṭ-ʊ́ŋ**	**kárɔ́-ṭâ**
piece_of-wood	c-stab-LOCAPP:COMPL-O2	where-QW

where did it happen that the piece of wood pricked/pierced you? (for example: on the road to the market)

The following sentence is a case of the second type where the Locative-applicative derivation is not felicitous. It is an answer to the question 'where is Lalʊ?'. Instead of just answering that Lalʊ is 'in the compound', the speaker says 'he is mending a bed in the compound'.

In the context of the question the place is the relevant information, though not as the location where Lalʊ is *mending*, but as the location where he *is*. The speaker, therefore, does not use the **t**-suffix on **ɔṭérɔ** 'mend':

m-p-ɔttɛ.t	**n-a-ák**	**a-kw-ɔ́ṭɛrɔ**		**áṛaŋkal**	**nɔ́-cərúk**
1-C-leave:COMPL	on-PERS-3	CONJ-3-mend:DEPINCOMPL		bed	on-opening

I (just) left him, he is mending a bed in the compound

A few verbs never get the **t**-suffix: **ɔkâ** (**cɪk**) 'be', **ɛɔ̂** 'go', **aɔ** 'come' and **ɔnâ** 'bring', due to their semantics. The verbs 'go', 'come' and 'bring' are inherently goal-oriented and the locative verb **ɔkâ** 'be' is inherently place-oriented. Because of their natural locative orientation, the **t**-suffix has no function on these verbs when they are used with a locative constituent. They can, however, also be used without such a constituent, but recall that in such cases 'be' as a main verb must be combined with the 'vague reference' particle **cɪk** replacing the locative constituent (unless it functions as a copular verb). Examples with 'be', 'go' and 'bring' follow here.

m-p-a.ká	**tɔ́rrû**
1-C-be:INCOMPL	Lumun_country

I will be in Lumun country

m-p-a.ɛɔ̂	**tɔ́rrû**
1-C-go:INCOMPL	Lumun_country

I will go to Lumun country

ana	**úl**	**w-á.ná**	**ŋə́pák**	**kéccûk**[3]
and	people	C-bring:INCOMPL	beer	market

and the people bring beer to the market

The Locative-applicative with objects not marked by a PPC

When some positional verbs occur with the **t**-suffix, a locative prepositional phrase from the clause with the non-derived verb

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[3] **kɛccûk** 'market' is an inherently locative noun.

becomes object (without PPC) in the clause that has the locative-applicative suffix. The suffix establishes that the action, in one way or another, *concerns* this object, or that the object is affected by the action. The sentence with the underived verb and the sentence with the derived verb are typically semantically not precisely equivalent. Compare the following pairs of examples:

ɔ-kʊkkú	p-á.ík	p-á.cɔ́ɽɔ	nɔ-karrâŋ
PERS-Kʊkkʊ	C-be:PR	C-stand:INCOMPL	on-wall

Kʊkkʊ is standing on the wall

ɔ-kʊkkú	p-á.ík	p-á.cɔ́ɽɔ-t	kárraŋ
PERS-Kʊkkʊ	C-be:PR	C-stand-LOCAPP:INCOMPL	wall

Kʊkkʊ is standing near the wall (maybe guarding it)

ɔ-kín	ṱ-á.ík	ṱ-íkkɔ	cɪk	ɪ-ccík	k-ɔ-ṱɪ̆k
PERS-3A	C-be:PR	C-sit:INCOMPL	VREF	in-place	C-of-fire

they are sitting near the fire

ɔ-kín	ṱ-á.ík	ṱ-íkkɔ-t	ṱɪk	cîk
PERS-3A	C-be:PR	C-sit-LOCAPP:INCOMPL	fire	VREF

they are sitting near the fire (maybe guarding it)

ɔ-kín	ṱ-á.ík	ṱ-íkkɔ-t	púl	cɪk	ákka	p-p-ɔ́ŋɔ́
PERS-3A	C-be:PR	C-sit-LOCAPP:INCOMPL	person	VREF	that	PRO-C-sick

they are sitting with the man because he is ill

The verb in the following example must have the locative-applicative derivation, though this cannot be seen from its form, since Dependent Perfectives of ɔcéɽɛ and ɔcéɽɛt are identical. ɔcéɽɛ 'make stand', however, would imply that the spear stands by itself, without support, and in combination with a form of ɔcéɽɛ, cʊɽé cɔ-pɪra 'bottom of the tree' could not be used without prepositional proclitic.

a-kɪt	ɔcéɽɛ-kat	kaṱʊk	cʊɽé	c-ɔ-pɪra
CONJ-wild_chicken	make_stand-LOCAPP:DEPPRFV	spear	bottom	C-of-tree

and the wild chicken made the spear stand against the bottom of the tree (the lower part of the tree trunk) ('The story of the jackal')

A few transitive verbs have a Locative-applicative derivation that
introduces an argument that is deprived from something. Stealing
something from a place is expressed with the verb **ɔmʊ́ɲɛ** 'steal' in
combination with a locative constituent preceded by **ń-** 'with, by,
(away) from'. Stealing something from a person is expressed with the
t-final verb **ɔmʊ́ɲɛt** and a noun without prepositional marking
referring to the victim**.** It seems that, with persons, stealing as
affecting somebody takes prominence over the notion of stealing as
an act of taking something away from a location.

n-ɔkə́rənnɔ	**ɔmʊ́ɲɛ-t**	**ɔ-paŋ-k-aŋ-ɔ̂ŋ**
2A-let:DEPINCOMPL	steal-LOCAPP:DEPINCOMPL	PERS-sibling-C-POSS2-PL

do not steal from your brothers! (plural addressee)

A case of change from intransitive to transitive verb is the following:

kəpa	**k-a.ɪk**	**k-á.kkʊnakɔ**	**ɪ-makkə́rɛn**
meat	C-be:PR	C-smell:INCOMPL	in-somewhere

meat is smelling somewhere (Said upon passing some houses. There is a
smell of meat, but it is not clear where exactly it comes from)

m-p-a.ɪk	**p-á.kkʊnakɔ-t**	**kəpá**
C-be:PR	C-smell-LOCAPP:INCOMPL	meat

I smell meat

Non-valency increasing derivations: change of patient-role of object into
affected-entity role

The **t**-suffix can be used in order to express that an action is
performed at, or upon, (part of) somebody or something. With the
verb **ɔmɛ** 'wash', there is a difference between washing a cloth or
bathing a person (or for example a cow). A cloth which is washed is
put into the water entirely, while a person is typically not. The
bathing of a person by somebody else is performed at, or onto (parts
of) the body of that person and requires the **t**-suffix on the verb **ɔmɛ**
'wash' (second example below). Compare:

m-p-ɔmɛ́.t   **kərɛ́t**
1-C-wash:COMPL   cloth

I have washed the cloth

m-p-ɔmɛ́-ṭ.ɛ   **ɔ-kakkâ**
1-C-wash-LOCAPP:COMPL   PERS-Kakka

I have bathed Kakka

*m-p-ɔmɛ́.t   **ɔ-kakkâ**
1-C-wash:COMPL   PERS-Kakka

A comparable case is the following:

m-p-a.kɛ́ccɛ   **ṭɔɾə́k**
1-C-cut.PLUR:INCOMPL   rope

I will cut the rope (cutting it in two parts)

m-p-a.kɛ́ccɛ-t   **ṭɔɾə́k**
1-C-cut.PLUR-LOCAPP:INCOMPL   rope

I will cut the rope smooth (I will cut at the rope: I will cut off the fibres that are sticking out)

The Locative-applicative verb of 'cut', **ɔkɛ́ccɛt**, can also express that an action is performed upon oneself. Cutting somebody's hair (or somebody's nails) can be expressed with a possessive construction (first example below), but also with a Benefactive verb, where the possessor functions as the complement of the Benefactive verb (second example). If the action is performed upon oneself, on the other hand, the verb needs the **t**-suffix: the own body, though not explicitly mentioned, is the affected entity (or the location) of the action (third example).

m-p-a.ɪk   **p-a.kɛ́ccɛ**   **wan**   **w-ɔ́-kakkâ**
1-C-be:PR   C-cut.PLUR:INCOMPL   hair   C-of.PERS-Kakka

I am cutting Kakka's hair

m-p-a.ɪk   **p-a.kɛ́ccɛ-nɛ**   **ɔ-kakká**   **wăn**
1-C-be:PR   C-cut.PLUR-BEN:INCOMPL   PERS-Kakka   hair

I am cutting Kakka's hair

m-p-a.ɪk   p-a.kéccɛ-t   wăn
1-C-be:PR   C-cut.PLUR-LOCAPP:INCOMPL   hair

I am cutting my hair

If a locative adverbial phrase is added to the first or second example above, the verb with **t**-suffix is used. The Benefactive verb **ɔkéccɛnɛ** 'cut for' (second example above) then becomes **ɔkéccɛnṭet**.

m-p-a.ɪk   p-a.kéccɛ-nṭet   ɔ-kakká   wan   nɔ.ppăn
1-C-be:PR   C-cut.PLUR-BEN.LOCAPP:INCOMPL   PERS-Kakka   hair   inside

I am cutting Kakka's hair inside

Some verbs of speech

With verbs of speech the function of the **t**-suffix is different. The verbs **ɪɽet** 'tell sb.' and **ɔmêt** 'tell sb.' have an additional object with the role of 'recipient' of the speech, as compared to **ɪɽɛ** 'say' and **ɔmê** 'say'. The same is true for **ɪpɪttɔ** 'ask (for) sth.', where the Locative-applicative derivation (**ɪpɪttɔt** 'ask sb. (for) sth.') adds the 'recipient' of the question. The Benefactive derivation adds an argument with beneficiary role to this verb (**ɪpɪttɪnṭet** 'ask sb. (for) sth. for the benefit of'), cf.:

m-p-ípɪttɔ   ŋʊí
1-C-ask:INCOMPL   milk

I will ask for milk

m-p-ípɪttɔ-t   ɔ-kakká   ŋʊí
1-C-ask-LOCAPP:INCOMPL   PERS-Kakka   milk

I will ask Kakka for milk

m-p-ípɪtt-ɪnɛ   ɔ-kakká   ŋʊí
1-C-ask-BEN:INCOMPL   PERS-Kakka   milk

I will ask for milk for Kakka

m-p-ípɪtt-ɪnṭet   úkʊl   ɔ-kakká   ŋʊí
1-C-ask-BEN.LOCAPP:INCOMPL   child   PERS-Kakka   milk

I will ask Kakka for milk for the child

The nouns referring to the child and to Kakka in the last example cannot be reversed without a change of semantic roles.

With the verb **ɛrɛ** 'speak', the **t**-suffix takes what is spoken about as its complement (second example below), while the Benefactive derivation introduces the addressee of the speech. Note that the language is marked with **ɲ-** 'with, by, (away) from' in such cases (third example below).

ʋl   w-ɛ́rɛ   kárrɔ̂
people   C-speak:INCOMPL   mother_tongue

the people speak Lumun

ʋl   w-ɛ́rɛ-t   kárrɔ̂
people   C-speak-LOCAPP:INCOMPL   mother_tongue

the people speak about Lumun

ʋl   w-ɛ́rɛ-nɛ   ɔ-nnán   ŋ-karrɔ̂
people   C-speak-BEN:INCOMPL   PERS-mother   with-mother_tongue

the people speak to the mother in Lumun

The sentence below, with a locative adverbial phrase, is ambiguous. The locative-applicative derivation can be used because of the locative phrase, but it is also possible that **karrɔ̂** 'mother tongue' functions as its complement. The first case translates as 'speak Lumun', the second as 'speak about Lumun'.

ʋl   w-ɛ́rɛ.t   kárrʋ́   ɪ-man   m-ɔ́-kapɪk
people   C-speak-LOCAPP:INCOMPL   mother_tongue   in-house   C-of-God

the people speak Lumun in the church / the people speak about Lumun in the church

Some speakers, however, combine **ɛrɛ** 'speak' with **nɔ-** instead of using the locative applicative derivation for 'speak about'.

Lexicalizations

Several verbs with the **t**-suffix have lexicalized semantics.

An example is the pair **ɔʈɨ́ɔ** 'push' / **ɔʈɨ́ɔt** 'send'. A prototypical situation of **ɔʈɨ́ɔt** is described as a mother pushing a child out of the house in the early morning in order to go and get fire from the neighbours. This pushing involves a locative goal and has lexicalized into the verb **ɔʈɨ́ɔt** 'send', which can occur without a locative phrase.

ɔ-kakká	**p-ɔʈɨ̀ɔʈ.ɛ́**	**ʊkʊl**
PERS-Kakka	C-send:COMPL	child

Kakka has sent the child

The verb **ɔʈɨ́ɔ** is used as 'push' (first example below). In the second example below, the verb has the **t**-suffix because of the locative phrase: a regular productive derivation exists here next to the lexicalized derivation.

ɔ-cɛccɛ́	**p-á.ík**	**p-á.ʈɨ́ɔ**	**cúɽɔl**
PERS-Cɛccɛ	C-be:PR	C-push:INCOMPL	stone

Cɛccɛ is pushing the stone

ɔ-cɛccɛ́	**p-ɔʈɨ̀ɔ-ʈ.ɛ́**	**cʊɽɔl**	**nɔ-kʊʈʊ́t**	**k-ɔ-kkwɔn**
PERS-Cɛccɛ	C-push-LOCAPP:COMPL	stone	on-lip	C-of-farming_field

Cɛccɛ has pushed the stone to the edge of the farming field

The vowel-final verb **ɔʈɨ́ɔ** 'push' also has the more specialized meaning of 'divorce'. Divorce is conceptualized as pushing the wife out of the compound: no locative goal is involved and the verb lacks the **t**-suffix.

ɔ-kʊkkú	**p-ɔʈɨ̀ɔ.t**	**parí**
PERS-Kʊkkʊ	C-push:COMPL	wife

Kʊkkʊ has divorced his wife

Some more verbs with a lexicalized **t**-final counterpart follow here. The developments are not in all cases as transparent as in the pair **ɔʈɨ́ɔ** / **ɔʈɨ́ɔt**.

ɔkkwɔ̂	beat	**ɔkkwɔ̂t**	kill
ɔkwɔ̂	blow	**ɔkwɔ̂t**	ignite, blow at (fire)

ɪ̠ɽɪkɔ	enter	**ɪ̠ɽɪkɔt**	be busy
ʊmmɔ	take, pick	**ʊmmɔt**	come up (of sun, grass)
ɪpɔ	collect	**ɪpɔt**	dig (up), store
ɔkkɔ̂	pass	**ɔkkɔ̂t**	do, make

Several **t**-final verbs lack a vowel-final counterpart. For some it is easy to think of a "natural" spatial complement, for others this is not so obvious. Though they have very diverse semantics, I suppose that all these verbs contain, historically, the **t**-suffix. They do not, or no longer, need the presence of a locative complement, although in some cases the element **cɪk**, functioning as a "dummy" place (or time) denoting element, is obligatory. For some of the verbs a corresponding verb without **t** does exist, but seems to be unrelated; such counterpart verbs are given in parentheses. Some examples:

apɪkɔt 'rest', **ɛ̠t̠ɛ̂t** 'give', **ɪttarɔt** 'help', **ɪttat** 'become fat' (**ɪtta** 'get married'), **i̠cat** 'lie down, sleep', **i̠cat cɪk** 'lie (down)', **ɪntat cɪk** 'disappear', **ɔcʊ́ŋkwɛt** 'splash (in the water)', **ɔkʊ́ccɛt** 'prepare', **ɔkwántɔt** 'search', **ɔnɔ́kkɛt** 'put down', **ɔŋɔt** 'like, want, love', **ɔpákkɔt** 'return' (**ɔpákkɔ** 'wash one's body'), **ʊnɔt** 'taste' (**ʊnɔ** 'build').

14.3. The Causatives

Lumun has a productive Causative suffix **ɪɛ** and a non-productive Causative suffix **ɛ** that occurs on a few verbs only. In this section, the suffix **ɛ** is glossed as CAUS1, the suffix **ɪɛ** as CAUS2. The two are in principle in complementary distribution, but this seems to be in a process of becoming somewhat fuzzy: some of the Causatives with the non-productive CAUS1 (**ɛ**) were, in elicitation, also given with the productive CAUS2 (**ɪɛ**), though in most of these cases doubt was expressed about the acceptability of the derivation with CAUS2, and in all cases the Causative with CAUS1 was the preferred.

In a few cases, Causatives with **ɛ** and with **ɪɛ** exist next to each other not as variants, but as different verbs. In such cases, the verb with **ɪɛ** is a double Causative: it is a derivation with CAUS2 based on a Causative that is derived with CAUS1.

Causatives can be derived from intransitive and from transitive verbs and have increased valency as compared to their base verb. The Lumun causative clause contains, apart from the Causative verb, at least two arguments: a "causer" and a "causee". The causer-argument is the agent of the causation that is expressed by the verb. The causee-argument undergoes the causation and is at the same time agent or undergoer of the caused effect. In a situation of "direct causation" the causer-argument is directly and typically physically involved in the caused effect. In this situation control over the caused effect lies with the causer, not with the causee. In a situation of "indirect causation" the causer's involvement in the effect is only indirect. The effect is caused by the causer, but actively carried out by the causee. In such a case, the causee is typically animate.

Form

The productive suffix ɪɛ (CAUS2) replaces a final or last vowel ɔ, ɛ or **a**. Upon attachment to a +ATR stem it is realized as i̧ɛ [ie]. Some examples:

akɔ 'wear; suck milk'	**akɪɛ** 'dress sb.; breast feed'
apɔ 'fall'	**apɪɛ** 'make fall, drop (tr.)'
arrɔt 'cross'	**arrɪet** 'make cross'
ɪkkɔ cɪk 'sit, stay'	**ɪkkɪɛ cɪk** 'make sit, make stay'
i̧kkɔ 'drink'	**i̧kki̧ɛ** [ikkie] 'make drink'
accakɔ 'soak (intr.)'	**accakɪɛ** 'make wet'
ɔpákkɔ 'wash (intr.)'	**ɔpákkɪɛ** 'help sb. wash'
ɔkwárɪkɔt 'remember'	**ɔkwárɪkɪet** 'make remember, remind'
ɔccɔ̂ 'take, receive'	**ɔccíɛ** 'make take, make receive'
ɔllɔ̂ 'run'	**ɔllíɛ** 'make run'
ɔkkɔ̂t 'make, do'	**ɔkkíɛt** 'make make, make do'
ɔpə́llɛ 'be afraid'	**ɔpə́llɪɛ** 'make afraid, scare'
ɛrɛ 'speak'	**ɛrɪɛ** 'make speak'
ɔŋantɛ 'enumerate, count'	**ɔŋantɪɛ** 'make enumerate, count'
ɔppêt 'get pregnant'	**ɔppíɛt** 'make pregnant'
ɔppêt 'fill'	**ɔppíɛt** 'make fill'

ɛlla 'lack, be absent'   ɛllɪɛ 'make disappear'
ɔcɔ́kka 'grow (up)'   ɔcɔ́kkɪɛ 'make grow (up), raise'
ɪʈɪmat 'get dark, get blinded' ɪʈɪmɪɛt 'make dark, blind'
ɔpíra 'become good'   ɔpírɪɛ 'make good'
ɔkíʈaka 'become bad'   ɔkíʈakɪɛ 'make bad'
ɔnʈɔma 'become dry'   ɔnʈɔmɪɛ 'dry (tr.)'

In Causatives based on verbs with a L.L.HL tone pattern, the H tone occurs one mora to the left compared to the base verb:

ɔʈəkɔ̂ 'eat'   ɔʈə́kɪɛ 'make eat'

Causatives with the non-productive suffix ɛ (CAUS1) are a limited set. The suffix ɛ replaces a final or last vowel ɔ or a. The derivational pairs that I found are listed below. In the case of ɔcéʈɛ (< ɔcɔ́ʈɔ), the second vowel has harmonized with the suffix.

ɪʈɪkɔ 'enter (intr.)'   ɪʈɪkɛ 'make enter'
ɔpákkɔt 'return (intr.)'   ɔpákkɛt 'make return, put back'
ɔcɔ́ʈɔ 'stand, wait'   ɔcéʈɛ 'make stand, make wait, stop (tr.)'
ɔpáʈɔ 'move at level height' ɔpáʈɛ 'move at level height'
ɔrəpɔ̂ 'move down'   ɔrəpɛ̂ 'make move down'
ɔkúʈɔt 'move up'   ɔkúʈet 'make move up'
ɔpáʈɔ cɪk 'move out of the way'
          ɔpáʈɛ cɪk 'make move out of the way'
ɔʈə́kkarɔt 'move over'   ɔʈə́kkarɛt 'make move over'
ɔkəʈɔ̂ 'get burnt'   ɔkəʈɛ̂ 'make burn'
ɛrɛkɔt 'grumble in oneself' (related to ɛrɛ 'speak')
          ɛrɛkɛt 'convince' (< make say to oneself)
ɔkkɔ̂t 'do, make'   ɔkkɛ̂t 'make (fire)'

ɔppât 'become full'   ɔppɛ̂t 'fill'
ɨcat cɪk 'lie (down)'   ɨcɛt cɪk 'lay (down), make lie (down)'
ɛrɪma 'become deafened' ɛrɪmɛ 'deafen'
ʊrat cɪk 'become lost'   ʊrɛt cɪk 'loose, forget'

ɔppɛ̂t 'get pregnant' is probably related to ɔppɔ̂ 'appear', and the Locative-applicative verb ɛrɛkɔt 'grumble in oneself' relates to ɛrɛ

'speak', but has lexicalized semantics (< 'speak to oneself'). It seems that its Causative, ɛrɛkɛt 'convince', was derived before ɛrɛkɔt developed its specialized, somewhat pejorative, semantics.

In the following cases it is impossible to decide whether the suffix is ɛ or ɪɛ, since both would have the same result: ɔʈɪ-a + ɪɛ > (ɔʈɪ-ɪɛ >) ɔʈɪɛ; ɔʈɪ-a + ɛ > ɔʈɪɛ.

ɔʈɪa 'become red, ripe'   ɔʈɪɛ 'make red, ripe'
ɛʈɪa 'become cool'   ɛʈɪɛ 'make cool'

Argument structure and semantics of Causatives

Causatives with ɛ are typically based on intransitive verbs and are themselves transitive: they have a causer and a causee argument. Causatives with ɪɛ can be formed on the basis of intransitive and transitive verbs, and are themselves transitive or ditransitive. In the latter case they have, apart from the causer and the causee, a third argument that typically has a patient or beneficiary role in the caused event. Both Causatives can express direct as well as indirect causation. Whether a verb expresses direct or indirect causation is in some cases determined by the verb itself, but can also depend on its collocation. Finally, some sentences can be interpreted both as direct and as indirect causation.

In order to demonstrate the argument structure, the sentences presented in this section are in some cases contrasted with a sentence that contains the base verb.

Causatives with ɛ (CAUS1)

Several of the verbs with ɛ are concerned with path of movement ('make enter', 'make go up', and others) or with putting someone or something in a certain position. An example of the latter follows here.

ɔ-nnán   **p-i̯c-ɛ.káṭɛ**   **ʋkʋl**   **cɪk**   **ná-aɽaŋkál**
PERS-mother   C-lie_down-CAUS1:PST   child   VREF   on-bed

the mother laid the child down on the bed / the mother made the child lie
down on the bed

ʋkʋl   **w-i̯ca.káṭɛ**   **cɪk**   **ná-aɽaŋkál**
child   C-lie_down:PST   VREF   on-bed

the child lay down on the bed

In this example, the causative can refer to a situation of direct
involvement of the causer in the effect, but also to a situation of
indirect involvement: a situation in which it is the child itself that
carries out the action of lying down.

Also in the following examples, with a verb with ɛ that is concerned
with path of movement, the directness of the causers involvement is
not determined by the verb itself. Here an interpretation as direct or
indirect causation depends on the collocation of the verb. In the first
two examples, with an inanimate causee, the causer is directly
involved in the effect, in the third, the causer's involvement is less
direct: the action of going back will be carried out by the people
themselves.

ant-ɔpákk-ɛ.t   **lɔ́n**   **l-ɛn**
can:DEPINCOMPL-return-CAUS1:DEPINCOMPL   words   C-DEM

please repeat what you said (lit.: please make those words return)

ɔpakk-ɛ.ṭ.ɛ   **mí̯l**   **nɔ.ppăn**
return-CAUS1:IMP   sorghum   inside

put the sorghum back inside! (the addressee has just taken it out, but must
put it back inside)

ɔpakk-ɛ.ṭ.ɛ   **ôl**
return-CAUS1:IMP   people

make the people go back!

The example below is a clear example of indirect causation: the goats
perform the action of going up.

k-kw-ɔ́kʊɽ-ɛ́.ʈ.ɛ   **lịcɔk**   **tɔpərâ**
3-C-move_up-CAUS1:COMPL   goats   Tɔpərâ

s/he made the goats move up to Tɔpərâ

lịcɔk   **l-ɔkʊɽɔʈ.ɛ́**   **tɔpərâ**
goats   C-move_up:COMPL   Tɔpərâ

the goats moved up to Tɔpərâ

A few verbs with **ɛ** are Causatives derived from (inchoative) state verbs. They typically express direct causation. The causee (first example below) has an undergoer role. The noise is directly making the man deaf.

pɔɽɛ́   **p-ɛrɪm-ɛ́.t**   **pʊl**
sound   C-become_deafened-CAUS1:COMPL   person

the noise has deafened the man

pʊl   **p-ɛrɪmâ.t**
person   C-become_deafened:COMPL

the man is deafened (typically by a loud noise)

Causatives with ɪɛ (CAUS2)

Causatives with **ɪɛ** are often derived from transitives, but can also be derived from intransitives. The Causative in the example below is based on an intransitive verb. Causation can be indirect and direct. The example below illustrates indirect causation. It describes the situation that the child, just upon seeing the dog, got scared and ran. The dog is present, but otherwise no action on its part is implied, it may even be sleeping. The causer, the dog, is involved in the causation, if only by its presence, but the effect is carried out by the child alone. The sentence cannot be interpreted as that the dog is running after the child.

ʈʊk   **ʈ-ɔll-ɪɛ́.t**   **ʊkʊl**
dog   C-run-CAUS2:COMPL   child

the dog has made the child run

ʊkʊl   w-a.ɪk   w-a.llɔ́   aka-ín-ṭa
child   C-be:PR   C-run:INCOMPL   that-what-QW

why is the child running?

The following example of direct causation is also derived from an intransitive verb. The child is typically a small child, unable to wash itself (properly) on its own. The child is not necessarily purely undergoing the washing, it may have some agent-role itself as well. In the second (non-Causative) example, the child is typically a bit older, washing itself alone.

ɔpakk-ɪɛ   ʊkʊl
wash_body-CAUS2:IMP   child

help the child to wash itself! / bathe the child!

ʊkʊl   w-a.ɪk   w-a.pákkɔ
child   C-be:PR   C-wash_body:INCOMPL

the child is taking a shower

Some Causatives with **ɪɛ** are derived from (inchoative) state verbs. Like the Causatives with **ɛ** that are derived from (inchoative) state verbs, they express direct causation:

cįŋkį   c-a.ɪk   c-á.nṭɔm-ɪɛ   ərét
sun   C-be:PR   C-become_dry-CAUS2:INCOMPL   cloths

the sun is drying the clothes

ərɛt   w-a.ɪk   w-á.nṭɔma
cloths   C-be:PR   C-become_dry:INCOMPL

the clothes are getting dry

An example with a Causative based on a transitive verb follows here. Causatives based on transitive verbs often express situations of indirect causation. This is also the case in the following example: the causer can only make the causee decide to carry out the effect (swear an oath).

k-kw-á.kkw-ɩɛ   **púl**   **mɪ̌ɔ̃**
3-C-hit-CAUS2:INCOMPL   person   spell

s/he will make the person swear an oath

pʊl   **p-a.kkwɔ**   **mɪ̌ɔ̃**
person   C-hit:INCOMPL   spell

the person will swear an oath

There is lexical variation as to whether a causative verb allows for both a direct and an indirect causation as an interpretation. The following example based on the transitive verb **ɔɽəkɔ̂** 'eat' allows for both interpretations. It can be a case of indirect causation: the mother makes the child eat (for example by suggesting punishment if it does not), but it also allows for an interpretation as direct causation: the mother feeds the child. In the latter case she is directly and physically involved, putting asida in the child's mouth.

ɔ-nnán   **p-á.ɪ́k**   **p-á.ɽə́k.ɪɛ**   **úkʊl**   **ŋuɽû**
PERS-mother   c-be:PR   C-eat-CAUS2:INCOMPL   child   asida

the mother is feeding the child asida / the mother is making the child eat asida

The situation is different with **akɔ** 'wear, put on', which only allows for a reading as direct causation. In the following example the causer has a direct physical involvement in the caused action. The sentence does not allow for a reading without such direct physical involvement.

ɔ-nnán   **p-ák-ɪɛ**   **ɲúkʊl**   **ərét**
PERS-mother   C-wear-CAUS2:INCOMPL   children   cloths

the mother helps the children to put on their clothes (Not: the mother makes the children put on their clothes)

Verbs allowing both Causative suffixes

One verb occurs with both Causative suffixes: **ɩɽɪkɔ** 'enter'. The most common Causative form has the suffix **ɛ**, but a variant with **ɪɛ** is considered acceptable as well. The variant with **ɪɛ** cannot be used in

the first example below, which is a clear situation of direct causation. It can, however, be used in the second example, with a (wilful) human causee. Notably, in the second example below, there is no difference between the verbs as to the way in which the causation is carried out (for example through persuasion or physically).

… a-kw-íʈɪk-ɛ   káíʈí   ɪ-a-âk
CONJ-3-enter-CAUS1:DEPINCOMPL   nail   in-PERS-3

and he inserts his claw into him (the lion attacks the leopard) ('The story of the jackal'

k-kw-íʈɪk-é.t / k-kw-íʈɪk-íɛ.t   ɔ-lɔ́ccɔ   nɔ-ppǎn
3-C-enter-CAUS1:COMPL / 3-C-enter-CAUS2:COMPL   PERS-Lɔccɔ   on-room

s/he made Lɔccɔ enter the room

Some of the other verbs with **ɛ** possibly have a variant with **ɪɛ**. In most of these cases there was uncertainty about the acceptability of the verb with **ɪɛ**. One such case is the verb **ɔrəpê** 'make come down':

ɔrəp-ɛ   ʋkʋl   n-tɔ-cʋʈɔ̂l
come_down-CAUS1:IMP   child   with-up_on-stone(k.o.)

get the child down from the stone!

? ɔrəp-ɪɛ   ʋkʋl   n-tɔ-cʋʈɔ̂l
come_down-CAUS2:IMP   child   with-up_on-stone(k.o.)

make the child come down from the stone!

There seems to be a subtle semantic difference between the two sentences above, but it was difficult to get clear what exactly the difference would be. The verb with **ɪɛ**, if acceptable, seems to imply an effort on the part of both causer and causee, whereas the Causative with **ɛ** refers in the first place to an action by the causer. The translations try to reflect this. In both cases, the child can come down from the stone by itself, but it is also possible that the addressee gives it a helping hand.

Further Causatives with **ɛ** that can (possibly) also be used with **ɪɛ** follow here. Most verbs with **ɪɛ** have a question mark, indicating that

my consultant hesitated about their acceptability or that acceptability judgements about these verbs with ɪɛ were inconsistent. The forms with ɛ are the ones commonly used.

i̧cat cɪk 'lie down'   i̧cɛt cɪk, i̧ci̧ɛt cɪk 'lay sb. down'
ʊrat cɪk 'become lost' ʊrɛt cɪk, ?ʊrɪɛt cɪk 'loose, forget'
ɔcɔ́ɽɔ 'stand, wait'   ɔcéɽɛ, ?ɔcéɽɪɛ, ?ɔcɔ́ɽɪɛ 'stop (tr.), make wait'
ɔpáɽɔ 'go level'   ɔpáɽɛ, ?ɔpáɽɪɛ 'go level'
ɔpáɽɔ cɪk 'move out of the way'   ɔpáɽɛ cɪk, ?ɔpáɽɪɛ cɪk 'make move out of the way'
ɔkʊ́ɽɔt 'move up'   ɔkʊ́ɽɛt, ?ɔkʊ́ɽɪɛt 'make move up'
ɔpákkɔt 'return'   ɔpákkɛt, ?ɔpákkɪɛt 'make return, put back'

Double Causatives

The above-mentioned pairs with ɛ and with ɪɛ (ɪ̧ɪkɛ/ɪ̧ɪkɪɛ and others) are based on the same non-Causative base verb and can, at least in some constellations (and as far as the forms with ɪɛ are at all considered acceptable) be used both. Three pairs of Causatives are attested with ɛ and with ɪɛ that have different argument structures. In such cases the verb with ɪɛ is a (ditransitive) double Causative, derived on the basis of the Causative with ɛ: ɛ + ɪɛ > ɪɛ. The attested cases are all derived on the basis of Causatives with ɛ that are themselves derived from verbs with final or last **a** (typically (inchoative) state verbs). The fourth verb of the small set of verbs with a final or last **a** that have a Causative with CAUS1 (ɛrɪma 'become deafened' / ɛrɪmɛ 'deafen') does not seem to allow for double derivation. This is perhaps because the causer argument of ɛrɪmɛ 'deafen' is typically non-animate (a loud noise).

A case of double derivation is i̧ci̧ɛt cɪk 'lay down, make lie (down)' (< i̧cɛt cɪk < i̧cat cɪk 'lie (down)'). On the one hand i̧ci̧ɛt cɪk is said to be an alternative form of i̧cɛt cɪk (though in cases where both are possible, the latter is preferred), on the other hand it is also a different verb: a double Causative with an additional argument as compared to i̧cɛt cɪk. Where in the first example both verbs are possible (and both verbs can express direct as well as indirect

causation), the second example, with an additional argument, only allows for the double Causative **i̧ci̧et cɪk**.

ɔ-kakká   p-i̧c-éṭ.ɛ / p-i̧c-íȩṭ.ɛ   **ʋkʋl   cɪk**
PERS-Kakka   c-lie_down-CAUS1:COMPL / c-lie_down-CAUS2:COMPL   child   VREF

Kakka has laid the child down, Kakka has made the child lie down

ɔ-kakká   p-i̧c-í-ȩṭ.ɛ   **ɔ-cɛccé   ʋkʋl   cɪk**
PERS-Kakka   c-lie_down-CAUS2-CAUS1:COMPL   PERS-Cɛccɛ   child   VREF

Kakka has made Cɛccɛ lay the child down

The other attested pairs are **ʋrɛt cɪk** 'loose, forget' (< **ʋrat cɪk** 'become lost') / **ʋrɪɛt cɪk** 'make sb. loose sth., make sb. forget', and **ɔppêt** 'fill' (< **ɔppât** 'become full') / **ɔppíet** 'make sb. fill'. Compare:

ṭɔntərɔ   ṭ-ɔppáṭ.ɛ
calabash(k.o.)   c-become_full:COMPL

the *ṭɔntərɔ*-calabash is full

ɲʋkʋl   ɲ-ɔpp-é.ṭɛ   **ṭɔntərɔ   ṭamúr**
children   c-become_full-CAUS1:COMPL   calabash(k.o.)   sand

the children have filled the *ṭɔntərɔ*-calabash with sand

ɔ-kʋkkú p-ɔpp.ɪ-éṭ.ɛ   **ɔ-nɛnní   ŋəṭɪ   ṭɔ́ntərɔ**
PERS-Kʋkkʋ   c- become_full-CAUS2-CAUS1:COMPL   PERS-Nɛnnɪ   water   calabash(k.o.)

Kʋkkʋ made Nɛnnɪ fill the *ṭɔntərɔ*-calabash with water

Most Causatives derived from (inchoative) state verbs (with a final or last vowel **a**) are derived by means of the CAUS2 suffix **ɪɛ**. The Causative **ɔnṭɔmɪɛ** 'dry' (< **ɔnṭɔma** 'become dry'), can function as a transitive verb 'dry sth.', but also as a ditransitive verb 'make sb. dry sth.'. In other words, this verb can express single causation (with one causee-object), but also double causation (with two causee-objects). In the latter case, **ɪɛ** is perhaps the surface outcome of a doubled CAUS2 suffix (second example below).

ɔ-kakká   p-ɔnṭɔm-íɛ.t   **ərét**
PERS-Kakka   c-become_dry-CAUS2:COMPL   cloths

Kakka has dried the clothes (typically by waving them in the air)

ɔ-kakká	p-ɔnt̪ɔm-íɛ.t	ɔ-kʊmaŋ	ərét
PERS-Kakka	C- become_dry-CAUS2(?-CAUS2):COMPL	PERS-Kʊmaŋ	cloths

Kakka made Kʊmaŋ dry the clothes (typically by waving them in the air)

Certain Causatives with CAUS1 (ɛ) do not allow for double derivation, e.g., *ɔkʊ́ɽɪet 'make sb. make go up' (double Causative, < ɔkʊ́ɽet / ? ɔkʊ́ɽɪet (single Causative) < ɔkʊ́ɽɔt 'move up'):

*ɔ-kʊkkú	p-ɔkuɽ-í-ɛt̪.ɛ	ɔ-lɔ́ccɔ	lịcɔk	tɔpərâ
PERS-Kʊkkʊ	C-move_up-CAUS2-CAUS1:COMPL	PERS-Lɔccɔ	goats	Tɔpərâ

Kʊkkʊ made Lɔccɔ make the goats move up to Tɔpərâ

Causatives with CAUS2 (ɪɛ) based on other than (inchoative) state verbs can often only express single causation, not double, e.g.,

ɔkkwíɛ 'make hit' < ɔkkwɔ̂ 'hit'

k-kw-á.kkw-ɪɛ	pʊl	mɪ̌
3-C-hit-CAUS2:INCOMPL	person	spell

s/he will make the person swear an oath

*k-kw-á.kkw-ɪɛ	ɔ-kʊkkú	pʊl	mɪ̌
3-C-hit-CAUS2:INCOMPL	PERS-Kʊkkʊ	person	spell

s/he will make Kʊkkʊ make the person swear an oath

ɛrɪɛ 'make speak' < ɛrɛ 'speak'

ɛr-ɪɛ	pʊl
speak-CAUS2:IMP	person

make the man speak!

*ɛr.ɪɛ	ɔ-kʊkkú	pʊl
3-C-speak-CAUS2:IMP	PERS-Kʊkkʊ	person

make Kʊkkʊ make the man speak!

With verbs which do not allow for double Causative derivation —the far majority— double causation can be expressed syntactically, with an additional verb. The next sentence was elicited with 'Kʊkkʊ made Lɔccɔ stop Lalʊ'. The verb is ɔcéɽɛ 'stop (tr.)' (< ɔcɔ́ɽɔ 'stand, wait').

ɔ-kʊkkú   **p-ɪrɛ́t̪.ɛ**   **ɔ-lɔ́ccɔ**   **ɪttɪ**   **k-kw-á.cɛʈ-ɛ**   **ɔ-lalʊ̂**
PERS-Kʊkkʊ   C-say:COMPL   PERS-Lɔccɔ   that   3-C-stand-CAUS1:INCOMPL   PERS-Lalʊ

Kʊkkʊ told Lɔccɔ that he must stop Lalʊ

A syntactic construction expressing double causation is actually also
more common in cases in which double derivation is possible (first
example below) and also in the case of **ɔnt̪ɔmɪɛ** '(make sb.) dry sth.',
a verb that can express both single and double causation (second
example below).

ɔ-kakká   **p-ɪrɛ́t̪.ɛ**   **ɔ-cɛccé**   **ɪttɪ**   **k-kw-íc-ɛt**   **ʊ́kʊl cɪk**
PERS-Kakka   C-say:COMPL   PERS-Cɛccɛ   that   3-C-lie_down-CAUS1:INCOMPL   child   VREF

Kakka told Cɛccɛ to lay the child down, Kakka told Cɛccɛ to make the child
lie down

ɔ-kakká   **p-ɪrɛ́t̪.ɛ**   **ɔ-nɛnní**   **ɪttɪ**   **k-kw-á.nt̪ɔm-ɪɛ**   **ərɛ́t**
PERS-Kakka   C-say:COMPL   PERS-Nɛnnɪ   that   3-C-become_dry-CAUS2:INCOMPL   cloths

Kakka told Nɛnnɪ to dry the clothes

*Verbs with last or final vowel(s) (ɪ)ɛ and causative semantics, but without base
verb*

There are a number of verbs with last or final vowels (ɪ)ɛ that
suggest, based on their meaning, that they have developed as
Causatives, but that lack a base verb from which they were derived.
Such verbs almost always have **ɛ**, I found just one case with **ɪɛ**. Some
examples:

aʈɛ   'hang sth. (make sth. hang)'
ɔcákkɛ   'make smooth, filter'
ʊɛt   'beg (make sb. accept)'
ɔkúccɛt   'prepare (make ready)'
ɔnákkɛt / ɔllákkɛt / ɔʈákkɛt   'put down'
akkəʈɛt   'add (make sth. increase)'
ɔʈɛt   'save'

ɔʈíkjɛ   'block sb.'s view (make sb. not see)'

These verbs with **ɛ** can serve as a basis for Causative derivation with **ɪɛ**. For example **ɔkúccɛt** 'prepare' / **ɔkúccɪɛt** 'make sb. prepare', and **aʈɛ** 'hang sth.' / **aʈɪɛ** 'make sb. hang sth.'.

Since in these cases, the base-verbs themselves have inherent causative semantics (but are not regarded as Causative derivations because they lack a non-Causative base-verb) they semantically express double causation.

k-kw-áʈé.t   **kərɛt**   **nɔ́-cáʈícáʈâ**
3-C-hang:COMPL   cloth   on-bush(sp.)

s/he has hung the cloth over the bush

k-kw-áʈ-ɪé.t   **ɔ-kakká**   **kərɛt**   **nɔ́-cáʈícáʈâ**
3-C-hang-CAUS2:COMPL   PERS-Kakka   cloth   on-bush(sp.)

s/he has made Kakka hang the cloth over the bush

14.4. The Passives

Lumun has three Passive suffixes: -**(a)kɔ** (PASS1), -**(V)tta** (PASS2) and -**(ʊ)ra** (PASS3). I refer to verbs that contain one of these suffixes and that occur next to a base verb as Passive verbs or Passives.

In this section, I first present the form, distribution and function of the Passive suffixes. An agent argument can, in general, be expressed in Lumun passive clauses, but is usually omitted. Intransitive verbs can serve as base for a Passive derivation because oblique arguments (i.e. arguments marked with a preposition) with locative or instrumental role can function as subject of a Passive verb. With an instrument as subject, Passives denote the function of that instrument (i.e. what is done with it). Lumun does not have impersonal passive constructions.

An explanation for the existence of three instead of just one Passive derivational suffix will be proposed, suggesting that they have developed, on the one hand, from morphemes that historically had a different distribution related to plural versus non-plural semantics of the verb (PASS2 vs. PASS3), and on the other hand from morphemes

that historically had different functions (middle marking in the case of PASS1 versus passive marking in the case of PASS2 and PASS3).

Finally, some verbs are presented that (seem to) contain two Passive suffixes.

The three Passive suffixes

There are three Passive suffixes: (**a)kɔ** (PASS1), (**V)tta** (PASS2) and (**ʊ)ra** (PASS3).

Many base verbs allow for two of these suffixes, and in some cases any of the suffixes is possible. These forms can simply be alternative possibilities, expressing the same meaning —though in most such cases one derivation is more commonly used—, but there can also be semantic differences, subtle in some cases, very clear in others. There are some distributional tendencies with regard to the choice between (or preference for one of) the three Passive suffixes, which relate to the final (or last) stem vowel of the base verb (in case of attachment of PASS1 or PASS2) and to its tonal structure in combination with the final (or last) stem vowel (in case of attachment of PASS3).

Forms, attachment and distribution

The suffixes (**a)kɔ**, (**ʊ)ra** and (**V)tta** replace the final or last vowel of the base verb or come after it. If the base verb has a final **t**, this **t** remains in final position. If it contains a Benefactive suffix, the Passive suffix comes before the Benefactive suffix. **V** in PASS2 (**V)tta** stands for an underspecified vowel: its realization in the derived verb is determined by the vowel of the base verb that precedes it. Examples are given further below.

PASS1 (**a)kɔ** is the preferred suffix when a base verb ends in **ɔ** or **ɔt.** PASS2 (V)**tta** is the most common Passive suffix with verbs ending in **ɛ** or **ɛt**. Cases of PASS1 (**a)kɔ** attached to a verb ending in **ɛ** or **ɛt** are, however, attested next to Passives with PASS2, as are cases of PASS2 (V)**tta** attached to verbs ending in **ɔ** or **ɔt**. In the latter situation, Passives with PASS1 are sometimes not possible.

Verbs ending in **a** or **at**, as far as they allow for Passive formation at all, tend to be open to both PASS1 and PASS2, preference for one or the other is lexically determined.

The distribution of PASS3 (**ʊ**)**ra** is restricted to a specific set of verbs: it occurs only on bimoraic verbs with L.HL tone pattern, particularly those that have a final or last vowel **ɔ**. There are, however, a few **ɔt**-final bimoraic verbs with L.HL tones that cannot take PASS3: these verbs only occur with PASS2 (V)**tta**. A case of PASS3 attached to a L.HL verb ending in **â** is also attested. All verbs that can take PASS3 also allow for both other suffixes. PASS3 is not attested with (**ɛ**)**t**-final verbs.

NB: The examples below just illustrate the attachment of the suffixes. In a few cases, there are semantic differences between Passives derived from the same base verb which are not revealed by the English translations provided here. Semantic issues will be discussed further below.

Attachment of PASS1 (**a**)**kɔ** to verb stems with different last or final vowels gives the following results:

ɔ(t) + akɔ > akɔ(t)
a(t) + kɔ > akɔ(t)
ɛ(t) + kɔ > ɛkɔ(t)

Examples:

ɔkɪɔ 'cut'	**ɔkɪ-akɔ** 'be cut'
ɛlɪkkɔ 'release'	**ɛlɪkk-akɔ** 'be released'
ɔkwéntɔ 'leave (tr.)'	**ɔkwént-akɔ** 'be left over, remain'
ɔɲô 'fry'	**ɔɲ-ákɔ** 'be fried'
ɔŋɔt 'like, want, love'	**ɔŋ-akɔ-t** 'be liked, be wanted, be loved'
ɪna 'know'	**ɪna-kɔ** 'be known'
ɔnâ 'bring'	**ɔná-kɔ** 'be brought'
ɔkwárɪccat 'search for'	**ɔkwárɪcca-kɔ-t** 'be searched for'

ɛʈɪɛ, ɪʈɪɛ 'make cool, bless' **ɛʈɪɛ-kɔ, ɪʈɪɛ-kɔ** 'be made cool, be blessed'
ɔkê 'shave'   **ɔké-kɔ** 'be shaved'
ɔkúccɛt 'prepare'   **ɔkúccɛ-kɔ-t** 'be prepared'

A few verbs with PASS1 have an irregular form. In the first case below the last consonant of the non-derived stem is geminated upon attachment of PASS1. In the second case, the consonant of the PASS1 suffix is geminated:

ɔʈəkɔ̂ 'eat'   **ɔʈə́kk-akɔ** 'be eaten'
ɪʈa 'cook (asida)'   **ɪʈa-kkɔ** 'be cooked (asida)'

Attachment of PASS3 (V)**tta** leads to change of the final or last vowel of the base verb when this vowel is **ɔ**. Attachment of the suffix to bimoraic L.HL verbs with a final **ɔ** results in **ətta** and sometimes allows for an alternative realization as **ʊtta**. If a labialized consonant (always a velar) precedes a final or last vowel **ɔ**, the suffix is realized as **ʊtta**. In all cases the underspecified vowel of the suffix is realized with a different quality than the preceding stem vowel.

Attachment of PASS3 to **ɛ(t)**-final verbs is presented first, since PASS2 most commonly occurs with these verbs, either as the preferred or as the only possibility.

ɛ(t) + **tta** > **ɛtta(t)**
a(t) + **tta** > **atta(t)**
ɔ(t) + (V)**tta** > **ɪtta(t), atta(t), ətta(t), ʊtta(t)**

Examples:

ɛê 'stab, blow'   **ɛɛ́-tta** 'be stabbed, be blown'
ɔkíccɛ 'chase'   **ɔkíccɛ-tta** 'be chased'
ɔkê 'shave'   **ɔké-tta** 'be shaved'
ɛʈɪɛ, ɪʈɪɛ 'make cool, bless' **ɛʈɪɛ-tta, ɪʈɪɛ-tta** 'be made cool, be blessed'
ɔkkwê 'beat'   **ɔkkwé-tta** 'be beaten'
ɛrɛt 'talk about'   **ɛrɛ-tta-t** 'be talked about'
ɔkúccɛt 'prepare'   **ɔkúccɛ-tta-t** 'be prepared'
ɛʈêt 'give'   **ɛʈé-tta-t** 'be given'

ɪna 'know'	**ɪna-tta** 'be known'
ɔt̪ía 'fear'	**ɔt̪ía-tta** 'be feared'

akɔ 'wear'	**ak-ətta** 'be worn'
ɔnɛ́kɔ 'take'	**ɔnɛ́k-ɪtta** 'be taken'
ɛlɪkkɔ 'release'	**ɛlɪkk-atta** 'be released'
ɔɲɔ̂ 'fry'	**ɔɲ-útta / ɔɲ-ɔ́tta** 'be fried'
ɔkwɔ̂ 'blow'	**ɔk-útta** 'be blown'
ɔkkɔ̂t 'do, make'	**ɔkk-ɔ́ttat** 'be done, be made'
ɔkkwɔ̂t 'kill'	**ɔkk-úttat** 'be killed'

Attachment of Pass3 (ʊ)**ra**:

ɔ̂(t) + (ʊ)ra > úra(t)
â(t) + ra > ára(t)

Examples:

ɔɲɔ̂ 'fry'	**ɔɲ-úra** 'be fried'
ɔppɔ̂t 'collect at'	**ɔpp-úra-t** 'be collected at'
ɔllâ 'wipe (away)'	**ɔllá-ra** 'be wiped (away)'

As mentioned earlier, passive suffixes always precede benefactive suffixes, cf.:

ɔkwɛ́ntɔ 'leave (tr.)'	> **ɔkwɛ́ntɪnɛ** 'leave sth. for' (BEN)	
ɔkwɛ́ntɔ 'leave (tr.)'	> **ɔkwɛ́ntakɔ** 'be left over, remain' (PASS1)	
ɔkwɛ́ntakɔ 'be left over'	> **ɔkwɛ́ntakɪnɛ** 'be left over for'	
	(BEN + PASS1)	

The following Passives have irregular forms:

ɔkákɔ 'grind'	**ɔk-ə́tta** 'be ground'
ɔɽəkɔ̂ 'eat'	**ɔɽə́-tta** 'be eaten'
ɪpɔ 'obtain, marry'	**ɪ-tta** 'get married'
ʊnɔ 'build'	**ʊn-ta** 'be built'
ərrɔ 'push, shoot'	**ərr-a** 'be pushed, be shot'

ɔkə́ttɛ 'trade (PLUR)'   **ɔkə́tt-a** 'be traded (PLUR)'
ɔkɪɔ 'cut'   **ɔk-ɛ́cca** 'be cut'

Argument structure and meaning of constructions with Passives

All three derivations function as regular or canonical passives. Canonical passive constructions are generally defined in relation to active constructions with a transitive verb (a.o. Siewierska 1984). In its most typical form, a passive construction lacks an overtly stated agent argument (the argument that functions as the subject of the active transitive clause), while subject function is assumed by the argument that functions as object (with patient role) in the active clause. It is generally possible to express the agent as an oblique.

Examples follow here, contrasting active and passive constructions. In some examples, a Passive with one or either of the other Passive suffixes would be possible as well, without a change of meaning. In such cases, the example is given with the Passive that is most commonly used. In the second example below the agent is omitted.

ɔ-lɔ́ttɪ   **p-ɛlɪkkɔ́.t**   **pʊɽʊpê**
PERS-Lɔttɪ   C-release:COMPL   bird

Lɔttɪ has released the bird

pʊɽʊpɛ́   **p-ɛlɪkk-ákɔ.t**
bird   C-release-PASS1:COMPL

the bird has been released

NB: instead of PASS1 (**ɛlɪkk-akɔ** 'be released'), PASS2 (**ɛlɪkk-atta**) could also be used.

Expression of the agent

Though agents are commonly omitted, it is possible to express them. People as agents (i.e. pronouns, personal names and common nouns referring to people) are followed by **ŋŋɪn** 'with, by', which is the absolute form of the prepositional proclic **ɪ́-** 'with, by, (away) from' (see chapter 16.6 for the absolute prepositions):

pʊɾʊpɛ́   **p-ɛlɪkk-ákɔ.t**   **ɔ-lɔ́ttɪ́**   **ń̩.ŋɪn**
bird   C-release-PASS1:COMPL   PERS-Lɔttɪ   with:ABS

the bird has been released by Lɔttɪ

pʊɾʊpɛ́   **p-ɛlɪkk-ákɔ.r-ɔk**   **ŋ.ŋɪn**
bird   C-release-PASS1:COMPL-O3   with:ABS

the bird has been released by him

Animals as agents are marked by **ń-** 'with, by, (away) from':

ṭʊk   **ṭ-ɔkkwɔṭ.ɛ́**   **pəlla**
dog   C-kill:COMPL   cat
the dog has killed the cat

pəlla   **p-ɔkk-ʊttá.ṭ.ɛ**   **n-ṭŭk**
cat   C-kill-PASS2:COMPL   with-dog
the cat was killed by the dog

At least a few common nouns referring to people allow for both ways of expression of the agent argument, for example **ʊkʊl** 'child':

ʊkʊl   **w-a.ɪk**   **w-a.ṭɔ**   **ịmít**
child   C-be:PR   C-pull:INCOMPL   goat

the child is pulling the goat

ịmịt   **w-a.ɪk**   **w-a.ṭ-ʊ́ra**   **ʊ́kʊl**   **ŋ.ŋɪn / n-ʊ́kʊl**
goat   C-be:PR   C-pull-PASS3:INCOMPL   child   with:ABS   with-child

the goat is being pulled by the child

NB: instead of Pass3 **ɔṭʊ́ra** 'be pulled', Pass1 **ɔṭákɔ** and Pass2 **ɔṭʊ́tta** or **ɔṭə́tta** are also possible.

Passives can express states; in such cases use is made of the Completive. An example follows here with the irregular Passive **ɪtta** 'get married' (< **ɪpɔ** 'obtain, marry'):

ŋ-kw-ɪttá.r-ɪ
2-C-get_married-PASS2:COMPL-Q

are you married?

The Completive of **ɔkə́ɽɪttakɔt** 'be(come) narrow, hold arms against/around the body and legs together' (< **ɔkə́ɽɪttɔt** 'make narrow, squeeze') is another example of a verb expressing a state. The example below can refer to a path (**kaṭə́r**) that is naturally "squeezed", for example because it passes between rocks, but also to a path that has become narrow because people have been cultivating sorghum on it (second example below). An added phrase **nôl** or **ʋl ŋŋɪn** (third example below) is understood as people standing on the path, causing the road to be narrow due to their presence.

kaṭər   k-ɔkəɽítt-akɔ.ṭ.ɛ
road   C-become_narrow-PASS1:COMPL

the path is narrow

kaṭər   k-ɔkəɽítt-akɔ.ṭ.ɛ   m-mîl
road   C-become_narrow-PASS1:COMPL   with-sorghum

the path is narrow because of the sorghum (it grows on the path)

kaṭər   k-ɔkəɽítt-akɔ.ṭ.ɛ   n-ôl   / ʋl   ŋ.ŋɪn
road   C-become_narrow-PASS1:COMPL   with-people   people   with:ABS

the path is narrow because of the people (they are standing on the path, leaving only a narrow space to pass)

An interpretation as a state and as a regular passive construction can both be possible. The verb in the examples below is **ɔmɛ́tta** 'be engraved' (< **ɔmɛ̂** 'engrave').

cakkə́lɔk   c-ɔmɛ-ttâ.t
calabash(k.o.)   C-engrave-PASS2:COMPL

the *cakkəlɔk*-calabash is decorated

cakkə́lɔk   c-ɔmɛ-ttá.t   ɔ-kakká ŋ.ŋɪn
calabash(k.o.)   C-engrave-PASS2:COMPL   PERS-Kakka   with:ABS

the *cakkəlɔk*-calabash has been decorated by Kakka

A notion such as 'be edible' is expressed with a Passive verb. Edibility is conceptualized as 'be eaten (by people)':

cantít   pɪɲɪl   ɪ-p-a.ɽə́-tta
snake(k.o.)   snake   RES-C-eat-PASS2:INCOMPL

the *cantɪt* is a snake that is eaten / the *cantɪt* is a snake that can be eaten / the *cantɪt* is an edible snake

NB: instead of **ɔɽə́tta** 'be eaten', **ɔɽə́kkakɔ**, with PASS1, can also be used.

The same goes for the notion 'be visible'. In the first sentence below **ɪmmakɔ** 'be seen' is preferred, in the second **ɪmmatta** 'be seen', though in both cases the other verb would be acceptable as well. There is a subtle semantic difference between the two verbs. The sentence with **ɪmmakɔ** suggests a somewhat more active role of the sun than the sentence with **ɪmmatta**.

cɨ̰ŋkɨ̰   c-ímm-akɔ   ŋ-ŋíɽɪmak
sun   C-see-PASS1:INCOMPL   with-early_morning

the sun is visible in the early morning (the sun lets itself be seen / appears in the early morning)

cɨ̰ŋkɨ̰   c-ímm-atta   ámmá   c-ɔ́ppɔ̂.t
sun   C-see-PASS2:INCOMPL   if   C-pass:COMPL

the sun is visible when it has come out (the sun can be seen when it has come out)

Semantic roles of subjects of Passive verbs

Subjects of a Passive verb often have a patient role, but not always. Examples with subjects with other semantic roles follow here. The examples show that Passives can be formed not only on the basis of transitive verbs but also on the basis of intransitive verbs, since oblique arguments with locative or instrumental roles can be subject of the Passive.

ɛéttat (also **ɛṯéttat**) 'be given' (< **ɛṯêt** 'give') allows for both the patient and the recipient to take the subject position.

caṭṭak   **c-ɛ́ɛ́-tta.t**   **ɔ-kakkâ**
calabash(k.o.)   C-give-PASS2:COMPL   PERS-Kakka

the bowl will be given to Kakka

ɔ-kakká   **p-ɛ́ɛ́-tta.t**   **cáṭṭak**
PERS-Kakka   C-give-PASS2:COMPL   calabash(k.o.)

Kakka will be given the bowl

A beneficiary and a patient argument can both be the subject of a
Passive + Benefactive verb. The verb in the examples is **ɔnékɪttanɛ**
'be carried for' (base verb **ɔnékɔ** 'carry'). Note that the order of the
derivational suffixes remains unchanged.

ɔ-kakká   **p-ɔnɛk-ítta-kanṭɛt**   **ŋəɽĭ**
PERS-Kakka   C-carry-PASS2-BEN:PST   water

the water was carried for Kakka (she did not carry it herself)

ŋəɽɪ   **ŋ-ɔnɛk-ítta-kanṭɛt**   **ɔ-kakkâ**
water   C-carry-PASS2-BEN:PST   PERS-Kakka

the water was carried for Kakka (she did not carry it herself)

Prepositional phrases can be passivized. For example, the Passive +
Benefactive verb **arəttakɪnṭɛt nán** 'be added to sth. for sb.' (base
verb **arəttɔt nán** 'add') has a beneficiary argument and an oblique
argument marked by **nɔ** 'on, at'. Both can be subject of the Passive +
Benefactive verb. When not followed by its complement, **nɔ** is
realized as its absolute counterpart **nán** (second example below). The
action is presumed to be carried out by someone, but the agent is left
unexpressed:

pʊl   **p-arətt-ák-ínṭét**   **nɔ́-úɽû**
person   C-add-PASS1-BEN:COMPL   on-asida

the man was given some more asida (for the man was added to the asida)

ŋuɽú   **ŋ-arətt-ák-ínṭét**   **púl**   **nán**
asida   C-add-PASS1-BEN:COMPL   person   on:ABS

the man was given some more asida (the asida was added to for the man)

The locative argument of a active Locative-applicative verb can be the subject of a passive construction:

ʊl	w-a.ɪk	w-â.ŋɔkɔ-t	ɪ-cʊɽé	c-ɔ-pɪra
people	C-be:PR	C-rest-LOCAPP:INCOMPL	in-bottom	C-of-tree

the people are resting under the tree

pɪra	p-a.ɪk	p-â.ŋɔk-akɔ-t	tɪt	n-ôl
tree	C-be:PR	C-rest-PASS1-LOCAPP:INCOMPL	in:ABS	with-people

the tree is being rested under (lit.: in) by the people

A locative adjunct in a construction with an active verb can also be the subject of a corresponding passive construction. The verb ɔcɔ́ɽɔ does not take the Locative-applicative derivation when combined with a locative prepositional phrase, nor does it inherently require a locative constituent. In the first example below, 'on the wall' is thus an adjunct, it could also be left out. Nevertheless, 'the wall' can function as the subject of the Passive verb ɔcɔ́ɽakɔ (second example below); the PPC that is now separated from its complement takes on its absolute form nán. Instead of ɔcɔ́ɽakɔ, derivation with PASS2 (ɔcɔ́ɽɪttɔ) is also possible.

ɔ-kʊkkú	p-á.ík	p-á.cɔ́ɽɔ	nɔ-karrâŋ
PERS-Kʊkkʊ	C-be:PR	C-stand:INCOMPL	on-wall

Kʊkkʊ is standing on the wall

karraŋ	k-a.ɪk	k-a.cɔ́ɽ-akɔ	nán
wall	C-be:PR	C-stand-PASS1:INCOMPL	on:ABS

somebody is standing on the wall (lit.: the wall is being stood on)

An instrumental adjunct can also function as subject of a Passive verb. In a corresponding active clause, the instrument is often marked with ń- 'with, by, (away) from', but in some cases with another preposition. Incompletives of Passive verbs with an instrument as their subject are used for the expression of the function or use of that instrument, stating what is generally done with it. Because the instrument is dislocated in the passive clause, the PPC is

realized in its absolute form. The examples below contrast the active with the passive constructions.

ʊl	w-a.ṭáttɔ	ŋ-kurrɔ́ŋ	éŋ-k-í
people	c-fight:INCOMPL	with-stick	DEM-C-NEARSP

people fight with this stick

kurrɔ́ŋ	éŋ-k-í	k-a.ṭátt-akɔ	ŋ.ŋɪn
stick	DEM-C-NEARSP	c-fight-PASS1:INCOMPL	with:ABS

this stick is for fighting (this stick is being fought with)

ʊl	w-ícat	na-aṛaŋkal	én-n-í	tullúk
people	c-lie_down:INCOMPL	on-bed	DEM-C-NEARSP	just

people only lie down (sleep) on this bed (i.e. it is not for sitting on)

aṛaŋkal	én-n-í	w-íca-kɔ.t	nan	tullúk
bed	DEM-C-NEARSP	c-lie_down-PASS1:INCOMPL	on:ABS	just

this bed is only for sleeping (this bed is slept on only)

Interestingly, when an instrument functions as the subject of a Passive that is derived from a transitive verb, **ń-** 'with, by, (away) from' marking the instrument in the active sentence can be attached to the patient argument of the verb in the passive sentence (third example below). Compare:

ʊl	w-a.kɛ́ccɛ	ṭún	ŋ-kəṛittaŋ	éŋ-k-í
people	c-cut.PLUR:INCOMPL	onion	with-knife	DEM-C-NEARSP

people cut onions with this knife

kəṛittaŋ	éŋ-k-í	k-á.kɛ́ccɛ-tta	ṭún	ŋ.ŋɪn
knife	DEM-C-NEARSP	c-cut.PLUR-PASS2:INCOMPL	onion	with:ABS

this knife is for cutting onions (this knife is cut onion with)

kəṛittaŋ	éŋ-k-í	k-á.kɛ́ccɛ-tta	n-ṭûn
knife	DEM-C-NEARSP	c-cut.PLUR-PASS2:INCOMPL	with-onion

this knife is for cutting onions (lit.: this knife is cut with onion)

Attachment of the PPC to a different argument than the one that is its complement in the corresponding active sentence was only found

with **ń** 'with, by, (away) from'. In the passive constructions below (second and fifth examples) the absolute prepositions **nán** (corresponding to **nɔ** 'on, at') and **ntít** (corresponding to **ntɪ ɪ** 'from, out of') must be used, respectively. Constructions with **nɔ** 'on, at' or **ntɪ ɪ** 'from, out of' attached to **ŋəʈɪ** 'water' are not possible.

ʊl	w-íkkɔ	ŋəʈɪ	nɔ-cátʈák	éɲ-c-í
people	C-drink:INCOMPL	water	on-calabash	DEM-C-NEARSP

people drink water from this *catʈak*-calabash

catʈak	ɛɲ-c-ɪ	c-íkk-akɔ	ŋəʈɪ	nán
calabash(k.o.)	DEM-C-NEARSP	C-drink-PASS1:INCOMPL	water	on:ABS

this *catʈak*-calabash is for drinking water

*catʈak	ɛɲ-c-ɪ	c-íkk-akɔ	nɔ-əʈɪ̆
calabash(k.o.)	DEM-C-NEARSP	C-drink-PASS1:INCOMPL	on-water

ʊl	w-únɔ	ŋəʈɪ	n.tɪ	ɪ-kʊmmúk	éŋ-k-í
people	C-pour:INCOMPL	water	from	in-pot	DEM-C-NEARSP

people pour water from this pot

kʊmmʊk	ɛŋ-k-ɪ	k-ún-akɔ	ŋəʈɪ	n.tít
pot	DEM-C-NEARSP	C-pour-PASS1:INCOMPL	water	from:ABS

this pot is for pouring water

* kʊmmʊk	ɛŋ-k-ɪ	k-ún-akɔ	n.tɪ	ɪ-əʈɪ̆
pot	DEM-C-NEARSP	C-pour-PASS1:INCOMPL	from	in-water

Differences between the three Passives?

As stated above, there are distributional differences between the Passive derivations, relating to the final or last vowel of the base verb. PASS3 has a very restricted distribution, limited to bimoraic verbs with L.HL tones (but not all such verbs can take PASS3).

PASS2: historically related to pluractionality?

The forms of PASS2 and PASS3 (**V**)**tta** and (**ʊ**)**ra** suggest that they may be related to each other: if **r** of PASS3 is underlying **t**, PASS2 can be

regarded as the geminated counterpart of PASS3. Another observation is that PASS2 typically occurs on verbs ending in ɛ or ɛt. Such verbs are typically Pluractionals and Causatives. Pluractionals have inherent plural semantics, and Causatives are associated with a kind of action plurality as well: both causer and causee can perform an action (the causing action and the caused action).

Verbs to which PASS3 can be attached are, on the other hand, typically underived verbs (though they may contain the Locative-applicative suffix **t**). They do not involve action plurality. Thus, even though its phonological structure would fit the use of PASS3, the Pluractional verb **ɔŋwɔ̂** 'kill (PLUR)', only takes PASS2: **ɔŋwʊ́ttɔ** 'be killed (PLUR)'.

This suggests that PASS2 (V)**tta** may have developed as gemination of PASS3 (ʊ)**ra** and may historically have been the suffix used on verbs with inherently plural semantics: Pluractionals and Causatives. The use of PASS2 has then later spread to verbs lacking plural semantics: synchronically, in all cases in which PASS3 is used PASS2 is possible as well, and several verbs that preferably go with PASS1 (and which lack plural semantics) also allow for PASS2.

It is unclear why the distribution of PASS3 is so restricted. Possibly PASS1, which arguably developed from a middle marker (see below), replaced PASS3. Notably, the verbs which take PASS3 also allow for PASS1 —and in such cases there are no semantic differences— but not vice versa.

*Development of PASS1 (**a**)**kɔ** from a middle marker*

A closer look at verbs with PASS1 (**a**)**kɔ** strongly suggests that, historically, the function of PASS1 was different from the others. The semantics of several derivations ending in **kɔ**, but also of verbs ending in **kɔ** that lack a base verb, suggest that PASS1 developed from a middle marker **kɔ**. This will be shown with several examples. Next to Passives with PASS1 that just function as passives, we distinguish:

- Passives with PASS1 functioning as regular passives, but also having a middle-type meaning;
- Verbs ending in **kɔ** and existing alongside a base verb as (formally) regular PASS1 derivations, but having middle-type meaning only;
- Verbs ending in (V)**kɔ** and existing alongside a base verb, but which are not PASS1 derivations and have middle-type meaning;
- Verbs ending in **kɔ** that lack a base verb and only have middle-type meaning.

In several cases a Passive with PASS2 exists alongside the verb with (**a**)**kɔ**. Both can be regular passives, but if there is a difference between them, whether clear or subtle, it is the verb with (**a**)**kɔ** that deviates towards middle semantics. One such case, **ɪmmakɔ** versus **ɪmmatta** (both derived from **ɪmma** 'see') was already mentioned.

Examples of Passives with PASS1 that function as regular passives but also have a middle-type meaning follow here (second column). The base verb is presented in the first column. In case a Passive with PASS2 or PASS3 is attested as well, it is mentioned in the third column. The latter ones are always regular passives. Note that the base verb and the derived verb may differ as to presence or absence of a final **t**.

Table 94 Derivations with PASS1 also having middle semantics

base verb	*Passive with PASS1*	*Passives with PASS2 or PASS3*
ɔllâ 'wipe (away)'	**ɔllákɔ** 'be wiped away', 'scratch oneself'	**ɔllə́tta**, **ɔllára** 'be wiped away'
ɔkê 'shave (tr.)'	**ɔkékɔ** 'be shaved', 'shave oneself'	**ɔkétta** 'be shaved'
ɔkúccɛt 'prepare (tr.)'	**ɔkúccɛkɔt** 'be prepared, prepare oneself'	**ɔkúccɛttat** 'be prepared'
ɔkə́ɽɪttɔt 'make narrow, squeeze'	**ɔkə́ɽɪttakɔt** 'be made narrow, hold arms against/around the body and legs together'	
ɔpə́rəttɔt tít 'turn (tr.)'	'be turned', 'turn oneself' **ɔpə́rəttakɔt tít** 'be surprised'	

ɔkkárəttɔ 'return (tr.)'	**ɔkkárəttakɔ** 'be returned', 'return (intr.)'	
ɔkkápərəttɔ 'return (tr.)'	**ɔkkápərəttakɔ** 'be returned', 'return (intr.)'	
aɽəntɔt 'collect'	**aɽəntakɔt** 'be collected', 'gather, come together'	
ɪllɔ 'divide in two, split (tr.)'	**ɪllakɔ** 'be divided in two', 'split (intr.)'	

Cf. the following examples showing the Passives of 'shave' **ɔkɛ́kɔ** (PASS1) and **ɔkɛ́tta** (PASS2). The example with PASS2 is unambiguous: someone else is doing the shaving. The second example is ambiguous as to who performs the action: it can be the speaker himself, but also somebody else.

m-p-a.ɪk   p-a.kɛ́-tta
1-C-be:PR   C-shave-PASS2:INCOMPL

I am being shaved (by somebody else)

m-p-a.ɪk   p-a.kɛ́-kɔ
1-C-be:PR   C-shave-PASS1:INCOMPL

I am shaving (i.e. I am shaving myself) / I am being shaved (by somebody else)

In order to clearly express that the shaving is done by the person himself the active verb is used in a reflexive construction:

m-p-a.ɪk   p-a.kɛ́   ka   k-ɪn
1-C-be:PR   C-shave:INCOMPL   body   C-POSS1

I am shaving myself

Other interesting cases are found with the Passive derivations of **ɔmɛ̂** 'decorate, scarify'. **ɔmɛ̂** combines both with PASS1 and with PASS2. Both function as regular passives, but their meanings are different. **ɔmɛ́tta** 'be decorated', with PASS2, is used for objects (for example a calabash), PASS1 **ɔmɛ́kɔ** 'be scarified' is used for the human body being decorated through scarification.

Examples of verbs derived with PASS1 that only have a middle-type meaning follow here (second column). Derivations with PASS2 are added in the third column for comparison.

Table 95 Derivations with PASS1 only having middle semantics

base verb	Passive with PASS1	Passive with PASS2
ɛrɛt 'talk about'	ɛrɛkɔt 'grumble in oneself'	ɛrɛttat 'be talked about'
ɔmɛt 'rub at'	ɔmɛkɔt 'wash oneself'	ɔmɛttat 'be rubbed'
ɔt̪íɛ 'stretch, make straight'	ɔt̪íɛkɔ 'stretch oneself out'	ɔt̪íɛtta 'be stretched out, be made straight'

Table 96 contains verbs with middle semantics that have a suffix (V)**kɔ** rather than PASS1 (**a**)**kɔ**. In the first two cases, the final or last vowel **ɔ** has not changed into **a** but remained **ɔ** or changed into **ɨ**, in the third case, **ɛ** has changed into **ɪ**. Regular passives are presented in the third column. In the first two cases, a regular derivation with PASS1 (**a**)**kɔ** exists next to the middle verbs with (V)**kɔ**.

Table 96 Verbs derived with (V)**kɔ** having middle semantics

base verb	derived verb with middle meaning	regular Passive
ɔt̪ɔ̂ 'apply on sb.'	ɔt̪ɔ́kɔ 'apply on oneself'	ɔt̪ákɔ, ɔt̪útta / ɔt̪ətta, ɔt̪úra 'be applied on sb.'
ɔccɔ̂t 'receive at'	ɔccɨ́kɔt 'hear, listen' ɔccɔ́kɔt 'catch' (receive at body)	ɔccákɔt, ɔccúttat / ɔccəttat, ɔccúrat 'be received at'
at̪ɛ 'hang (tr.)'	at̪ɪkɔ 'stay longtime, hang out (intr.)'	at̪ɛtta 'be hung'

Evidence for a historical middle marker **kɔ** also comes from verbs that lack a base verb. The verbs below have meanings within the semantic range of middle marking as identified by Kemmer (1993, p. 267-270), i.e. in domains involving the proper body, such as grooming, change in body posture, position of the body, translational motion (including negative motion), cognition and perception.

ɪlakkɔ	'wash one's hands or feet'
ɔpákkɔ	'wash one's body, take shower'
ɔɲírɪkɔ	'blow one's nose'
akɔ	'wear'
ʋrəkɔ	'get up, stand up, start'
apəʈɪlakɔ	'hang (intr., of human or animal, from the hands)'
accakɔ	'get soaked'
appəʈɪkɔ	'get loose'
aʈəkɔ	'float, swim'
ɔkkɔ̂	'pass, arrive'
ɔʈʋŋkɔ	'set (of the sun)'
ɪkkɔ cɪk	'sit, stay'
ɪʈɪkɪttakɔ	'hurry (intr.)'
aʈəntakɔ	'dream'
ɔkwárɪkɔt	'recall'
ɔkkʋnakɔ	'smell' (intr.)
ɔkkʋnakɔt	'smell' (tr.)
accakɔ	'get soaked'
appəʈɪkɔ	'get loose'

It is therefore likely that the current productive Passive suffix (**a**)**kɔ** has developed from a morpheme **kɔ** which functioned as a middle marker: a marker of actions initiated by a subject and involving that subject's proper body.

*Derivations with -**tta** with deviating semantics*

The far majority of verbs ending in **tta** are regular passives. There are however a few such verbs with different semantics, notably middle-type semantics. Such verbs are far fewer than verbs with middle semantics ending in (**a**)**kɔ** and development of PASS2 from a middle marker does not seem likely. Two verbs of this type, 'tear' and 'break', are presented in the table below. Note that the verbs with **tta** and middle semantics are not cases of regular attachment of the PASS2 suffix. It is therefore unclear if these cases should be regarded as cases of PASS2 or perhaps as something different.

Active (transitive) verbs of 'break' and 'tear' are given in the first column, regular Passives in the second, verbs ending in **-tta** in the third. The fourth column presents some more unexpected forms: one verb with **tta** and PASS1 (**ɔcɔ́ttakɔ**), and a verb with PASS3 + PASS1 (**ɔŋárakɔ**). Both function as passives. **ɔŋárakɔ** has the same meaning as the regular Passive in the second column, the meaning of **ɔcɔ́ttakɔ** is slightly different from its regular Passive counterpart.

Table 97 Verbs of 'break' and 'tear'

active transitive verb	*regular Passive derivation*	*verb with middle semantics*	*verb with passive semantics*
ɔcɔ́ṱɔ 'break in two' (tr., object is sth. hard)	**ɔcɔ́ṱakɔ** 'be broken in two' (subject is sth. hard)	**ɔcɔ́tta** 'break in two' (intr., subject is sth. hard)	**ɔcɔ́ttakɔ** 'be cancelled, be broken off'
ɔmɔ́ṱɔ 'break in two' (tr., object is sth. bendable)	**ɔmɔ́ṱakɔ** 'be broken in two' (subj. is sth. bendable)	**ɔmɔ́tta** 'break (loose)' (intr., subj. is sth. bendable)	
ɔŋâ 'tear off from a tree' (the object is sth. light: a leaf, twig or small branch)	**ɔŋákɔ, ɔŋára** 'be torn off from a tree' (subject is sth. light: a leaf, twig or small branch)	**ɔŋátta/ ɔŋə́tta** 'break off, come down' (break down from point of attachment and fall down)	**ɔŋárakɔ** 'be torn from a tree' (subject is sth. light: a leaf or a twig)
ɔŋáṱɔ 'tear from a tree' (object is part for which force is needed: bark, small branch)	**ɔŋáṱakɔ** 'be torn from a tree' (subject is part for which force is needed: bark, small branch)		

Some sentential examples:

attɪ   **kwɔ́ɾɛn**   **k-ɪna**   **ɔcɔ́ṭ-akɔ**
I_hope_that   piece_of_firewood   c-know:INCOMPL   break-PASS1:INCOMPL

I hope this piece of firewood can be broken (the speaker wants to break it, but it looks like it will be difficult to do this)

ṭɔɾək   **ṭ-ɔmɔ.ttâ.t**
rope   c-break:COMPL

the rope has broken

The 'break' verbs ending in **tta** express a process from inside. The oblique in the example below is not a wilful agent. Lɔttɪ is only instrumental to the breaking: he has unintentionally caused it.

ṭɔɾək   **ṭ-ɔmɔ.ttá.t**   **ɔ-lɔ́ttí**   **ŋ́.ŋɪn**
rope   c-break:COMPL   PERS-Lɔttɪ   with:ABS

the rope has broken through Lɔttɪ's weight (The sentence evokes the situation that Lɔttɪ tried to hang himself, but the rope broke. The breaking of the rope is not due to an action of Lɔttɪ that was intended to break the rope).

An animal breaking loose from a rope can function as subject:

ịmịt   **w-ɔmɔ.ttâ.t**
goat   c-break:COMPL

the goat has broken loose

Two more series of related verbs follow here. The first column has the base verb, the second the regular passive verb. The third and fourth columns contain verbs with **kɔ** and with **a** (or **tta**?) and **ta** that are clearly related to the base verb, but not regularly derived from it. These verbs have middle-type meanings. The verb in the fifth column, with PASS1 attached after **ta**, functions as a regular passive.

Some of the earlier mentioned pairs of base verbs and Passives that have an irregular form, namely **ʊnɔ** 'build'/ **ʊnta** 'be built', **ərrɔ** 'push, shoot' / **ərra** 'be pushed, be shot', and **ɔkɔ́ttɛ** 'trade' / **ɔkɔ́tta** 'be traded' are formally comparable with **unɔ** / **unta** and **ʊrəttɔ** /

ʊrətta respectively. Semantically, however, they are different. As can be seen in table 98, **ʊrətta** and **unta** have middle-type semantics.

Table 98 Derivations of 'wake up (tr.)' and 'pour'

active transitive verb	*regular Passive*	*verb with **kɔ** and middle semantics*	*verbs with **a** (or **tta**?) and **ta** and middle semantics*	*verb with passive function*
ʊrəttɔ 'wake up (tr.)'	**ʊrəttakɔ** 'be woken up'	**ʊrəkɔ** 'get up, start (intr.)'	**ʊrətta** 'wake up (intr.)'	
unɔ 'pour'			**unta** 'spill over, fall down, collapse'	**untakɔ** 'be poured'

Combinations of Passive suffixes

One verb that appears to have two passive suffixes was already mentioned above: **ɔŋárakɔ** 'be torn form a tree' (PASS 3 + PASS1). Two further cases of PASS3 + PASS1 are presented below. PASS1 always comes last. The first functions as a regular passive, the second has middle semantics.

Table 99 Combination of PASS3 and PASS1

base verb	*with PASS3*	*with PASS3 and PASS1*
ɔllâ 'wipe (away)'	**ɔllára** 'be wiped (away), be swept'	**ɔllárakɔ** 'be wiped (away), be swept'
ɔʈɔ̂ 'pull'	**ɔʈʊ́ra** 'be pulled'	**ɔʈʊ́rakɔ** 'stretch oneself (out)'

Other combinations have not been attested, unless the above mentioned verbs **ɔcɔ́ttakɔ** 'be cancelled, be broken off' and **untakɔ** 'be poured', should be regarded as cases of PASS2 + PASS1. In any case, these forms do not involve regular PASS2-derivation.

14.5. The Reciprocals

Lumun has two Reciprocal suffixes: (**a**)**rɔ** (REC1) and **ttɔ** (REC2). I refer to verbs that contain one of these suffixes and that occur next to a non-derived base verb as Reciprocal verbs or Reciprocals. Reciprocals can be derived from transitive verbs, but also from certain verbs which realize the other participant in a prepositional phrase.

Forms, attachment and distribution

The suffixes have different distributions. REC1 (**a**)**rɔ** replaces a final or last vowel **ɔ** or comes after a final or last vowel **a**, REC2 **ttɔ** is typically attached to stems with a final or last **ɛ**. Benefactive verbs, which end in (**ɪ**)**nɛ** or (**ɪ**)**nt̪ɛt**, form Reciprocals with REC1 or REC2 preceding the benefactive suffix. A stem-final **t** (the locative-applicative suffix) always remains in final position.

Attachment of REC1 (**a**)**rɔ** to **ɔ**(**t**)- and **a**(**t**)-final stems gives the following results:

ɔ(**t**) + **arɔ** > **arɔ**(**t**)
a(**t**) + **rɔ** > **arɔ**(**t**)

Some examples:

akkarɔ	'call'	**akkar-arɔ**	'call e.o.'
ɔmíccɔ	'greet'	**ɔmícc-arɔ**	'greet e.o.'
ɔŋwɔ̂	'kill (PLUR)'	**ɔŋw-árɔ**	'kill e.o.'
ɔccɪ́kɔt	'hear'	**ɔccɪ́k-arɔ-t**	'hear e.o.'
angwɔt	'guard'	**aŋw-arɔ-t**	'guard e.o.'
ɪttarɔt	'help'	**ɪttar-arɔ-t**	'help e.o.'
ɪmma	'see'	**ɪmma-rɔ**	'see e.o.'
ɪna	'know'	**ɪna-rɔ**	'get to know e.o.'
ɔmmâ	'not know'	**ɔmmá-rɔ**	'not know e.o.'
ɔkwárɪccat	'search'	**ɔkwárɪcca-rɔ-t**	'search e.o.'

In the case of **ɔ̞ʈəkɔ̂** 'eat', the root-final consonant **k** is geminated in the Reciprocal verb:

ɔ̞ʈəkɔ nɔ-pôl   'eat from a person' ('eat from a person's plate or portion')

ɔ̞ʈə́kk-arɔ nán   'eat from e.o.' ('eat from e.o.'s plates or portions')

Attachment of REC2 **ttɔ** to **ɛ-** and **ɛt**-final stems:

ɛ(t) + **ttɔ** > **ɛttɔ(t)**

Some examples:

accɛ	'lick'	**accɛ-ttɔ**	'lick e.o.'
ɔ̞ʈə́kɪɛ	'feed'	**ɔ̞ʈə́kɪɛ-ttɔ**	'feed e.o.'
ɔŋwíɛ	'make sb. kill (PLUR)'	**ɔŋwíɛ-ttɔ**	'make e.o. kill'
ɪkkɛt	'give (PLUR)'	**ɪkkɛ-ttɔ-t**	'give e.o.'
ɔ̞ʈêt	'save'	**ɔ̞ʈé-ttɔ-t**	'save e.o.'

If a Benefactive suffix is present, the Reciprocal suffix is attached before this suffix. Benefactive stems that are based on **ɔ** or **a**-final verbs typically form Reciprocals with REC1 **(a)rɔ.** The suffix sequences **(a)rɔ** + **ɪnɛ**, or **(a)rɔ** + **ɪnʈ̭ɛt,** are respectively realized as **(a)rənɛ** and **(a)rənʈ̭ɛt.** Some examples:

aɲɔ 'open'	**aɲ-ɪnɛ** 'open for'	**aɲ-ar-ənɛ** 'open for e.o.'
aʈa 'pray'	**aʈa-nɛ** 'pray for'	**aʈa-r-ənɛ** 'pray for e.o.'
ɔccíkɔt 'hear'	**ɔccík-ɪnʈ̭ɛt** 'listen to'	**ɔccík-ar-ənʈ̭ɛt** 'listen to e.o.'
ɔkkɔ̂t 'do, make'	**ɔkk-ínʈ̭ɛt** 'do for, make for'	
		ɔkk-ár-ənʈ̭ɛt 'do for e.o., make for e.o.'

In case of a Benefactive stems that is based on an **ɛ**-final verb, the Reciprocal suffix is always REC2. An example:

ɛrɛ 'speak'	**ɛrɛ-nɛ** 'talk to'	**ɛrɛ-tt-ɪnɛ** 'talk to e.o.'

Reduplicated Reciprocal suffixes

Several (perhaps all) Reciprocals allow for a reduplicated reciprocal suffix. REC1 (**a**)**rɔ** can also be (**a**)**rarɔ**, REC2 **ttɔ** can also be **ttɛttɔ**, reduplicating the vowel **ɛ** of the stem that precedes the double suffix.

Some examples:

akkar-arɔ	'call e.o.'	**akkar-ar-arɔ**	'call e.o.'
ɔmícc-arɔ	'greet e.o.'	**ɔmícc-ar-arɔ**	'greet e.o.'
ɔŋw-árɔ	'kill e.o.'	**ɔŋw-ár-arɔ**	'kill e.o.'
ɔccík-arɔ-t	'hear e.o.'	**ɔccík-ar-arɔ-t**	'hear e.o.'
ɪttar-arɔ-t	'help e.o.'	**ɪttar-ar-arɔ-t**	'help e.o.'

ɪmma-rɔ	'see e.o.'	**ɪmma-r-arɔ**	'see e.o.'
ɔmmá-rɔ	'not know e.o.'	**ɔmmá-r-arɔ**	'not know e.o.'
ɔkwárɪcca-rɔ-t	'search e.o.'	**ɔkwárɪcca-r-arɔ-t**	'search e.o.'

accɛ-ttɔ	'lick e.o.'	**accɛ-tt-ɛttɔ**	'lick e.o.'
ɔɽə́kɪɛ-ttɔ	'feed e.o.'	**ɔɽə́kɪɛ-tt-ɛttɔ**	'feed e.o.'
ɪkkɛ-ttɔ-t	'give e.o.'	**ɪkkɛ-tt-ɛttɔt**	'give e.o.'

*Reciprocals with a double suffix **tt-arɔ***

There are also Reciprocals with a sequence of REC2 and REC1, realized as **tt-arɔ**. Some examples follow here. Note that **tt-arɔ** is not only attached after a vowel **ɛ**, but also after **a** (fourth example below). The **arɔ**-part of the suffix can again be reduplicated:

ɔmɛ́-tt-arɔ-t 'tell e.o.', **ɔmɛ́-tt-ar-arɔ-t** 'tell e.o.'
< **ɔmɛ̂t** 'tell sb.'
also: **ɔmɛ́-ttɔ-t**, **ɔmɛ́-tt-ɛttɔ-t** 'tell e.o.'

ɔ̪ṯṯɛ́-tt-arɔ nán 'leave e.o.', **ɔ̪ṯṯɛ́-tt-ar-arɔ nán** 'leave e.o.'
< **ɔ̪ṯṯɛ nɔ-pôl** 'leave a person'
also: **ɔ̪ṯṯɛ́-ttɔ nán** 'leave e.o.', **ɔ̪ṯṯɛ́-tt-ɛttɔ nán** 'leave e.o.'

ɛrɛ-tt-ar-ənɛ 'say to e.o.', **ɛrɛ-tt-ar-ar-ənɛ** 'say to e.o.'
< **ɛrɛ-nɛ** 'say to sb.' < **ɛrɛ** 'speak'
also: **ɛrɛ-tt-ɪnɛ**, **ɛrɛ-tt-ɛtt-ɪnɛ** 'say to e.o.'

ɔt̪ía-tt-ar-ənɛ cɪk 'fear e.o.', **ɔt̪ía-tt-ar-ar-ənɛ cɪk** 'fear e.o.'
< **ɔt̪ía-nɛ cɪk** 'fear sb.' < **ɔt̪ía cɪk** 'become afraid'
also: **ɔt̪ía-r-ənɛ cɪk**, **ɔt̪ía-r-ar-ənɛ cɪk** 'fear e.o.'

The following irregular derivational verb also seems to contain both REC2 and REC1. The combined suffix now comes directly after the verb root and a vowel **ʊ** occurs before the suffix. Note that the verb root has undergone a vowel change (the base verb is **ɔllɔ̂** 'run')

ʊll-ʊtt-ar-ənɛ 'run against e.o. (in a race)', **ʊll-ʊtt-ar-ar-ənɛ** 'run against e.o. (in a race)'
< **ɔll-ínɛ** 'run because' < **ɔllɔ̂** 'run'
NB: the forms *ɔll-ár-ənɛ, *ɔll-ár-ar-ənɛ 'run because of e.o. (from fear)' were rejected, after some doubt. 'Run because of/from e.o.' is expressed by the verb **ɔpɛ́llɛ-tt-ar-ənɛ** (< **ɔpɛ́llɛnɛ** 'fear sb., run from sb. (out of fear)' < **ɔpɛ́llɛ** 'fear, run out of fear')

I analyse the suffix (**ʊ**)**tt** in the sequence (**ʊ**)**tt-ar** as REC2 **ttɔ**, but, judging from the form alone, it could also be the PASS2 (V)**tta**. It is, however, unlikely that Reciprocals with (**ʊ**)**tt-ar** are Reciprocals based on Passives. A Passive derivation reduces the valency of a verb. Since the Reciprocal derivation is also a valency reducing operation and must be based on verbs that can have two arguments referring to the same kind of animate entity, it is unlikely that Reciprocals are based on Passives. Doubling of the same reciprocal suffix, on the other hand, is generally possible. Such doubling of the reciprocal suffix does not mean that the derivation takes place twice (the valency of the verb is not reduced twice), but rather seems with processes of (double) Pluractional formation. A sequence of REC2 + REC1 is therefore the more likely analysis of the sequence (**ʊ**)**tt-ar**.

Argument structure of verbs serving as a base for Reciprocals

The (agent) participants in a reciprocal event are participants that act upon each other. Therefore, they combine the semantic role of agent with another semantic role, for example patient, recipient or beneficiary. Lumun Reciprocal verbs can be derived from transitive verbs, but also from verbs that mark the relevant non-subject argument with a preposition.

Verbs may need a Benefactive or a Locative-applicative derivation in order to accommodate for a person as the object. For example, the verb **ɔkkɔ̂t** 'do, make' is a transitive verb but does not easily take a person as object and cannot serve as the direct basis for a Reciprocal derivation. The Benefactive **ɔkkínṯet** 'do for' however can serve as a basis for the Reciprocal **ɔkkárənṯet** 'do for e.o.':

n-ɔkk-ár-ənṯet   **lɔ́n**   **í-l-ɔ́pərɔt**
2-do-REC1-BEN:DEPINCOMPL   words   RES-C-good

do good things for each other!

Another example is **akɔ** 'wear'. Its Benefactive derivation **akɪnɛ** 'wear for, wear instead of sb.' serves as a basis for the Reciprocal stem **akarənɛ**:

ɔ-kín   **ṯ-á.ík**   **ṯ-ák-ar-ənɛ**   **ərét**
PERS-3A   C-be:PR   C-wear-REC1-BEN:INCOMPL   cloths

they are wearing each other's clothes (lit.: they are wearing the clothes instead of each other)

The object of the verb **ɪpɪttɔ** 'ask (about)' refers to what is asked or what is asked about. A Reciprocal can be formed from it, denoting 'greet e.o.' (lit.: ask about each other). The verb **ɪpɪttɔt** 'ask sb.', with Locative-applicative **t**, has the addressee as object. The Reciprocal verb 'ask e.o.' is based on this verb.

ɪpɪttɔ   'ask (about)'   **ɪpɪttarɔ**   'greet e.o.'
ɪpɪttɔt   'ask sb.'   **ɪpɪttarɔt**   'ask e.o.'

As mentioned above, Lumun Reciprocals can also be derived from certain verbs that co-occur with a prepositional phrase. This prepositional phrase realizes the other participant needed for the Reciprocal. Upon Reciprocal derivation, the PPC remains *in situ* taking on in its absolute form. The following pairs contrast the base verb + PPC (first example) with the Reciprocal verb + absolute preposition (second example). In the second example, however, it was also considered possible to leave **tít** out.

a-cʊmpʊ́raŋ	**ɔ́cɪnt.at**	**ɪ-papê**
CONJ-monkey(sp.)	wrestle:DEPPRFV	in-fish

and the *cʊmpʊraŋ*-monkey wrestled with the fish

a-kín	**ɔ́cínt-ar.at**	**tít**
CONJ-3A	wrestle-REC1:DEPPRFV	in:ABS

and they wrestled with each other

pʊl	**ɛm-p-əɽɛ́**	**p-aɽɔ.t**	**m-parɪ**	**p-âŋ**
person	DEM-C-DIST	C-spend_night:COMPL	with-wife	C-POSS2

that man has slept with your wife

ɔ-kín	**t̪-aɽ-arɔ́.t**	**ŋ.ŋɪn**
PERS-3A	C-spend_night-REC1:COMPL	with:ABS

they have slept with each other

ʊkʊl	**w-a.ɪk**	**w-a.llɔ-t**	**t-a-kʊkkɔ̂**
child	C-be:PR	C-run-LOCAPP:INCOMPL	up_on-PERS-Kʊkkʊ

the child is running to Kʊkkʊ (facing him)

ɔ-kín	**t̪-á.ík**	**t̪-á.ll-árɔ-t**	**tán**
PERS-3A	C-be:PR	C-run-REC1-LOCAPP:INCOMPL	up_on:ABS

they are running to each other

Reciprocals based on Pluractional stems

Several verbs have different stems for reference to one (simple) event and for reference to an event that is composed of multiple sub-events. In some cases, the Reciprocal verb must be based on the Pluractional stem of the verb. Some examples follow here:

ɔŋwɔ̂ 'kill (PLUR)'
ɔŋw-árɔ / ɔŋw-ár-ar-ɔ 'kill e.o.'

ɔt̪íllɛ 'push (PLUR)'
ɔt̪íllɛ-ttɔ / ɔt̪íllɛ-tt-ɛttɔ 'push e.o.'

ɪɲcɛt 'find (PLUR)'
ɪɲcɛ-ttɔ-t 'find e.o., meet'

ɪkkɛt 'give (PLUR)'
ɪkkɛ-ttɔ-t / ɪkkɛ-ttɛ-ttɔ-t 'give e.o.'

ɔkkwɛ̂ 'beat (PLUR)'
ɔkkwɛ-ttɔ 'beat e.o.'

There are also cases in which the Reciprocal derivation can be based on both the non-Pluractional and the Pluractional verb. An example follows here. The Reciprocals have different meanings:

i̪ṛi̪kɔ 'tie'
i̪ṛi̪k-arɔ / i̪ṛi̪k-ar-ar-ɔ 'hug e.o.'

i̪ṛi̪ki̪kkɔ 'tie (PLUR: several objects or one object tied with several
           windings)'
i̪ṛi̪ki̪kk-arɔ / i̪ṛi̪ki̪kk-ar-arɔ 'tie e.o.'

Two reciprocal suffixes: REC1 and REC2

The forms of the reciprocal suffixes (**a**)**rɔ** and **ttɔ** are reminiscent of the forms of the PASS3 (**ʊ**)**ra** and the PASS2 (V)**tta**: in both cases one can be regarded as a geminated version of the other (with **r** as the intervocalic allophone of **t**). The main difference between the reciprocal suffixes and the two Passives is the final vowel. Moreover, REC2 and PASS2 have a comparable distribution: both are typically used after a final or last vowel **ɛ**. It is likely then, that historically REC2 is a gemination of REC1, in the same way as PASS2 may well be a gemination of PASS3 (see 14.4), and that the geminated suffix reflects "agreement" with the inherently plural semantics of

Pluractionals and Causatives base verbs: verbs that typically have a final or last vowel ɛ.

Semantic differences

There seem to be no semantic differences between REC1 and REC2, just like no apparent semantic differences were found between PASS2 and PASS3.

There is most probably some semantic difference between Reciprocals with a single and Reciprocals with a reduplicated reciprocal suffix. Where the choice of REC1 or REC2, seems related to plural semantics of the base verb (at least historically), the use of a single or a reduplicated suffix relates to the participants of the reciprocal event itself. Verbs with a single Reciprocal suffix can cover the whole range of events with two participants, one group of multiple participants, and multiple groups of two or more participants acting upon each other. Verbs with a reduplicated Reciprocal, on the other hand, typically refer to reciprocal events with participants in more than one group. According to my consultant (JS), double Reciprocals cannot be used in case of just two participants. This points towards the doubling of the reciprocal suffix as a process of Pluractional formation.

The following examples contrast a Reciprocal with a single suffix and one with a reduplicated suffix.

lʊk   l-a.ɪk   l-áccɛ-ttɔ
dogs   C-be:PR   C-lick-REC2:INCOMPL

the dogs are licking each other (the participants can be two dogs, or a group of for example a mother and some puppies, or separate groups of dogs)

lʊk   l-a.ɪk   l-áccɛ-tt-ɛttɔ
dogs   C-be:PR   C-lick-REC2-REC2:INCOMPL

the dogs are licking each other (the participants are imagined as separate groups of dogs)

In addition, the reduplicated suffix possibly has an expressive quality, drawing special attention to the plurality of the event. However, since attestations in texts are very rare, the actual use of Reciprocals with a reduplicated suffix is not entirely clear.

It is unclear whether and to what extent the combination of REC2 and REC1 (**ttarɔ**) expresses different semantics from the single and the reduplicated suffixes.

Use of Reciprocals as anti-passives

The reduced valency of the verb, as compared to its base verb, does not only give an 'each other'-reading, but also a non-reciprocal reading with a human object that is not (nominally or pronominally) referred to, i.e. an antipassive.

When the Reciprocal functions as an anti-passive, the subject can refer to a singular referent. Here are some examples of Reciprocals with REC1 with an anti-passive reading. In the examples, there is actually an understood object, but the Reciprocal verb does not allow for its expression. The antipassive is thus of the implicit argument type: the object is entirely removed from the syntactic structure (Kulikov 2011, p. 380).

pʊl   p-ɔ-nɔppət   p-a.ɪk   p-árək-ɔmák-arɔ.t
person   C-of-Nɔppət   C-be:PR   C-as_always:INCOMPL-follow-REC1:DEPINCOMPL

n-ʈɔ-cəkɛ̂n
with-at-lower_back

the person of Nɔppət is surely following (her) from behind (lit.: following each other from behind) (fr. written story)

tʊɛ   t-ɔká.t   t-ɔ́nʊ́   ŋəɽɪ   ŋ-ɔppɔt
river   C-be:COMPL   C-have   water   C-many

ɪ-a.nɛ́k-arɔ   tíaʈ-ʈɪak
RES-(C-)take-REC1:INCOMPL   very-REDUP

there was a river that had a lot of water and that took many people's lives (lit.: that took each other very).

The following example, about the rite of passage of **ṭapəɽ̟eṭ̟ṭǎ** 'beating people while they run', contains a Passive and a Reciprocal with REC2 that is used as an antipassive. It is certain that the second verb has an antipassive interpretation, because **ṭapəɽ̟eṭ̟ṭǎ** involves no reciprocity: one group beats, the other group (those being initiated) get beaten.

ana	**ól**	**w-á.ɛ́ɔ̆**	**í-á.kkwɛ́-tta**
and	people	C-go:INCOMPL	RES-(C-)hit.PLUR-PASS2:INCOMPL

ana	**ɪ-a.kkwɛ́-ttɔ**
and	RES-(C-)hit.PLUR-REC2:INCOMPL

and people who will be beaten, and who will do the beating will go

Some further examples of Reciprocals used as anti-passives will be given in the section 'Combinations of derivational suffixes'.

Naturally reciprocal events

Some verbs with naturally reciprocal semantics are listed below. They allow for the formation of a Reciprocal with REC1 as well as with a reduplicated REC1.

ɔṭáttɔ (**tít**) 'fight'   **ɔṭáttarɔ tít**, **ɔṭáttararɔ tít**   'fight with e.o.'
ɔcíntɔ (**tít**) 'wrestle'   **ɔcíntarɔ tít**, **ɔcíntararɔ tít** 'wrestle with e.o.'
ɔkə́ttɔ (**tít**) 'run into' **ɔkə́ttarɔ** (**tít**), **ɔkə́ttararɔ** (**tít**) 'run into e.o.'
ɔcúrɔt (**tít**) 'meet'   **ɔcúrarɔt** (**tít**), **ɔcúrararɔt** (**tít**) 'meet e.o.'

Some examples with **ɔcúrɔt** (**tít**) 'meet' follow here. With a plural subject and without prepositional phrase **ɔcúrɔt** 'meet' has a reciprocal reading (first example). With **ɪ-** + noun, or with **tít**, it has a non-reciprocal reading (second and third example):

ịn-ṭ-ɔcʊrɔ́ṭɛ   'we (EXCL) met (e.o.)'
ịn-ṭ-ɔcʊrɔ́ṭɛ ɪ-kəllân   'we (EXCL) met with the old woman'
ịn-ṭ-ɔcʊrɔ́ṭé tít   'we (EXCL) met with it' (for example a cow)

With a plural subject, reciprocal **ɔcúrarɔt** 'meet' can be used both with and without **tít.** With **tít** the reciprocity of the event is more strongly expressed.

i̯n-ṭ-ɔcʊrárɔṭɛ   'we (EXCL) met each other'
i̯n-ṭ-ɔcʊrárɔ́ṭɛ́ tít   'we (EXCL) met each other'

Both **ɔcúrɔt** (**tít**) 'meet' and reciprocal **ɔcúrarɔt** (**tít**) allow for a singular subject, in which case the other participant must be realized in a prepositional phrase:

m-p-ɔcʊrɔ́ṭɛ ɪ-kəllân   'I met the old woman'
***m-p-ɔcʊrɔ́ṭɛ**
m-p-ɔcʊrárɔṭɛ ɪ-kəllân   'I and the old woman met e.o.'
***m-p-ɔcʊrárɔṭɛ**

By contrast, the reciprocal derivation of 'wrestle', **ɔcíntarɔ tít**, does not allow for a singular subject. Compare:

a-cʊmpúraŋ	**ɔ́cɪnt.at**	**ɪ-papê**
CONJ-monkey(sp.)	wrestle:DEPPRFV	in-fish

and the *cʊmpʊraŋ*-monkey wrestled with the fish

***a-cʊmpúraŋ**	**ɔ́cɪnt-ar.at**	**ɪ-papê**
CONJ-monkey(sp.)	wrestle-REC1:DEPPRFV	in-fish

14.6. Combinations of derivational suffixes

A verb stem can contain more than one derivational suffix. The Locative-applicative suffix **t** always comes in final position, and in derivations based on lexicalized **t**-final verbs, the final position of **t** is maintained. In the absence of the **t**-suffix, the Benefactive suffix (**ɪ**)**nɛ** comes last. If a verb contains both, they combine to (**ɪ**)**nṭɛt**. Any other derivational suffix (Causative, Passive, Reciprocal) precedes a Benefactive and/or Locative-applicative suffix. Some examples:

Causative **ɪɛ** + Benefactive (**ɪ**)**nɛ**:
ɔrék-ɪɛ 'make work'   **ɔrék-ɪɛ-nɛ** 'make work for'

Passive **akɔ** + Benefactive (ɪ)**nɛ:**
un-akɔ 'be poured'   **un-ak-i̧nɛ** 'be poured for'

Passive (**V**)**tta** + Benefactive (ɪ)**nɛ:**
ɛrɛ-tta 'be said'   **ɛrɛ-tta-nɛ** 'be said to'

Final **t** + Benefactive (ɪ)**nɛ:**
ɔccɔ́kɔt 'catch'   **ɔccɔ́k-ɪn̪t̪ɛt** 'catch for sb.'
+ Causative **ɪɛ:**
ɔccɔ́k-ɪn̪t̪ɛt 'catch for sb.'   **ɔccɔ́k-ɪɛ-n̪t̪ɛt** 'make catch for sb.'

Final **t** + Reciprocal (**a**)**rɔ** + Benefactive (ɪ)**nɛ:**
ɔccɪ́kɔt 'hear, listen'   **ɔccɪ́k-ar-ən̪t̪ɛt** 'listen to each other'

In combinations of a Causative suffix and a Passive suffix, the Causative suffix precedes the Passive suffix. Since the Causative suffix has a final ɛ, the Passive suffix that follows is most commonly PASS2 (**V**)**tta**, but combinations with PASS1 (**a**)**kɔ** are also attested.

Causative **ɛ** + Passive (V)**tta:**
ɔcɛ́t̪-ɛ 'make stand, make wait' **ɔcɛ́t̪-ɛ-tta** 'be made to stand, be made to wait'

Causative **ɪɛ** + Passive (V)**tta:**
ʊn-ɪɛ 'make build'   **ʊn-ɪɛ-tta** 'be made to build'

Causative **ɪɛ** and final **t** + Passive (V)**tta:**
ɔkk-ɪ́ɛ-t 'make do, make make'   **ɔkk-ɪ́ɛ-tta-t** 'be made to do, be made to make'

Causative **ɪɛ** + Passive (V)**tta** or (**a**)**kɔ:**
ɛt̪ɪa, ɪt̪ɪa 'become cool'   **ɛt̪ɪɛtta, ɛt̪ɪɛkɔ, ɪt̪ɪɛtta, ɪt̪ɪɛkɔ** 'be made cool, be blessed

A sentential example of 'build' with Causative, Passive and Benefactive suffix follows here:

m-p-ɔká.t	**cɪk**	**a-n-ún-ɪɛ-tta-nɛ**	**t̪ɔ́mɔccɔ**	**mǎn**
1-C-be:COMPL	VREF	CONJ-1-build-CAUS-PASS2-BEN:DEPINCOMPL	old_man	house

I was made / forced to build a house for the old man

When a Causative suffix is attached to a verb that ends in **kɔ(t)** that is not a Passive (such verbs often have middle semantics), the suffix replaces the final or last vowel **ɔ**, e.g.,

apəɽɪlakɔ 'hang (subject is human or animal, from the hands)' /
    apəɽɪlak-ɪɛ 'make hang (a human or animal, from the hands)'

A Passive suffix can also be attached:
apəɽɪlak-ɪɛ-tta 'be made to hang (from the hands)'

A Causative and a Reciprocal suffix can be combined in two ways. The Reciprocal suffix (**a**)**rɔ** (REC1) can precede the Causative suffix **ɪɛ**, and the Causative suffix **ɪɛ** can precede the Reciprocal suffix (V)**ttɔ** (REC2). First an example of REC1 (**a**)**rɔ** followed by the Causative suffix:

ɔ-kʊkkú	**p-á.ŋw-ár-ɪɛ**	**ôl**
PERS-Kʊkkʊ	C-kill.PLUR-REC1-CAUS2:INCOMPL	people

Kʊkkʊ will make the people kill each other

When the Causative suffix precedes the REC2 suffix (V)**ttɔ**, the REC2 suffix functions as an anti-passive. The unexpressed objects are translated with 'us' since the person who utters the sentence is included.

ɔ-kʊkkú	**p-á.ŋw-íɛ-ttɔ**
PERS-Kʊkkʊ	C-kill.PLUR-CAUS2-REC2:INCOMPL

Kʊkkʊ will make us kill e.o.

ɔ-kʊkkú	**p-á.ŋw-íɛ-ttɔ**	**ôl**
PERS-Kʊkkʊ	C-kill.PLUR-CAUS2-REC2:INCOMPL	people

Kʊkkʊ will make the people kill us

lɔn   **ɪ-l-a.pír-ɪɛ-ttɔ**   **nɔ-kâ**
words   RES-C-make_good-CAUS2-REC2:INCOMPL   on-body

things which make us happy / things which make people happy

A sequence of REC1, CAUS2 and REC2 is also possible. The derivation
in the example below is based on the Pluractional verb **ɔŋwɔ̂** 'kill'.
The REC1 suffix turns the verb into a Reciprocal, the REC2 suffix
expresses the anti-passive. The person who utters the sentence is
included in the event (hence the translation with 'us').

ɔ-kʊkkú   **p-á.ŋw-ár-ɪɛ-ttɔ**   **ûl**
PERS-Kʊkkʊ   C-kill.PLUR-REC1-CAUS2-REC2:INCOMPL   people

Kʊkkʊ will make people kill us and us kill people

A last example shows a Causative and Reciprocal verb (with REC2
(V)**ttɔ** and anti-passive reading) that is based on the non-Pluractional
stem of 'kill' **ɔkkwɔ̂t**:

cʊpú   **c-á.kkw-íɛ-ttɔ.t**   **píca**
fruit(k.o.)   C-kill-CAUS2-REC2:INCOMPL   thirst

the *cʊpʊ*-fruit makes people very thirsty / the *cʊpʊ*-fruit makes you very
thirsty (lit.: the *cʊpʊ*-fruit makes thirst kill us / makes thirst kill people)

15. cĭk 'place(s)': noun and grammaticalizations

There is a noun **cĭk** 'place(s)', functioning as a common noun, and there are grammaticalizations of this noun. I distinguish two grammaticalizations: 1) a "vague-reference" particle **cɪk** and 2) a pragmatic marker **cík**- 'just, exactly' which is proclitic to locative constituents.

In this chapter, I will first discuss the noun **cĭk** 'place(s)', then the "vague-reference particle" **cɪk**, then the locative proclitic **cík**-. I'll end with a few remarks on the lexical item **ɲcɪk**.

15.1. The noun **cĭk** 'place(s)'

cĭk 'place(s)' functions as a regular noun. It can have modifiers agreeing with it (first and second example below), and it can function as subject (first example), object (second example), or be preceded by a prepositional proclitic (third example).

cɪk	**έɲ-c-í**	**c-ɔ́-t̪ʊk**
place	DEM-C-NEARSP	C-of-dog

this is the place of the dog (the place where the dogs always stays, for example in a corner of the compound)

a-áppɔ́	**ɔ́t̪-í.at**		**cɪk**	**c-ʊnnʊ́kkwakɔt̪.ɛ**	**appɪk**
CONJ-Tocho	IT:DEPINCOMPL-find:DEPPRFV		place	C-be_closed.PLUR:COMPL	all

and the Tocho found all places closed (fr. written story)

ʊl	**w-ɔ-nɔ-cɪk**	**ɪ-c-ɔnʊ́**	**kəɽan**	**ɪttɪ**	**t̪áɽʊ**
people	C-of-on-place	RES-C-have	name	that	Ṭaɽʊ

people of the place which is called Ṭaɽʊ

cĭk 'place(s)' can often be replaced by the more commonly used noun **kaɽən/aɽən** 'place':

ɔ-kín	**t̪-akkakát̪ɛ**	**nɔ-cɪk**	**ɪ-c-éllá**	**tácɔ́**	**nán**
PERS-3A	C-come:PST	on-place	RES-C-not_have:INCOMPL	grass	on:ABS

they came to a place where there was no grass (which does not have grass on it)

ɔ-kín	ṭ-akkakáṱɛ	nɔ-kaṛə́n	í-k-ɛ́llá		tácɔ́	nán
PERS-3A	C-come:PST	on-place	RES-C-not_have:INCOMPL		grass	on:ABS

they came to a place where there was no grass (which does not have grass on it)

cǐk can be directly preceded by **ń-** in its reading '(away) from', which is only possible for locative constituents (see 16.5):

ámmá	w-ɛ́ɔ.t	ana	w-íɔt	ól	ɲ-cɪk	áppɪk
if	PRO.C-go:COMPL	and	PRO.C-find:INCOMPL	people	with-place	all

when they go they will find people from everywhere (i.e. from all places) (fr. written story)

Unlike **cǐk** 'place', **kaṛən/aṛən** 'place(s)' cannot be immediately preceded by **ń-** expresssing 'from'. In order for **ń-** to express 'from', a PPC must precede **kaṛən/aṛən** turning it into a locative phrase first:

ámmá	w-ɛ́ɔ.t	ana	w-íɔt	ól	n-n-aṛə́n	appɪk
if	PRO.C-go:COMPL	and	PRO.C-find:INCOMPL	people	with-on-places	all

and when they go (lit.: have gone) they find people from all places

cǐk relates here paradigmatically to the prepositional phrase **n-aṛên** 'on places', not to the noun. The reference of **cǐk** seems somewhat more abstract than the reference of **(k)aṛən**. The translation ('everywhere' versus 'from all places') tries to reflect this.

cǐk lacks a singular/plural opposition, but can have singular or plural reference, as shown in the example with **ń-** interpreted as 'from'. It has also plural reference in the earlier given example about the Tocho, as can be seen from the Pluractional verb modifying **cǐk**. Replacement of **cǐk** in this clause is by the plural noun **aṛən**:

a-áppɔ́	ɔ́ṱí.at	aṛən	w-ʊnnʊ́kkwakɔṱ.ɛ	áppɪk
CONJ-Tocho	find:DEPPRFV	places	C-be_closed.PLUR:COMPL	all

and the Tocho found that all places were closed

In the examples below, the English translations have an expletive subject where Lumun has **cǐk**. Replacement by **kaṛən** is not possible

here. Though perhaps slightly vaguer, the reference of **cǐk** is still close to the notion of 'place' or also 'time':

m-p-ɔkɪɲá.t		**ana**	**cɪk**	**c-a.ɪk**	**c-íɽɪmat**
1-become_tired:COMPL		and	place	C-be:PR	C-become_dark:INCOMPL

I am tired and it is getting dark (i.e.: the place is getting dark)

cɪk	**c-ănn-ɔ́ká**	**c-áŋkɔ**	**ɪppa**	**nɔ.ppan-ǐ**
place	C-NEG-be:DEPCOMPL	C-be_hot:INCOMPL	hotly	inside-Q

is it not terribly hot inside? (i.e.: is the place not terribly hot inside?)

cɪk	**c-ɛɔ́.t**	**ana**	**m-p-ɔkɪɲâ.t**
place	C-go:COMPL	and	1-C-become_tired:COMPL

it is late and I am tired (lit.: the time has gone)

Unlike English expletive 'it', **cǐk** cannot be used in other contexts. For example, English 'it is raining' does not make use of **cǐk** in Lumun, but is expressed as **kapɪk kaɪk kápɔ** 'the rain is falling'. I therefore regard the sentences above as containing the noun **cǐk** 'place(s)', not the vague reference particle.

15.2. The vague-reference particle **cɪk**

Morpho-phonologically and tonally, the vague-reference particle deviates from the noun. The particle will be referred to as 'VREF **cɪk'.**

*Morpho-phonology and tone of VREF **cɪk***

After a vowel-final verb (or adjective) the initial consonant of VREF **cɪk** can be articulated as a soft palatal fricative, which is regular, but it can also be entirely omitted, which is not regular. The latter realization is represented below:

mpallá cɪk	'I will sweep'	[mbalːá-ɪkˀ]
mpaɽəkɔ́ cɪk	'I will eat'	[mbaɽᵊɰɔ́-ɪkˀ]
ɔɽəkʊ cɪk	'eat!'	[ɔɽᵊɰʊ-ɪkˀ]
mpɔɽəkkáʈɛ cɪk	'I ate'	[mbɔɽᵊkáðɛ-ɪkˀ]

In case of adjacent ɪ's a small glide is inserted after ɪ:

ɪkkɪ cɪk   'sit down!'   [ɪkɪ-ʲɪk˺]

Elision of **c** is particularly common in frequently occurring items, such as **ɔká cɪk** 'be' and **ɪkkɔ cɪk** 'sit, stay'. In the Present of 'be', c-**aîk**, **c** can no longer be realized. Its remnant (**ɪk**) has become a fixed part of the verb.

Tone

The particle is tonally irregular, as will be exemplified below. Because of this, I represent it without tone. The absence of tone marking does not imply that I regard it as a low-toned item.

In the citation form with the verb, **cɪk** is realized with a low tone, e.g. **ɪkkɔ cɪk** 'sit, stay' and **ɔká cɪk** 'be'. In the case of **ɪkkɔ cɪk** this is unexpected, since the incompletive TAM-stem **ɪkkɔ** has a floating high tone. It may, however, point at a rising tone, since, in final position a rising tone may be realized low (see 3.2.2). In other environments, **cɪk** can receive a high tone from a preceding element (resulting in a prepausal falling tone). This is compatible only with a low tone:

ɔ-kakká p-i̯cɛ́t̯.ɛ   ɔ-lɔ́ttɪ   cîk
PERS-Kakka   C-lay_down:COMPL   PERS-Lɔttɪ   VREF

Kakka has laid Lɔttɪ down

puɽupɛ́   p-ɔɽɛ   cîk
bird   C-red   VREF

the bird is reddish

Apart from cases like afore-mentioned **ɪkkɔ cɪk** 'sit, stay', there are other cases in which **cɪk** does not receive a high tone from a preceding verb with floating high tone. For example:

k-kw-ɔ́t̯i̯ɔt̯-ín   ɔ́t̯əkka   ɪttɪ   á-ɪmma   cɪk
3-C-send:COMPL-O1   become:DEPINCOMPL   that   SUBJ-(2-)see:DEPINCOMPL   VREF

he sent me so that you will be able to see (Acts 9:17)

cɪk itself brings a high tone to a following element. The high tone on **akká** comes from **cɪk**:

ɔ-kín	t̪-á-ík	t̪-íkkɔt	púl	cɪk	ákka	p-ɔ́ŋɔ́
PERS-3A	C-be-VREF	C-sit_up_with:INCOMPL	person	VREF	that	C-sick

they sit up with the man because he is ill

cɪk modifying an adjective can have a prepausal falling tone, as shown above, but also a prepausal high tone:

ɔ-paŋ	ɪ-p-ɔ́parɪ	ɪ-p-ɔ̂ttɛ	cík
PERS-sibling	RES-C-female	RES-C-small	VREF

the youngest sister (i.e. the youngest of three or more sisters)

There is no underlying tone pattern that can account for all these different tonal realizations. I therefore represent VREF **cɪk** without tone.

*Environments of VREF **cɪk***

VREF **cɪk** occurs in two environments:

- in combination with a verb;
- in combination with an adjective.

In combination with a verb, three types can be distinguished:

1. **cɪk** as fixed part of the verb, functioning as part of the verbal lexeme. These combinations typically have lexicalized semantics as compared to the verb without it, but a notion of 'place' (or 'time') can often still be recognized;
2. In combination with certain transitive verbs with which an object is expected, **cɪk** functions as a non-referential element that marks that the verb is used without object;
3. In combination with verbs which are expected to co-occur with a locative constituent, **cɪk** functions as a non-referential element that changes the focus of the clause (that is, the part which is understood as the main new information) from the locative

constituent to the verb itself. There can still be a locative constituent in the clause, but this constituent is now somewhat more "backgrounded".

In combination with an adjective **cɪk** functions as a modifier. It tends to make the reference of the adjective somewhat vaguer, semantically comparable to the English suffix ' -ish'. In one case it makes the reference more precise or absolute. Only a few adjectives can co-occur with **cɪk**.

Whether or not a verb or adjective can or must co-occur with **cɪk** is lexically determined. In fact, with verbs, the boundary between **cɪk** as common noun denoting 'place' and **cɪk** as VREF particle is not always so clear-cut.

15.2.1. **cɪk** as part of the verbal lexeme

In several cases, **cɪk** is part of the verbal lexeme. Next to a verb with **cɪk** there is often a verb without it, and the verb with **cɪk** has acquired lexicalized semantics. A notion of 'place(s)' (or time) can in several cases still be recognized, but synchronically **cɪk** as fixed part of the verb is better regarded as VREF particle, also because it is tonally different from the noun. **cɪk** as part of the noun can paradigmatically relate to different constituents. Some examples with **cɪk** paradigmatically relating to an object of the verb without it follow here:

ɔllâ   'wipe (something) away'
ɔllá cɪk   'sweep' (combines with a locative phrase, not an object)

ɔccɔ̂   'take, receive (something)'
ɔccɔ́ cɪk   'be late' (lit.: take time)

m-p-ɔccɔ́.t   kəɾan   ɪttɪ̆ ...
1-C-receive:COMPL   name   that

I have received the name … (my name is …)

m-p-ɔccɔ́.t   **cɪk** …
1-C-receive:COMPL   VREF

I am late

In other cases, **cɪk** paradigmatically relates to a locative phrase:

ɔkkɔ̂   'pass' (typically followed by a locative phrase)
ɔkkɔ́ cɪk   'be/remain alive, survive'

m-p-a.kkɔ   **ɪ-kaṭə́r**
1-C-pass:INCOMPL   in-road

I will pass through the road

m-p-a.kkɔ́   **cɪk**
1-C-pass:INCOMPL   VREF

I will survive

In again other cases, the counterpart without **cɪk** is an intransitive verb, which can easily occur alone. Note in the third example that the verb with **cɪk** has the locative-applicative **t**, but not its counterpart without it.

i̯rrɔ   'jump, fly'
i̯rrɔ cɪk   'bow'

aŋkɔ   'be hot, boil' (INTR.)
aŋkɔ cɪk   'be silent'

ʊra   'escape'
ʊrat cɪk   'become lost'

The following verb with **cɪk** is a passive derivation, relating to a transitive verb without it. Compare:

ɔkʊ́ccɛt   'prepare (something)'
ɔkʊ́ccɛttat   'be prepared' (by somebody)
ɔkʊ́ccɛkɔt cɪk   'be ready, be prepared' (by one's own doing)

In a few cases the verbs with and the verb without it have developed quite different semantics (assuming that there is a relationship, which is actually not certain):

| ɪɔt | 'find' |
| ɪɔt cɪk | 'disappear' |

| ɪkkɔ | 'may' |
| ɪkkɔ cɪk | 'sit, stay' |

Finally, some verbs with **cɪk** have no counterpart without it:

| ɪntat cɪk | 'disappear' |
| ɔccɔ́kkɔt cɪk | 'get leprosy' |

cɪk as part of the verbal lexeme does not always immediately follow the verb. In derivations of verbs with increased valency the added object comes between the verb and **cɪk**. Compare the two examples below. In the second, which was given earlier in this chapter but is repeated here, the verb **ɪkkɔ cɪk** has the locative-applicative derivation (**t**) which introduces an extra argument (**pʊl**). This argument comes before **cɪk**.

ɔ-kín	t̪-á.ík	t̪-íkkɔ	cɪk	ɪ-cʊɽé	c-ɔ-pɪra
PERS-3A	C-be:PR	C-sit:INCOMPL	VREF	in-buttock	C-of-tree

they are sitting under the tree

ɔ-kín	t̪-á.ík	t̪-íkkɔt	pʊ́l	cɪk	ákka	p-ɔ́ŋɔ́
PERS-3A	C-be:PR	C-sit_up_with:INCOMPL	person	VREF	that	C-sick

they sit up with the man because he is ill

15.2.2. **cɪk** marking the absence of an expected object

With transitive verbs, the absence of an overt object establishes object reference to something or someone mentioned earlier in the text or otherwise understood from the context. In combination with some verbs with which an object is expected, the vague reference particle **cɪk** marks that the verb is used without an object.

Compare the following three examples with **ɪna** 'know', and also the next three with **ɔɽəkɔ̂** 'eat':

kəllán	**k-ɪna**	**lɔ́n**	**l-ɔppɔ́t**
old_woman	c-know:INCOMPL	words	c-many

the old woman knows many things

kəllán	**k-ɪná**
old_woman	c-know:INCOMPL

the old woman knows it / these things

kəllán	**k-ɪna**	**cîk**
old_woman	c-know:INCOMPL	VREF

the old woman is wise

m-p-a.ɪk	**p-a.ɽəkɔ́**	**pa-p-əɽɛk**
1-C-BE:PR	C-eat:INCOMPL	thing-c-some

I am eating something

m-p-a.ɪk	**p-a.ɽəkɔ̂**
1-C-BE:PR	C-eat:INCOMPL

I am eating it

m-p-a.ɪk	**p-a.ɽəkɔ́**	**cɪk**
1-C-BE:PR	C-eat:INCOMPL	VREF

I am eating

The verb **ɪmma** 'see' implies an object. With **cɪk**, **ɪmma** refers to the ability to see, as opposed to being blind (whether literally or metaphorically):

k-kw-ɔ́ṭi̭ɔṭ-ín	**ɔ́ṭə́kka**	**ɪttɪ**	**á-ɪmma**	**cɪk**
3-C-send:COMPL-O1	become:DEPINCOMPL	that	SUBJ-(2-)see:DEPINCOMPL	VREF

he sent me so that you will be able to see (Acts 9:17)

cɪk is not used for substitution of an argument that is introduced through the (valency-increasing) application of a Benefactive or Causative derivation. These derivations imply the presence of a beneficiary or a causee, respectively – whether overtly mentioned or

understood from the context. In such cases the use of **cɪk** marking that the verb lacks this additional object would be contradictory to the application of the derivation. The second object in these derivations (the object required by the non-derived verb), however, can be replaced by **cɪk**. An example:

k-kw-ímmíɛ.t   pʊl   cɪk
3-C-make_see:COMPL   person   VREF

s/he made the person see (the person was blind before)

Some verbs which can take an object can also be used alone. These verbs typically have a certain object by default. An example is **ɛrɛ** 'speak'. Its default object **lɔn** 'words' can, but needs not be mentioned:

k-kw-á-ík   p-érɛ
3-C-be-VREF   C-speak:DEPINCOMPL

s/he is speaking

Other examples are **ɔrâ** 'cultivate' and **ɔkákɔ** 'grind'. **ɔrâ** can be combined with different objects (for example onions, tobacco), but its object by default is **mɪ̂l** 'sorghum'. **mɪ̂l** is also the default object of **ɔkákɔ**, though other things can be ground, particularly also **məkal** 'sesame'. With both verbs **mɪ̂l** can be explicitly mentioned, but also left out: in the latter case it is still understood as the object. Several examples of **ɔrâ** can be found in 'The story of the jackal'. The animals cultivate in that story, but what they cultivate (sorghum) is, throughout the story, never explicitly mentioned.

... a-kɪn   ɔrâ
CONJ.PERS-3A   cultivate:DEPINCOMPL

and they cultivated (the usual crop, namely sorghum) ('The story of the jackal')

ɔrâ can also take the noun **cɪ̌k** 'place(s)' as object. **ɔrá cɪk** does not mean 'cultivate' (the action alone), but 'cultivate the piece of land':

… a-kın   ɔrá   cɪk
CONJ.PERS-3A   cultivate:DEPINCOMPL   place

and they cultivated the piece of land

15.2.3. **cɪk** marking the absence of an expected locative constituent

Locative 'be' (**ɔkâ**) co-occurs with a locative constituent. When VREF **cɪk** replaces the locative constituent, **ɔkâ** takes on an existential reading. Compare the following examples:

pʋl   p-ɔ-nɔppət   p-ɔká.t   ɪ-pɪrâ
person   C-of-Nɔppət   C-be:COMPL   in-tree

the person of Nɔppət was in the forest

pʋl   p-ɔ-nɔppət   p-ɔká.t   cɪk
person   C-of-Nɔppət   C-be:COMPL   VREF

the person of Nɔppət existed

*pʋl   p-ɔ-nɔppət   p-ɔkâ.t
person   C-of-Nɔppət   C-be:COMPL

In the following clause with the Past TAM of **ɔkâ** 'be' **cɪk** gives an existential reading of the verb (first exampe below). Here, however, **cɪk** can also be absent. In that case, 'be' rather functions as a copular verb, with the clause introduced by **ámmakka** as the predicate complement of the copula (second example below)**:**

ɛl-l-ɪ   l-ɔka.káṭɛ cɪk   ámm.akka   púl   p-ɪɽê.t
DEM-C-NEARSP   C-be:PST   VREF   like   person   C-say:COMPL

these things happened just like the man had said

ɛl-l-ɪ   l-ɔka.káṭɛ   ámm.akka   púl   p-ɪɽê.t
DEM-C-NEARSP   C-be:PST   like   person   C-say:COMPL

these things happened just like the man had said

In chapter 12 on verbal inflection it was shown that the auxiliary verb 'be' can also be combined with **cɪk**. For example, TAMs expressing continuous action typically have **cɪk**. They draw the hearer's attention towards the action having some duration:

kəllán	**k-ɔká.t**	**cɪk**	**a-k-ɔ́kəṭaccê-k**
old_woman	C-be:COMPL	VREF	CONJ-C-watch:INCOMPL-O3

the old woman was watching him / the old woman was there, watching him

In some cases, there seems to be a pragmatic difference between absence and presence of **cɪk** in combination with **ɔkâ**. Compare the following examples. The first, with **cɪk**, is a general (unsolicited) piece of information, the second a confirmative answer:

ṭ-ɔkwarəttɪkɔt	**kápík**	**ṭ-á.ká**	**cɪk**	**nɔ́-kamʊṭĕ**
NOM-remember.PLUR	God	C-be:INCOMPL	VREF	on-celebration

there will be remembering God at the celebration (general information about what will happen at the (Christmas) celebration) (fr. written essay)

ṭ-ɔkwarəttɪkɔt	**kápík**	**ṭ-á.ká**	**nɔ-kamʊṭĕ**
NOM-remember.PLUR	God	C-be:INCOMPL	on-celebration

remembering God will be there at the celebration (answer to the question if God will be remembered at the celebration)

ɔʈɔ 'land, alight' is another verb that must co-occur with a locative constituent but can take **cɪk** instead:

pʊʈʊpé	**p-ɔʈɔ.t**	**nɔ-pɪrâ**
bird	C-land:COMPL	on-tree

the bird has alighted in the tree

pʊʈʊpé	**p-ɔʈɔ.t**	**cîk**
bird	C-land:COMPL	VREF

the bird has alighted

Unlike Benefactives and Causatives, productively applied Locative-applicative derivations can take VREF **cɪk**. Apart from conveying an awareness that there is a spatial component to the action, there seems to be no difference between a clause with underived verb and a clause with derived Locative-applicative and **cɪk**. Compare the following examples with **ɔʈɪa** 'become red, ripe' (the first) and its Locative applicative derivation **ɔʈɪat** 'become red, ripe at' (the second and third). **nɔ-pɪrâ** 'on the tree' is replaced by **cɪk**:

aɽəpʋ w-ɔɽɪâ.t   'the fruits have become ripe'
aɽəpʋ w-ɔɽɪá.ʈɛ nɔ-pɪɾâ   'the fruits have become ripe on the tree'
aɽəpʋ w-ɔɽɪá.ʈɛ cɪk   'the fruits have become ripe'

The next examples contrast the transitive verbs **uttɛ** 'vomit' and **uttɛt cɪk** 'vomit at'. The third example contains a spatial notion though it remains unspecified.

ʋkʋl	w-a.ɪk	w-úttɛ	ʈʋɽît
child	C-be:PR	C-vomit:INCOMPL	food

the child is vomiting the food

ʋkʋl	w-a.ɪk	w-úttɛt	ʈʋɽít	nɔ-capʋ́
child	C-be:PR	C-vomit_at:INCOMPL	food	on-ground

the child is vomiting the food on the ground

ʋkʋl	w-a.ɪk	w-úttɛt	ʈʋɽít	cɪk
child	C-be:PR	C-vomit_at:INCOMPL	food	VREF

the child is vomiting the food

The content of the stomach is the object of **uttɛ** understood by default. This means that the verb can be used without object and that the object cannot be replaced by **cɪk.**

ʋkʋl	w-a.ɪk	w-úttɛ
child	C-be:PR	C-vomit:INCOMPL

the child is vomiting

*ʋkʋl	w-a.ɪk	w-úttɛ	cɪk
child	C-be:PR	C-vomit:INCOMPL	VREF

the child is vomiting

Whether or not verbs allow for replacement of the object or a locative constituent by **cɪk** is lexically determined.

15.2.4. **cɪk** modifying adjectives

As mentioned in chapter 10 on adjectives, certain colours can be combined with **cɪk**. Colours with **cɪk** refer to a resembling colour. In such cases, **cɪk** paradigmatically relates to adverbs. Compare:

pʊɾʊpé   **p-ɔɾɛ**   **ɪttɪăŋ**
bird   c-red   very

the bird is very red

pʊɾʊpé   **p-ɔɾɛ**   **cîk**
bird   c-red   VREF

the bird is reddish

cɪk can also be combined with at least some verbs related to colour terms, for example with **ʊpʊka** 'become white', which is related to the adjective C-**ɪpʊk** 'white':

pʊl   **ɪ-p-ɔká.t**   **p-ʊpʊkát̪.ɛ**   **cɪk**
person   RES-C-be:COMPL   C-become_white_at:COMPL   VREF

a man who was whitish (for example from disease)

ɔttê / ɔt̪t̪ê 'small' is another adjective that can be collocated with **cɪk**. In this case, **cɪk** makes the adjective more precise or absolute. The combination with **cɪk** refers only to the youngest sibling. Compare:

ɔ-paŋ   **ɪ-p-ɔ́parɪ**   **ɪ-p-ɔ̂ttɛ**
PERS-sibling   RES-C-female   RES-C-small

a small sister / a younger sister (i.e. the youngest of two sisters, or a younger, but not the youngest in a family with more sisters)

ɔ-paŋ   **ɪ-p-ɔ́parɪ**   **ɪ-p-ɔ̂ttɛ**   **cík**
PERS-sibling   RES-C-female   RES-C-small   VREF

the youngest sister

In the next example, the sentence in which **cɪk** is absent expresses that the person is still relatively young (for a certain purpose, for example for marriage). The second sentence, with **cɪk**, makes a statement in a more absolute sense: 's/he is still a child'.

k-kw-árəṭʊk　　**p-ɔttê**
3-C-be_still　　　　　C-small

s/he is still young (implication for example: she can still get married)

k-kw-árəṭʊk　　**p-ɔttê**　　**cík**
3-C-be_still　　　　　C-small　　　VREF

s/he is still a child

C-**ɔttê** 'small' forms part of the expression **papɔttê** 'a little, a little time', which derives from **papʊ pɔttê** 'small thing'. **papɔttê** can be used with and without **cɪk**. In the first example below, without **cɪk**, it denotes a period of time of short duration. In the second, with **cɪk**, it refers to a moment shortly before (or after) the moment of speech.

m-p-a.ɪk　**p-â.ŋɔkɔ**　　**pá.p.ɔ́ttê**
1-C-be　　　　C-rest:INCOMPL　　short_time

I am resting a little

m-p-aa.t　　**pá.p.ɔ́ttê**　　**cík**
1-C-come:COMPL　short_time　　　VREF

I just arrived

15.3. Locative proclitic **cík**- 'just, precisely'

Proclitic **cík**- can be attached to a prepositional phrase or a noun with locative semantics. It typically functions as a confirmative particle, expressing that something (indeed) happens or happened on that very spot. The use of proclitic **cík**- presupposes that the place is known (identifiable) for the hearer. Proclitic **cík**- can also be used when the locative constituent is a further precision of a preceding statement or question. Examples will be given after some remarks about morpho-phonological and tonal properties of the proclitic.

*Morpho-phonological and tonal properties of proclitic **cík**-*

The realization of proclitic **cík**- is determined by the initial sound of the word to which it is attached. It assimilates to a following consonant resulting in a (short) voiceless plosive or a short sonorant,

or is realized as a soft fricative/approximant before a vowel: this is all fully regular. For example:

cɪ-nɔ-pərrɔ̂k 'on the very chair' (glossed: LOC-on-chair)

The clitic differs from the noun and the vague reference particle when it comes to slow or careful (cut up) speech: the final **k** of the clitic will not be pronounced as [kʾ]. The clitic is either rendered as [cɪ] or, when followed by the prepositional proclitic **ɪ-**, as [cɪɰɪ], showing its clitic nature. Before **a** some speakers fully elide **k**:

cɪ-akkʊ́mân 'since (precisely) then'

Proclitic **cík-** brings a high tone to a following element, but cannot itself receive a high tone unless through tone bridge, which is compatible with either a rising or a high tone. Unlike the noun **cǐk** it has no prepausal realization. As I do in such cases (see 3.8), I assign it a high tone.

cík- procliticizes to locative phrases. Its use assumes that the place is identifiable for the hearer and it tends to convey a sense of 'precisely', 'especially' or 'only' at that place. In the example below, it is assumed that the hearer knows the chair of the speaker:

m-p-a.ɪk	**p-íkkɔ**	**cɪk**	**cɪ-nɔ-pərrɔ́k**	**p-ɪn**
1-C-be:PR	C-sit:INCOMPL	VREF	LOC-on-chair	C-POSS1

I am sitting on this very chair of mine (in a telephone conversation, the chair is known to the addressee)

The difference between presence and absence of the clitic is generally subtle and can be rather difficult to capture in English translation. 'Just', 'precisely' or 'the very' actually tend to be somewhat too strong.

A typical situation in which **cík-** will be used is the following:

ŋ-kw-a.ɪk p-a.ɛɔ́ **karə-ța** **/ m-p-a.ɪk p-a.ɛɔ́** **tɔʊmâŋ /**
2-C-be:PR   C-go:INCOMPL   where-QW   1-C-be:PR   C-go:INCOMPL   Tɔʊmâŋ

kərɛn **tɔ́ʊ́mâŋ** **/ cɪ̢-țɔ-nɪmérí-ɔ̂n**
where   Tɔʊmâŋ   /   LOC-at.PERS-Nɪmɛrɪ-PL

where are you going? / I am going to Tɔʊmâŋ / where in Tɔʊmâŋ? / to Nimeri's house

Two further examples follow here:

… a-kw-íɽį̢kɔ.t **cɪ-nɔ́-cúɽâŋ**
CONJ-3-tie_at:DEPINCOMPL   LOC-on-stick(k.o.)

and she tied it onto the stick (In the story, the stick has already been introduced. **cɪk-** draws extra attention to the ornament being put in place)

arrɪɛț.ɛ **wɛk** **w-əɽɛk cɪc-cénəkɛt** **ána w-əɽɛk** **cɪc-cénəkɛt**
make_cross:IMP leg   C-some   LOC-there_not_far   and   C-some   LOC-there_not_far

put one foot just there and the other one just there! (the speaker points at the places, the addressee should put his feet precisely at those places) (fr. written story)

cík- can be used on a constituent that has a locative role in a certain context, though it lacks prepositional marking or inherently locative semantics. Compare the following examples:

k-kw-ɔ́kkʊttá.t **círí** **c-ɔ́-wɛ́k**
3-C-be_hit:COMPL   joint   C-of-leg

s/he was hit at the ankle

k-kw-ɔ́kkʊttá.t **cɪc-círí** **c-ɔ́-wɛ́k**
3-C-be_hit:COMPL   LOC-joint   C-of-leg

s/he was hit precisely at the ankle

The presence of VREF **cɪk** does not stand in the way of addition of **cík-** to the locative phrase:

m-p-a.ɪk **p-íkkɔ** **cɪk** **cɪc-cəné**
1-C-be:PR   C-sit:INCOMPL   VREF   LOC-here

I am sitting right here

ɔ-kín ṭ-ɔɽəkk.áṭɛ cɪk cɪ-nɔ́ɽá w-ɔ́-káɲcâŋ
PERS-3A   C-eat:PST   VREF   LOC-on_top   C-of-big_flat_stone

they ate right on the big flat stone (the hearer is assumed to know the stone)

cík- cannot be used before a question word. The knowledge that **cík-** presupposes on the part of the hearer is incompatible with the question word. Compare:

n-ṭ-ɔká.t kárɔ́-ṭá máí
2A-C-be:COMPL   where-QW   just_before

where have you (PL) been just now?

*n-ṭ-ɔká.t cɪk-kárɔ́-ṭá máí
2A-C-be:COMPL   LOC-where-QW   just_before

cík- can be proclitic to a temporal prepositional phrase (first example below), but not to every time-adverbial word (third example below):

k-kw-ânn-aŋkɔt ɪttɪ k-kw-ítta cɪ-nɔ-ṭʊpʊ́t én-ṭ-í
3-C-NEG-want:DEPCOMPL that   3-C-get_married:INCOMPL   LOC-on-year   DEM-C-NEARSP

she does not want to get married this year

m-p-aa.t máí
1-C-come:COMPL   just_before

I have just arrived

*m-p-aa.t cɪ-máí
1-C-come:COMPL   LOC-just_before

Prepositional **ń-** 'with, by, (away) from' can precede locative phrases, expressing 'from'. In such cases **ń-** comes before proclitic **cík-**:

m-p-i̧cánṭet mɛccɪn ɲ-cɪk-ɪ-ci̧ŋkî̧
1-C-lie_down_for:PST   yesterday   with-LOC-in-sun

I slept yesterday from sunrise

m-p-i̧cánṭet mɛccɪn *cɪ-n.tɪ-ɪ-ci̧ŋkî̧
1-C-lie_down_for:PST   yesterday   LOC-from-in-sun

Proclitic **cík-** is a fixed part of the following adverbs:

cɪt.tɔ́.kɪ́t   'firstly, at first' (< **cík-** + **tɔ** 'up at' + **kɪ́t** 'eyes')
cɪn.nɔ́.môn   'firstly, at first' (< **cík-** + **nɔ** 'on' + ?)
cɪṭ.ṭán   'far, far away' (< **cík-** + **ṭán** 'there' (see 16.6 and
17.1.2))

Two examples:

ana	**kɪt**	**k-akkakáṭɛ**	**cɪt.tɔ́.kɪ́t**
and	wild_chicken	C-come:PST	firstly

and the wild chicken arrived first

ɛɛ	**kʊrɪ**	**cɪṭ.ṭán**
stab:IMP	cry	far

cry out loudly!

15.4. The lexical item **ɲcɪk**

There is an item **ɲcɪk** consisting of prepositional **ń-** 'with, by, (away)
from' and VREF **cɪk**. It behaves like a single low-toned item, not like
clitic **ń-** + another element, since **ń-** cannot receive a high tone, but
here it can. **ɲcɪk** is part of fixed lexical combinations. Lacking a clear
meaning, but often still containing some notion of 'place', I gloss it as
a single lexical item 'from_VREF'. **ɲcɪk** must be distinguished from **ɲ-
cĭk** 'from place(s)'. An example with **ɲcĭk** is given in chapter 16.5.
Some examples with **ɲcɪk** follow here:

ɔkʊ́ɾɛ	**man**	**ɲ́.cɪk**
make_move_up:DEPINCOMPL	house	from_VREF

to make a house rise up from nothing (when the building was started there
was nothing)

ɔkʊ́ɾɛ	**kɪt**	**ɲ́.cɪk**
make_move_up:DEPINCOMPL	wild_chicken	from_VREF

to make a wild chicken appear from nothing (typical situation: the chicken
could not be seen, you throw something to where you think it is, then it
suddenly flies up and appears as if from nowhere).

ŋ-kw-a.kkwín-ɔ́k**kunu****ɲ́.cɪk**
2-C-hit_for:INCOMPL-O3 ear from_VREF

you fix your ear to him/her (you must listen to him/her carefully. Lit.: you hit for him/her the ear (…). The picture is that somebody holds his ear turned to the sound, concentrating to catch it)

m-p-ɔkwɛɽɔ́.t**kuŋku****ɲ.cɪk**
1-C-graze:COMPL knee from_VREF

I have grazed my knee (through quick contact with a rough place)

16. Prepositional proclitics

Lumun has five basic prepositional proclitics (PPCs). They can be attached to a noun, including a noun with the persona prefix, a full personal pronoun, an independent possessor, an independent demonstrative or an independent modifier. Four proclitics are locative:

ɪ-	'in'
nɔ-	'on, at'
tɔ-	'up on, up at'
ṭɔ-	'at'

The fifth marks instrumental role, comitative role, or agent role in a passive construction. It can also function in a locative context; there it expresses '(away) from':

ń-	'with, by, (away) from'

In this chapter, I first present the tonal, morpho-phonological and morphological properties of the PPCs and then discuss their semantics, specific collocations and collocational restrictions. I also discuss complex prepositions and the "absolute" forms of the PPCs, which I call "absolute prepositions". I will present different syntactic environments in which they are used. In the last section of the chapter, I provide some examples of attachment of **ń-** 'with, by, (away) from' to a different constituent than expected on grounds of the role that it expresses.

16.1. Tone

ɪ-, **nɔ-**, **tɔ-** and **ṭɔ-** impose a specific tone pattern on the nouns to which they are attached. Since these patterns deviate from what can be expected on the basis of the general tone roles, I represent **ɪ-**, **nɔ-**, **tɔ-** and **ṭɔ-** without tone.

ń-, on the other hand, behaves tonally as expected from a monomoraic element with a high or rising tone. There are, however,

no cues that allow for a choice between these patterns: the element cannot be realized in isolation, nor does it have additional morae that might (or might not) receive a high tone from another element. As set out in 3.8 on tone, I assign a high tone in such cases.[4]

When ɪ-, nɔ-, tɔ- and ʈɔ- precede a L-noun, a H tone comes on the second mora of the noun, followed by a L-tone. This results in a falling tone on the second mora when the noun is bimoraic. When the L-noun is monomoraic, ɪ-, nɔ-, tɔ- and ʈɔ- generate a falling tone on the first mora. When ń- precedes an all-low noun, the Tone Shift Rule is applied, bringing a falling tone on the first mora of the noun. Then Contour simplification is applied, unless the falling tone is in prepausal position.

Table 100 Tonal effects of the PPCs on low-toned nouns

	ʋl 'person'	əlla 'cats'	cəʈɔkɪ 'gourd (k.o.)'	əʈəmɛkkʋ 'bats (sp.)'
ɪ- (also nɔ-, tɔ-, and ʈɔ-)	ɪ-ôl 'among the people'	ɪ-əllâ 'among the cats'	ɪ-cəʈɔ́kɪ 'in the gourd'	ɪ-əʈə́mɛkkʋ 'among the bats'
ń-	n-ôl 'with the people'	n-ə́lla 'with the cats'	ɲ-cə́ʈɔkɪ 'with the gourd'	n-ə́ʈəmɛkkʋ 'with the bats'

L-toned nouns with a long vowel preceded by ɪ-, nɔ-, tɔ- and ʈɔ-also get the H-tone on the first vowel:

ɪ-cáa 'in the grape'
ɪ-ɛ́ɛ 'in the poisont' (< ɪ- + ŋɛɛ)

One L-noun has a different tonal realization when preceded by one of the procliticss ɪ-, nɔ-, tɔ- and ʈɔ-. With caʈʈak/maʈʈak 'calabash (k.o.)' all prepositional proclitics give a H-tone on the first mora:

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[4] There are attestations of a high tone realized on the initial nasal in the word ɲcɪk (ɲ́cɪk). I regard ɲcɪk in these cases as a lexicalized item. Though the PPC ń- is clearly historically a formative here, synchronically I regard the initial nasal no longer as the PPC in this word (see also 15.4).

ɪ-cáṭṭak 'in the calabash (k.o.)'

When **ɪ-**, **nɔ-**, **tɔ-** and **ṭɔ-** precede a noun with a H-tone, whether or not as part of a contour, the tone pattern of the noun does not change. When preceded by **ń-**, sub-Rules 1 to 4 apply (see 3.3.3).

Table 101 Tonal effects of the PPCs on nouns containing a H-tone

	ɪ-, nɔ-, tɔ-, ṭɔ-	*ń-*
ṭŭk 'dog'	nɔ-ṭŭk	n-ṭŭk
waĭ 'cow'	tɔ-waĭ	n-naĭ
kəṛittăŋ 'knife'	nɔ-kəṛittăŋ	ŋ-kəṛittăŋ
ṭennɛkkɛttă 'test'	ɪ-ṭennɛkkɛttă	n-ṭennɛkkɛttă
kíṭ 'eye'	ɪ-kíṭ	ŋ-kíṭ
ɔpá 'piece of meat'	nɔ-ɔpá	n-ɔpá
aṛankál 'bed'	ta-aṛankál	n-áṛaŋkál
mịmənteɾí 'hedgehogs'	ɪ-cími̠ənteɾí	ɲ-cími̠ənteɾí
mîl 'sorghum'	ɪ-mîl	m-mîl
kurrɔ̂ŋ 'stick'	nɔ-kurrɔ̂ŋ	ŋ-kurrɔ̂ŋ
ŋaṭṭɔkkɔ̂l 'calabash (k.o.)'	ɪ-aṭṭɔkkɔ̂l	ŋ-ŋáṭṭɔkkɔ̂l
ŋaṭṭərəpê 'rabbit'	ta-aṭṭərəpê	ŋ-ŋáṭṭərəpê
ṭərɔ́ma 'ram'	tɔ-ṭərɔ́ma	n-ṭərɔ́ma
lʊmúttʊ 'bull (k.o.)'	tɔ-lʊmúttʊ	l-lʊmúttʊ
ŋaccəpápa 'tool (k.o.)'	na-accəpápa	ŋ-ŋáccəpápa
aləppaṭúra 'tomato'	ɪ-aləppaṭúra	n-áləppaṭúra
ɪṛɪmaníṛɪman 'spiders'	ɪ-ɪṛɪmaníṛɪman	n-íṛɪmaníṛɪman

The above description of tonal realizations of prepositional proclitics and nouns does not account for all tonal phenomena that relate to the prepositional proclitics, and a couple of attestations defy a clear analysis. **nɔ-** and **tɔ-** (and probably also **ṭɔ-**) can be realized with a high tone outside situations of tone bridge, and there are even attestations of **nɔ-** realized with a high tone where a preceding element providing this high tone appears to lack. **maɪt** 'beans' in the example below is an entirely low noun:

pʊl   p-ɔṛəkɔ́ṭ.ɛ   maɪt   nɔ́-capʊ́
person C-eat_at:COMPL beans   on-ground

the man has eaten the beans on the ground (i.e. while sitting on the ground)

ɪ-, on the other hand, never receives a high tone from a preceding element, nor is it ever realized high apparently 'out of the blue'.

The following minimal pair also testifies to **nɔ-** and **ɪ-** having different tonal effects. The verb preceding the PPC is realized differently:

kwɔk   **k-a.ɪk**   **ɪ-wɛ́k**
shoe   C-be:PR   in-leg

the shoe is on the foot

kwɔk   **k-a.ɪ́k**   **nɔ-wɛ́k**
shoe   C-be:PR   on-leg

the shoe is on the foot

16.2. Morpho-phonology and morphology

Vowel assimilation and coalescence

When **nɔ-**, **tɔ-** or **t̪ɔ-** is prefixed to an ɔ-initial noun, the resulting vowel tends to retain some length. A difference is audible between minimal pairs such as **nɔ-ɔpá** 'on the piece of meat' and **n-ɔpá** 'with the piece of meat'. I therefore use a double vowel in the spelling in case of attachment of **nɔ-**, **tɔ-** and **t̪ɔ-** before **ɔ** or an initial vowel to which the PPC assimilates, as far as this vowel is the initial vowel of a common noun. Before the persona prefix (**ɔ́-**) no length seems to be retained, nor for a demonstrative starting with **ɛ**.

The vowel of **nɔ-**, **tɔ-** and **t̪ɔ-** assimilates to a following **a** or **ɛ**:

nɔ- + **at̪əpʊ**   > **na-at̪ə́pʊ** 'on the things'
nɔ- + **ɛpʊ**   > **nɛ-ɛpʊ̂** 'on the mushrooms'

The same happens before independent possessors and demonstratives. Concord **t̪** in the examples below agrees, for example, with **t̪ʊk** 'dog'.

nɔ- + **áṭaŋ**   > **n-áṭaŋ** 'on yours'
nɔ- + **ɛnṭí**   > **n-ɛnṭí** 'on this one'

An exception is the following, in which **ɛ** of the noun assimilates to preceding **ɔ**:

nɔ- + **ɛɽəkɛ̂**   > **nɔ-ɔɽəkɛ̂** 'on the stirring spoons'

Attachment before one of the other vowels (**i̠**, **u**, **ɪ**, **ʊ**, **ə**) results in a diphthong.

Initial **ŋ** is (regularly) deleted between vowels. In such cases some length of the vowel tends to be more audible then upon direct adjacency of the vowels. The same assimilations take place, e.g.,

nɔ- + **ŋɛɽɪŋkâ**   > **nɛ-ɛɽɪŋkâ** 'on the donkey'

Attachment to (pro)nouns with the persona prefix

Upon attachment of **nɔ-**, **tɔ-** or **ṭɔ-** to a noun with the persona prefix (**ɔ́-**) there is full coalescence, resulting in a short vowel. Recall that **ɪ-**, **nɔ-** and **tɔ-** cause the persona prefix to change into **á-**, but **ṭɔ-** does not (see 4.10.1):

k-kw-ɔ́ṭṭɛ́.t   **nɔ-kəmən ána**   **n-a-paŋɔ́n**   **ana nɔ́-i̠mḭ́t**
3-C-leave_behind:COMPL on-houses   and   on-PERS-sibling.PL   and   on-goat

s/he left the house and his/her siblings and the goat behind

ṭɔkʊkkʊɔ́n   'at the house of Kʊkkʊ and his family'

A short vowel **a** also results upon attachment of **nɔ-** and **tɔ-** to a personal pronoun (**ṭɔ-** cannot occur in that position), i.e.:

na-âk 'on him/her'   (< **nɔ-** + **ɔɔ̂k**)

Full paradigms are given in chapter 6.1.4.

ATR harmonization

The vowels of the prepositional proclitics may undergo some influence of a +ATR noun to which they are attached, but do not fully harmonize with the +ATR noun. I therefore spell 'in' as ɪ- (instead of i̱-) in for example:

ɪ-cərúk 'in the opening'

Homorganic nasal

Lumun consonant clusters are always homorganic and the general rule is that the first consonant of a cluster adapts —at least— for place of articulation to the second. **ń-** 'with, by, (away) from' is no exception. It assimilates for place of articulation to a following obstruent consonant, e.g.,

ŋ-kurrɔ̂ŋ 'with the stick'

It fully assimilates to following **l**:

l-lɔ̂n 'with words'

A following **w**, however, assimilates to **ń-**:

n-naɪ̆ 'with the cow' (< **ń-** + **waɪ̆)**

Long initial consonants that are due to attachment of prepositional **ń-** tend to be pronounced with some length.

*Irregular assimilation of **t** or **k** before **ń-** and before **nɔ-** attached to a (pro-)noun with the persona prefix*

Deviating from the general rule, **ń-** does not cause the final **t** or **k** of a preceding word to become nasal. Instead, it causes lenition of **t** to **r**, and of **k** to **ɯ̆**. The absolute counterpart of **ń-**, **ŋŋɪn**, has the same effect. **nɔ-** and its absolute counterpart **nán**, on the other hand, have the regular effect of eliding a preceding word-final **t** or **k**.

Unexpectedly, however, when **nɔ**- is attached to a noun or pronoun with the persona prefix it causes lenition of a preceding **t** to **r**, and of a preceding **k** to **ɰ**. Examples of these different assimilations are provided in 2.1.1.

*Allomorph **rɪ**- of **ɪ**- 'in'*

ɪ- 'in' has an allomorph **rɪ**-, which is applied when 'in' is preceded by the connexive C-**ɔ** 'of', e.g.,

ɔkʋkkʋ́ kɔ́ríṯṯə̂k 'Kʋkkʋ of in the field' (i.e., Kʋkkʋ born from an unmarried mother) < **k-ɔ** 'of' + **rɪ**- 'in' + **kərək** 'farming field'

Assuming that **r** is the intervocalic allophone of **t** here, the same **t** preceding **ɪ**- is found in the absolute form of **ɪ**-, **tít**, and in the combination of **ń**- + **ɪ**-, realized as **ntɪ ɪ**-, with **ntít** as its absolute form (see 16.6). This suggests an older form of **ɪ**- with **t** preceding it (*__tɪ__-), which has been retained in some words/environments.

*Allomorph **na**- of **nɔ**-*

nɔ- has an allomorph **na**- which occurs when the PPC is used in a comparative construction before an independent modifier:

ɪ-c-íɸɛ	**akk-ɔpərɔ́t**	**ná-í-c-íé**
RES-C-old	FOC-good	on-RES-C-new

the old one is better than the new one

*Changed shape of certain nouns after **ɪ**-, **nɔ**-, **tɔ**- or **ṯɔ**-*

It is mentioned here also that certain nouns occur, or can occur, in a changed phonological shape upon prefixation of **ɪ**-, **nɔ**-, **tɔ**- or **ṯɔ**-. One example is:

nɔ- + **pəṯɔk** 'stone'   > **nɔ-ṯṯɔ̆k** 'in the country'

Further cases are listed in chapter 4.4. Some nouns occur both in original as in changed shape after a PPC and have developed different meanings. Such cases are presented in the subsections of 16.3.

16.3. Semantics and use of ɪ-, nɔ-, tɔ- and ṭɔ-

All four locative proclitics (ɪ-, nɔ-, tɔ- and ṭɔ-) can be used both in static expressions and in movement expressions[5].

16.3.1. ɪ- 'in'

ɪ- typically expresses a notion of being (or becoming) enclosed or enveloped or surrounded. It can often be translated as 'in' or 'into' or through (that is, moving through something) and with a plural noun as 'among' or 'between'.

maɪt	**m-a.ɪk**	**ɪ-cakkə́lɔ́k**
beans	c-be:PR	in-calabash(k.o.)

the beans are in the calabash

ɔppɔṭ.ɛ	**máɪt**	**ɪ-éɲ-c-í**
put_at:IMP	beans	in-DEM-C-NEARSP

put the beans in this one! (in this *cakkəllɔk*)

ɔccʊ	**ṭɔɽək**	**én-ṭ-í**	**á-ɪɽɪkɛ**		**ɪ-cərúk**
receive:IMP	rope	DEM-C-NEARSP	SUBJ-(2-)make_pass_entrance:DEPINCOMPL		in-opening

take this rope and pass it through the opening (lit.: in order to pass it …)

aɽəpʊ	**w-ɔɽɪát.ɛ**	**ɪ-paŋ-k-ên**
things	c-become_red_at:COMPL	in-sibling-c-of:ABS

the fruits have become ripe between the other fruits (lit.: between their siblings)

Some nouns can occur in a changed form after the PPCs ɪ-, nɔ-, tɔ- and ṭɔ- (see chapter 4.4). Next to this form, a regular form is often

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[5] Examples of the use of the prepositions in static situations are provided in Smits (2007), which contains short locative sentences, elicited with the help of pictures designed by Melissa Bowerman (1993). The sentences answer the question 'where is X'.

possible as well. In some cases, the form with gemination and the regular form have different meanings. Examples with ɪ- are:

pə̰ʈɔk   'stone'
ɪ-pə̰ʈɔ̂k   'under a stone' (typically in a (small) hole that has been dug and that has been closed by a stone)
ɪ-ʈ̰ʈɔ̆k   'in the cavity under stones that touch each other' (typically shaped by nature)

kərək   'farming field'
ɪ-kərə̂k   'in the bigger farming field away from the house'
ɪ-ttə̂k   'in the small farming field immediately around the house'

pərɪt   'granary'
ɪ-pərɪ̂t   'in the space between the actual storehouse and the wall of a room in which it is located'
ɪ-ttɪ̆t   'in the granary (i.e. in the actual storehouse)'

ɪkkwâ (< **ɪ-** + **ka** 'body') is a comparable case because of the gemination of the consonant. The regular form **ɪ-ká** is part of a complex preposition (see section 16.4):

ka   'body'
ɪ-ká kɔ   'in the centre/middle part of' (in the sense of not at the edge)
ɪ-kkwâ   'in the body'

'The shoe is on the foot' can be expressed with ɪ- (example given in 16.1), and ɪ- is used in the following situation:

ɔ-nɛnní	**p-á.ík**	**p-á.kɔ**	**cuccú**	**ɪ-cələ̂k**
PERS-Nɛnnɪ	C-be:PR	C-wear:INCOMPL	bead	in-neck

Nɛnnɪ is wearing a necklace around her neck

The use of ɪ- for temporal expressions is limited to forming a fixed part of the word for the early part of the dry season (roughly October till January): **ɪcəpɔ̂**.

ɪ-cəpɔ́   **ʊl**   **w-á.kḭɔ**   **mḭ̂l**
in-first_part_of_dry_season   people   C-cut:INCOMPL   sorghum

in the beginning of the dry season the people cut the sorghum

ɪ- is also used outside the locative (and temporal) domain. For example, engagement in hunting activities is expressed with **ɪ-**:

ʊl w-ɔ-rɪ-apê 'people of in fish' (that is, people engaged in fishing)

Some more examples of this type were provided in chapter 4.8.1.

A few verbs are obligatorily collocated with a prepositional phrase with **ɪ-**, for example **ɔt̪ḭɔt tɪ́t** 'answer (to it)'. Such verbs have the absolute preposition **tɪ́t** when cited alone.

16.3.2. **nɔ-** 'on, at'

nɔ- typically expresses surface contact, often at the side of something, but it may also be on a high (or the highest) point of something. If there is an element of height, **nɔ-** does not draw attention to it (in order to do that, **tɔ-** is used). **nɔ-** often translates as 'on' or 'at'.

ŋʊccók   **ŋ-á.ík**   **nɔ-kəɾḭttăŋ**
blood   C-be:PR   on-knife

there is blood on the knife

It can also be used in a directional way:

m-p-a.ɪk   **p-a.ɛ̃**   **nɔ-kaɾə́n**   **k-əɾɛk**
1-C-be:PR   C-go:INCOMPL   on-place   C-some

I am going to some place

nɔ- does not express envelopment, nevertheless it is a formative of **nɔppăn** 'inside' (**nɔ-** + **tʊpan** 'room').

The location of holes and cracks is expressed with **nɔ-**:

cəruk	**c-a.ɪk**	**nɔ-kərét**
opening	C-be:PR	on-cloth

the hole is in the cloth (answer to: where is the hole?)

A case in which **nɔ-** preceding a noun in its regular form and in its changed form (see 4.4) have different meanings is the following:

pəṭɔk	'stone'
nɔ-pəṭɔ̂k	'on the stone'
nɔ-ṱṱɔ̆k	'in the country'

nɔ- can be used in the temporal domain, where it is typically optional. In fact, not using it seems often the preferred option. The example below easily goes without it:

k-kw-ânn-aŋkɔt	**ɪttɪ**	**k-kw-ítta**	**(nɔ-)ṭʊpót**	**én-ṭ-í**
3-C-NEG-want:DEPCOMPL	that	3-C-be_married:INCOMPL	(on-)year	DEM-C-NEARSP

she does not want to get married this year

nɔ- is applied also in non-locative domains, expressing notions such as 'about' or 'concerning':

m-p-a.ɪk	**p-a.ṭ-érɛ**	**nɔ́-kammɪâ**
1-C-be:PR	C-IT:INCOMPL-talk	on-singing_whip

I am going to talk about the singing whip (App. II, 2)

lɔn	**ɪ-l-a**	**k-kw-ɔ́kkɔṭ.ɛ́**	**nɔ-pôl**
words	RES-C-COP	3-C-do:COMPL	on-person

the things s/he did to the person

A few verbs are obligatorily collocated with a prepositional phrase with **nɔ-**, for example **ɔṱṱɛ nán** 'leave sb./sth. (behind)'. Such verbs have the absolute preposition **nán** when cited alone.

Comparative constructions

nɔ- is further used in comparative constructions. In such constructions it has an allomorph **na-**. The allomorph **na-** is applied

before independently used modifiers. Adjectives and verbs describing properties can serve as the predicate of comparison.

əlla	w-acɔ́kɔc-cɔkɔt	nɔ-lŭk
cats	C-fast-REDUP	on-dogs

cats are faster than dogs

ʈʊk	ʈ-a.kíɲa	nɔ-pəllâ
dog	C-become_tired:INCOMPL	on-cat

the dog will get more tired than the cat

The allomorph **na-** is used in the next example because of attachment to an independently used modifier (a connexive). The example comes from an (unpublished) Lumun dictionary (Kuku et al. 2006):

pʊl	ɪ-p-ɔ́parɪ	p-ɔnʊ́	cʊ́ɽέ	c-ə́rík	ná-c-ɔ́-pʊ́l	í-p-ɔ́cʊra
person	RES-C-female	C-have	buttock	C-big	on-C-of-person	RES-C-male

a woman has a bigger bottom than a man (lit.: a woman has a bottom that is big on that of a man)

Which allomorph is applied in the next examples is not apparent, since in all three cases 'on' precedes a vowel **a** (in the first two examples the allomorph **á** of the persona prefix after a PPC; in the last the pronominal base **a** that forms part of the independent possessor pronoun).

ɔ-kín	ʈ-ɔpərɔ̂t[6]	n-a-nîn
PERS-3A	C-good	on-PERS-1A

they are better than we (are)

lɔttí	ŋ-kw-ɔnʊ́	ɪttɪ	ŋ-kw-a.ɽəkɔ	ʈʊɽít	ʈ-ɔppɔt[7]	n-a-ʈʊʈʈô
Lɔttɪ	2-C-have	that	2-C-eat:INCOMPL	food	C-many	on-PERS-Ṭʊʈʈʊ

Lɔttɪ, you must eat more than Ṭʊʈʈʊ

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[6] The final **t** of **ʈɔpərɔ̂t** is realized here as **r** (cf. chapter 2.1.1).

[7] The final **t** of **ʈɔppɔt** is realized here as **r** (cf. chapter 2.1.1).

á-t̯-aŋ   **ákk-ɔpərɔ̂t**[8]   **n-á-t̯-ɪn**
PROB-C-POSS2   FOC-good   on-PROB-C-POSS1

yours is better than mine (for example **t̯ŭk** 'dog')

Also the verb **ɔllɔ̂** 'run' allows for the comparative construction. The example clearly shows that non-locative use of **nɔ-** does not trigger the Locative-applicative derivation.

pəlla   **p-a.llɔ**   **nɔ́-t̯ʊk**
cat   C-run:INCOMPL   on-dog

a cat runs (faster) than a dog

16.3.3. **tɔ-** 'up on, up at'

Unlike **ɪ-** and **nɔ-**, **tɔ-** is not used outside of the locative domain. **tɔ-** typically expresses a vertical dimension: something is, or moves towards, a high point or the highest point of something. Compare the following sentences:

pʊɽʊpé   **p-ɔɽɔ.t**   **nɔ-pɪrâ**
bird   C-land:COMPL   on-tree

the bird has alighted in the tree

pʊɽʊpé   **p-ɔɽɔ.t**   **tɔ-pɪrâ**
bird   C-land:COMPL   up_on-tree

the bird has alighted in the top of the tree

In the following examples **nɔ-** and **tɔ-** describe the same situation. The use of **tɔ-** expresses that the location has a certain height, while **nɔ-** gives no information relating to height.

ŋat̯t̯ɔkkɔ́l   **ŋ-á.ík**   **nɔ́-cə́nâ**
calabash(k.o.)   C-be:PR   on-grinding_table

the *ŋat̯t̯ɔkkɔl*-calabash is on the grinding table

ŋat̯t̯ɔkkɔ́l   **ŋ-á.ík**   **tɔ́-cə́nâ**
calabash(k.o.)   C-be:PR   on-grinding_table

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[8] The final **t** of **ákkɔpərɔ̂t** is realized here as **r** (cf. chapter 2.1.1).

the *ŋaʈʈɔkkɔl*-calabash is on the grinding table (attention is paid to the grinding table having a certain height)

A human being, unlike a living tree and a grinding table, can assume different positions with respect to the ground. The following sentence can be said when the speaker is in upright position (the frogs will climb onto his head), but also when he is lying on the floor (the frogs are all over him).

nəllapɔ́k	**n-á.ʊ́rɔt**	**ta-ôn**
frogs	C-crawl_at:INCOMPL	up_on.PERS-1

the frogs will crawl on me (different positions of the body possible, the frogs reach the highest point)

The body parts of the upper half of the human body tend to be associated with **tɔ-** (a few more examples are given in table 102).

k-kw-ɔ́nɛk.áʈɛ	**tɔ-cəlêk**
3-C-put:PST	up_on-neck

s/he put it on his neck

For the position on the back of a donkey, **tɔ** is used:

k-kw-árrɔ́ʈ.ɛ	**tɛ-ɛrɪŋkâ**	(< **tɔ-** + **ŋɛrɪŋkâ**)
3-C-cross:COMPL	up_on-donkey	

s/he has mounted the donkey

With motion verbs, **tɔ-** can also be used in order to express that a distance has to be covered without giving information about height of the location. In the example below it is used irrespective of the location of the church (on the mountain or in the valley):

m-p-a.ɪk	**p-a.ɛ̃**	**tɔ-man**	**m-ɔ́-kapɪk**
1-C-be:PR	C-go:INCOMPL	up_on-house	C-of-God

I am going to the church (the speaker has to cover a distance)

By contrast, when the church is near, **t̪ɔ-** is used:

m-p-a.ɪk **p-a.ɛ̃** **ʈɔ-man** **m-ɔ́-kapɪk**
1-C-be:PR C-go:INCOMPL at-house C-of-God

I am going to the church (the church is near)

Both sentences above do not provide any information about the 'path' of movement, i.e. whether the agent has to climb the mountain, descend, or remain more or less at the same level to reach the church.

Farming fields, apart from some fields directly around the house, are traditionally situated in higher places on the hills, often at considerable distance from people's houses. Although people have in more recent times started to cultivate in the valleys as well, the traditional high location and the element of distance of the fields is reflected in the combination **tɔpɔ̂n** (< **tɔ-** + **əpɔn** (probably), see also 4.4) which is used regardless of the location of the field with respect to people's homes on a vertical axis:

ń-ʈ-ʊ́ɔ́.t **tɔ́.pɔ̂n**
3A-C-descend:COMPL at_farming_field

they have descended to the field

kəpɔn can also be marked with **ɪ-**. Use of **ɪkkwɔ̂n** (**ɪ-** + the contracted form of **kəpɔn**, see 4.4) as compared to **tɔpɔ̂n** conveys that the farming field is near (perhaps easily visible from the house), whereas the use of **tɔpɔ̂n** conveys that a distance has to be covered.

m-p-a.ɪk **p-a.ɛ̃** **ɪ-kkwɔ̂n**
1-C-be:PR C-go:INCOMPL in-farming_field

I am going to the farming field (which is near)

nɔkkwɔ̂n and **ʈɔkkwɔ̂n** also exist, but have specific meanings: **nɔkkwɔ̂n** 'near the field' and **ʈɔkkwɔ̂n** 'at the side of the field'.

16.3.4. **ʈɔ-** 'at'

ʈɔ-, like **tɔ-**, functions only as a locative marker. **ʈɔ-** can generally best be captured by 'at'. It collocates with some nouns that share a

notion of being situated in a low(er) place on a vertical axis, but probably rather involves the semantic notion of a non-high location (as opposed to a high location) than of a low-lying location as such. Collocations with some body parts, contrasting ṭɔ- and tɔ- are given in the table. **kucúl** 'back' occurs in its contracted form.

Table 102 Body parts collocated with ṭɔ- and/or tɔ-

	ṭɔ-	*tɔ-*
kucúl 'back'	**ṭɔ-ccúl** 'at the back'	**tɔ-ccúl** 'between the shoulders'
carə́k 'belly'	**ṭɔ-carə́k** 'at the belly'	
kʊŋkʊ 'knee'	**ṭɔ-kʊŋkô** 'at the knee'	
cəkên 'lower back'	**ṭɔ-cəkên** 'at the lower back'	
marrʊ́ 'kidneys'	**ṭɔ-marrʊ́** 'at the kidneys'	
cələk 'neck'		**tɔ-cələ̂k** 'at the neck'
cɛrĕŋ 'chest'		**tɔ-cɛrĕŋ** 'at the chest'

In a few other fixed collocations an element of lower altitude can be recognized. Water tends to be found at lower places, which is probably why going to the well (**tɔ́k**) is expressed with ṭɔ-, irrespective of whether one actually goes down or up the mountain in order to reach it.

m-p-a.ɪk	**p-a.ɛ́**	**ṭɔ́-rɔ́k**
1-C-be:PR	C-go:INCOMPL	at-waterplace

I am going to the well (no information about going up or down the mountain)

A place where water gathers in a hole in a big stone, on the other hand, is expressed with tɔ-: **tɔkkú** (tɔ- + **kupú** 'hole in rock where water gathers'). Such places are typically found higher up in mountains.

Places belonging to **mʊṭṭô** 'Arabs' are indicated with ṭɔ-, reflecting that such places are not on the mountains, but on the low plains in between or further away.

ɔ-kʊmáŋ	p-á.ík	ʈɔ́-mʊ́ʈʈɔ̂
PERS-Kʊmaŋ	C-be:PR	at-Arabs

Kʊmaŋ is in Arab country

Combinations of ʈɔ- and words with the persona prefix are restricted to plurals of kinship terms and personal names, and the noun **ɔpaʈʈɔ̂n** 'people, folk'. Such expressions refer to the living place or household of a person and his/her family or group, not to the people themselves:

m-p-a.ɛ̃	ʈɔ-kakkâ-n
1-C-go:INCOMPL	at.PERS-Kakka-PL

I will go to the place of Kakka and her family (the sentence contains no information about the location of Kakka's house)

k-kw-ânn-ítta	ʈɔ-paʈʈ-ôn
3-C-NEG-be_married:DEPINCOMPL	at.PERS-person-PL

she will not be married into the household of those people

ʈɔ- cannot be combined with a pronoun, whether singular or plural. Pronominal replacement of **ʈɔ-kakkân** 'at the place of Kakka and her family' and **ʈɔ-paʈʈɔ̂n** 'at the house of those people' in the examples above is by the absolute form of **ʈɔ-**, **ʈán** 'at, there' (see 16.6), not by *ʈɔ-kɪn 'at them' (or *ʈakɪn).

ʈɔ may historically be a formative of the word **ʈəpát** (also **ʈəpʊ́t**) 'outside'. There is also **ʈɔ-ʈəpʊ́t** 'place outside which people use as toilet'[9].

16.3.5. Place names

All indigenous place names contain one of the prepositions ɪ-, nɔ-, ʈɔ- or ʈɔ- as a formative. Places with **ʈɔ-** are mostly located higher up the mountain, but there are counter-examples. For example, **ʈɔʊ́** is a

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[9] Especially in the rainy season, when all the land around the house is being used for growing crops, and the pigs, who eat the human excrements, are locked inside, there is a place assigned for use as a toilet, often near a big stone.

place in the valley in Saraf Jamous. Some examples of place names follow here (some were also listed in chapter 4.7); there are many more. The noun involved is not always synchronically attested.

ɪǎr	lit. 'In the mud'	< **ŋǎr** 'mud'
ɪcapʊ́	lit. 'In the ground'	< **capʊ́** 'ground'
nɔt̪ʊpəɽʊ̆	lit. 'In the valley'	< **t̪ʊpəɽʊ̆** 'valley'
nɔkɪt̪în	?	< ?
tɔpɛɽíɲcɪn	lit. 'Up the *pɛɽɲcɪn*-tree'	< **pɛɽíɲcɪn** 'tree (sp.)'
tɔcəmarân	lit. 'Up at the free fight'	< **camarân** 'free fight'
t̪ɔmmʊ́	lit. 'At *ammʊ́*'	< **ammʊ́** (name of person)
t̪ɔrɔk t̪ápê	lit. 'At the waterplace of fish'	< **tɔ́k t̪ápê** 'waterplace of fish'

t̪ɔ is part of the name for the place where the spirits of dead people reside. **t̪ɪɽîn** (or **t̪ɪɽɪn**) is not attested as a noun on its own:

t̪ɔt̪ɪɽîn   'The place where the spirits of dead people reside'

Place names are not combined with one of the prepositions **ɪ-**, **nɔ-**, **tɔ-** or **t̪ɔ-**. They can only be combined with **ń-**, expressing 'from'. Compare:

m-p-a.ík   **tɔɽəmat̪ɔ̂n**
1-C-be:PR   Tɔɽəmat̪ɔ̂n

I am in Tɔɽəmat̪ɔ̂n

m-p-a.ɪk   **p-a.ɛɔ̂**   **tɔɽəmat̪ɔ̂n**
1-C-be:PR   C-go:INCOMPL   Tɔɽəmat̪ɔ̂n

I am going to Tɔɽəmat̪ɔ̂n

m-p-aat   **n-tɔ́ɽəmat̪ɔ̂n**
1-C-come:COMPL   with-Tɔɽəmat̪ɔ̂n

I come from Tɔɽəmat̪ɔ̂n (i.e. I have just come from Tɔɽəmat̪ɔ̂n)

Foreign place names are treated in the same way as indigenous place names and can only be combined with **ń-**:

m-p-ɔnʊ́	**man**	**m-a**	**m-p-ɔkɛrɔ́.t**	**káʈʊ́kəlɪ**
1-C-have	house	C-be:COP	1-C-trade:COMPL	Kadugli

I have a house which I bought in Kadugli

cə́rít	**ɛ́ɔ́**	**kéccók**	**ír-ɔʈ-íkkɔ**[10]	**ŋə́pak**
12HORT	go:DEPINCOMPL	market	(SUBJ-)12-IT:DEPINCOMPL-drink:DEPINCOMPL	beer

let's go to the market and drink beer

k-kw-áa.t	**ŋ-kárəʈûm**
3-C-come:COMPL	with-Khartoum

s/he comes from Khartoum (i.e. s/he has just come from Khartoum)

16.4. Complex prepositions

Fixed collocations of one of the prepositions ɪ-, nɔ-, tɔ- and ʈɔ-, a noun (mostly a body part), and the connexive C-ɔ- 'of' function as what I will call 'complex prepositions'. The connexive is proclitic to a noun. A list follows here:

ɪ-cʊɽɛ́ c-ɔ-	'under, at the bottom of'	(**cʊɽê** 'buttock')
ɪ-carək c-ɔ̂-	'inside'	(**carə́k** 'belly, stomach')
ɪ-pʊɽʊt p-ɔ̂-	'in the middle of (on a vertical axis)'	(**pʊɽʊ́t** 'waist')
ɪ-ká k-ɔ-	'in the centre part of'	(**ka** 'body')
ɪ-ʈɔɽəkɪt ʈ-ɔ̂-	'among, between, in the middle of'	(**ʈɔɽəkɪ́t** 'space between two things')
ɪ-ccík k-ɔ-	'near (no contact)'	(**cǐk** 'place(s)')
nɔ-kʊʈʊ́t k-ɔ-	'at the edge of, at the side of'	(**kʊʈɔ̂t** 'lip')
tɔ-kɪ̧t k-ɔ̂-	'before, in front of'	(**kɪ̧́t** 'eyes')
ʈɔ-ccul k-ɔ̂-	'behind'	(**kucúl** 'back')
ʈɔ-cəkén c-ɔ-	'behind, under'	(**cəkên** 'lower back')
ʈɔ-carək c-ɔ̂-	'in front of'	(**carə́k** 'belly, stomach')

---

[10] The subjunctive particle **â-** is underlyingly present, as can be seen from the high tone on the 12 pronoun clitic.

The formative **ɽá** in the following complex prepositions is probably related to **cá** 'head':

nɔ-ɽa w-ɔ̂-, **nɔɽɔ̂-**   'on top of, over, above of'
tɔ-ɽa w-ɔ̂-, **tɔɽɔ̂-**   'on top of, over, above of (element of height expressed)'

All body parts in the complex prepositions listed above are singulars, except **kɪ́t** 'eyes'. However, prepositions can in principle also be formed with the plurals of these nouns, namely when referring to several locations:

ɪ-mʊɽɛ́   **m-ɔ-mɔɽɔŋ**
in-buttocks   C-of-mountains

at places at the bottom of the mountains

m-p-ɔká.t   **cɪk**   **a-n-ɔ́llɔt**   **ɪ-lɔɽəkɪt**   **l-ɔ́-kəmə́n**
1-C-be:COMPL   VREF   CONJ-1-run_at:DEPINCOMPL   in-spaces_in_between   C-of-houses

I was running between the houses (passing through spaces between several houses)

By contrast, the next sentence has the complex preposition with the singular noun **ṭɔɽəkɪ́t**.

m-p-ɔká.t   **ɪ-ṭɔɽəkɪt**   **ṭ-ɔ́-ʊl**
1-C-be:COMPL   in-space_in_between   C-of-people

I was between the people

A special case of a complex preposition is **ṭɔɽəṭán** 'behind, beyond' which probably contains the absolute preposition **ṭán** 'at' as a formative. **ṭɔɽəṭán** is unusual as a complex preposition because it immediately precedes the noun, without a connexive:

ɔrʊkɪ   **ṭɔɽəṭan**   **páa**
hide:IMP   behind   vine

hide behind the vine!

16.5. ń- 'with, by, (away) from'

ń- 'with, by, (away) from' can mark the instrumental role of the noun, the comitative role, and the agent role in a passive construction. In combination with the verb 'be' it can express 'have'. With locative constituents ń- functions as an ablative marker, expressing 'from, away from'.

Examples of ń- marking the instrumental role of the noun:

m-p-a.ccíɛ	**ṭ̣ık**	**ŋ-kʊrʊ́tta**
1-C-ignite:INCOMPL	fire	with-rubbing_stick

I will make a fire with a rubbing stick

ɔ-paṭṭı	**p-ɔkkʊttáṭ.ɛ**	**ŋ-kəɽ̣ittăŋ**
PERS-person	C-be_killed:COMPL	with-knife

the person was killed with a knife

Examples of ń- marking the comitative role of the noun:

k-kw-áa.t	**m-púl**	**p-ɛn**
3-C-come:COMPL	with-person	C-DEM

s/he has come with that person (i.e. the person that we talked about)

… a-n-ɔ́ıŋkat	**l-lị̣cɔk**	**cık-ıpəríaŋ**
CONJ-1-go:DEPPRFV	with-goats	LOC-ıpərıaŋ

… and I went with the goats to ıpərıaŋ

k-kw-áa.t	**m-máṭṭák**	**m-ɛ́n**
3-C-come:COMPL	with-calabash(k.o.)	C-POSS3A

s/he has arrived with their plates

Example of 'be' + ń- expressing 'have':

ń- cannot be attached to a (pro)noun with the persona prefix (ɔ́-). Such (pro)nouns in a comitative role need an entirely different construction, which makes no use of a prepositional element (see chapter 6.7).

ɲ́- marking the agent role in a passive construction

ɲ́- can mark non-animate and animate agents in passive constructions:

ɔ-paṭṭɪ	**p-ɔkkʊttáṭ.ɛ**	**n-ṭʊ́lléɾák**	**tɔ́.pôn**
PERS-person	C-be_killed:COMPL	with-thunder_and_lightening	at_farming_field

the person was killed by lightening in the farming field

ɔ-paṭṭɪ	**p-ɔkkʊttáṭ.ɛ**	**n-ṭʊ̆k**
PERS-person	C-be_killed:COMPL	with-dog

the person was killed by a dog

k-kw-ɔ́kkʊttáṭ.ɛ	**ɲ-cʊṭṭô**
3-C-be_killed:COMPL	with-Arab_person

s/he was killed by the Arab

Agents in a passive construction that have the persona prefix (**ɔ́-**) use a construction with the absolute counterpart of **ɲ́-**, **ŋŋɪn**. Examples are provided in 14.4 and 16.6.

ɲ́- as ablative '(away) from'

ɲ́- preceding a locative phrase takes up ablative meaning. **ɲ́-** can precede one of the locative prepositional proclitics, giving the following forms. As mentioned earlier in this chapter, the formative **tɪ** in **ntɪ ɪ-** is possibly an older form of the PPC **ɪ-**.

ntɪ ɪ-	(< **ɲ́-** + **ɪ-**)
n-nɔ-	(< **ɲ́-** + **nɔ-**)
n-tɔ-	(< **ɲ́-** + **tɔ-**)
n-ṭɔ-	(< **ɲ́-** + **ṭɔ-**)

Some examples:

ŋ-kw-a.ná   lɔn   n.tɪ   ɪ-cá
2-C-bring:INCOMPL   words   from   in-head

you will bring words from in your head (i.e. you must come up with an idea)

k-kw-á.kwɔ   lɔ́n   í-l-ɔ́kɪ̠tak   n-nɔ-kâ
3-C-blow:INCOMPL   words   RES-C-bad   with-on-body

s/he will blow the bad things away from the body

ɔll.ʊ   n-t-a-ôn
run:IMP   with-up_on-PERS-1

get away from me! (the suggestion is that the speaker is lying down and the addressee is on top of him/her)

m-p-aa.t   n-t̠ɔ́-mɪɾʊk   p-át̠t̠-ɔ́ŋáɛ̃
1-C-come:COMPL   with_at-bush   C-ITVEN:COMPL-urinate:DEPINCOMPL

I come from the bush, having gone to urinate

ntɪ ɪ- can be used in a superlative expression:

t̠ʊpəɾʊ   t̠-ɔ́-t̠ɔcʊrák   t̠-ûkwɪ́t   n.tɪ   ɪ-lʊpəɾʊ   áppɪk   tɔrrô
valley   C-of-T̠ɔcʊrâk   C-long   from   in-valleys   all   Lumun_country

the valley of T̠ɔcʊrâk is the deepest of all valleys in the Lumun area

ń- can also precede complex prepositions. Some examples:

n.tɪ ɪ-ccík kɔ-   from near
n-nɔ-kʊt̠ʊ́t kɔ-   from at the edge of, at the side of
n-tɔ-kɪ̠t kɔ̂-   from before, in front of
n-t̠ɔ-cəkén cɔ-   from behind, under

ɔll.ʊ   n.tɪ   ɪ-ccík   k-ʊ́ŋ
run:IMP   from   in-place   C-POSS3

get away from him/her! (the addressee is near the person, not on him/her)

Words that inherently denote a place, such as the question word 'where', place deictics and place names can be directly preceded by ablative **ń-**, as can the noun **cĭk** 'place(s)':

ŋ-kw-aa.t   **ŋ-kárəṭa**
2-C-come:COMPL   with-where

m-p-aa.t   **ŋ-kárəṭṭôm**
1-C-come:COMPL   with-Khartoum

where have you come from? I have come from Khartoum

ɲ-cínâŋ
with-there_where_you_are

from there, *also:* from then onwards

ana   **w-íɔt**   **ʋl**   **ɲ-cɪk**   **áppɪk**
and   PRO.C-find:INCOMPL   people   with-place   all

and they (the people) will find people from everywhere (lit. from all places)

cík- as pro-clitic pragmatic marker of a locative phrase (see chapter 15.3) can also be preceded by **ń-**:

m-p-aa.t   **ɲ-cɪk-kéccôk**
1-C-come:COMPL   with-LOC-market

I come from the very market

m-p-ɪcáṭ.ɛ   **mɛccɪn**   **ɲ-cɪk-ɪ-ciŋkĵ**
1-C-lie_down:COMPL   yesterday   with-LOC-in-sun

I slept early yesterday (lit.: I slept yesterday from in the sun (but not necessarily when it was still light))

ń- is furthermore a formative of the lexical item **ɲcɪk** which tonally differs from a combination of **ń-** + **cĭk** (or **ń-** + **cɪk**), because **ɲ**, as the initial mora of this low-toned item, can receive a high tone from a preceding element. **ń-** as a PPC is not able to receive a high tone from a preceding element. Some examples with **ɲcɪk** can be found in 15.4.

16.6. Absolute prepositions

All PPCs have absolute counterparts, which I call absolute prepositions. This is the list:

ɪ-	> **tít**	'in'
nɔ-	> **nán**	'on, at'
tɔ-	> **tán**	'up there' ('up on, up at')
ṭɔ-	> **ṭán**	'there'
ń-	> **ŋŋɪn**	'with, by'

ŋŋɪn is a tonally irregular item. In isolation it is realized as an element with a rising tone (i.e. without downglide), but in context initial **ŋ** sometimes receives a high tone from a preceding element, which is not compatible with a rising tone. **ŋŋɪn** seems to fluctuate between an element with rising tone and with low tone. I therefore represent it without tones.

The absolute prepositions all have a formative relating to the corresponding PPC. **nán**, **tán** and **ṭán** contain a same formative **an** or probably rather **n,** which may well be the same element as occurs in the absolute connexive C-**ên** 'of'. **ŋŋɪn** contains the formative **ŋɪn** 'what', which is also part of the question word **ŋín-ṭa** 'what' and the related words **akkaîn/akaîn**, **akkaínṭa/akaínṭa** 'why' (lit. 'that what', see 20.1.2).

The absolute prepositions do not include pronominal reference to their complement, which appears from their ability to co-occur with their complement in the same clause. Constructions where this happens are presented in 16.6.1.

There are, however, also situations in which the absolute prepositions can be translated as preposition and pronoun with non-human reference ('in it', 'on it', etc.). This is not surprising since, in Lumun, non-humans other than subjects cannot be pronominally referenced. In such cases the absolute preposition relates to PPC + non-human noun in the same way as PPC + pronoun to a human noun.

16.6.1. Syntactic constructions involving the absolute prepositions

Verbs with prepositional phrase

Some verbs must be used together with a prepositional phrase (either a phrase with ɪ- or a phrase with nɔ-). In the absence of such a constituent an absolute preposition is used. Examples follow here with **ɔcúrɔt** (**tít**) 'meet sb.' (which must be combined with a prepositional phrase when the subject has singular reference, see chapter 14.5) and **ɔ̱ṱ̱ɛ nán** 'leave behind'.

ŋkɔ   á-ṱ-ɔcúrɔt   ɪ-a-nnân
go:IMP   SUBJ-(2-)IT:DEPINCOMPL-meet:DEPINCOMPL   in-PERS-mother

go to meet the mother!

ŋkɔ   á-ṱ-ɔcúrɔt   ɪ-a-âk
go:IMP   SUBJ-(2-)IT:DEPINCOMPL-meet:DEPINCOMPL   in-PERS-3

go to meet her!

ŋkɔ   á-ṱ-ɔcúrɔt   ɪ-lïcɔ́k
go:IMP   SUBJ-(2-)IT:DEPINCOMPL-meet:DEPINCOMPL   in-goats

go to meet the goats!

ŋkɔ   á-ṱ-ɔcúrɔt   tít
go:IMP   SUBJ-(2-)IT:DEPINCOMPL-meet:DEPINCOMPL   in:ABS

go and meet them (i.e. the goats, cannot refer to people)

*ŋkɔ   á-ṱ-ɔcúrɔt
go:IMP   SUBJ-(2-)IT:DEPINCOMPL-meet:DEPINCOMPL

ɔ̱ṱ̱ɛ   n-a-kʊkkɔ̂
leave:IMP   on-PERS-Kʊkkʊ

leave Kʊkkʊ behind!

ɔ̱ṱ̱ɛ   n-a-âk
leave:IMP   on-PERS-3

leave him/her behind!

ɔ̱ṱ̱ɛ   nɔ-ṱŭk
leave:IMP   on-dog

leave the dog behind!

ɔt̪t̪ɛ   **nán**
leave:IMP   on:ABS

leave it behind! (i.e. the dog, or other things or animals, but not people)

*ɔt̪t̪ɛ
leave:IMP

ɔt̪ɔt tít 'answer (to it)' is a verb that is commonly used with absolute preposition, since what is answered (the question) is typically stated, in one way or another, in the preceding discourse. For example:

ámmá   ḿ-p-ípíttɔ́t̪.έ nɔ́n   lɔ́n   ɔ-nɔn   t̪-ănn-ɔt̪ínt̪-ɪn   tít
if   1-C-ask:COMPL   O2A   words   PERS-2A   C-NEG-answer:DEPINCOMPL-O1   in:ABS

when I ask you something, you will not answer me

ɔpə́rəttakɔt tít 'be surprised, be amazed' (related to **ɔpə́rəttakɔ** 'turn oneself') cannot occur without **tít**, at least not without acquiring a different meaning. **tít** cannot be replaced by **ɪ-** + noun (phrase). If what people are surprised or amazed about is present in the clause, this constituent is marked by **nɔ-**:

ɔ́k.kw.í-ɔ́n   í-t̪-ɔ́ccíkɔ́t̪-ɔk   t̪-ɔká.t   cɪk
the_one-PL   RES-C-hear:COMPL-O3   C-be:COMPL   VREF

a-kín   ɔpə́rəttakɔt   tɪt   nɔ́-t̪-ɪna   cɪk   t̪-ύŋ
CONJ.PERS-3A   turn_oneself:DEPINCOMPL   in:ABS   on-NOM-know   VREF   C-POSS3

those who heard him were amazed at his wisdom (Luke 2:47)

Non-human complements

A non-human complement of a PPC is not pronominally expressed. In such cases an absolute preposition is used. Examples:

… a-kín   ɪll.at   ɪ-kəpa   a-kín   ɔ́nə́kkɛ.kat nɔ́-t̪ɪk
CONJ.PERS-3A   divide_in_two:DEPPRFV in-meat   CONJ.PERS-3A   put:DEPPRFV   on-fire

kʊrɛk-kʊrɛk   m-marrʊ   tít
each-REDUP   with-kidneys   in:ABS

… they divided the meat in two and they each put (his part of the meat) on the fire, with the kidneys in (it) (fr. written story)

… a-kín	**ɔ́nέk.at**	**túṭṭə̣rúk**	**á-kín**	**ɔ́íŋkat**	**ŋ.ŋɪn**	**cɪṭ.ṭán**
CONJ.PERS-3A	take:DEPPRFV	pig	CONJ.PERS-3A	go:DEPPRFV	with:ABS	far

… and they took the pig and they went far away with (it) (fr. written story)

The understood complement can be an afore-mentioned noun with non-human reference, but also a whole clause, as in the next case:

ana	**ṭúʋlɪ**	**ṭ-ɔmmá.t**	**nán**
and	hyena	C-not_know:COMPL	on:ABS

and the hyena was not aware of (it) (i.e. of the lamb being near the opening in the fence)

tɔ 'up at' and **ṭɔ** 'at' always refer to a place. Their absolute counterparts (**tán** and **ṭán**) function as locative adverbs, '(up) there' and 'there' respectively. Compare:

n-ṭ-ɔká.t	**tɔrəmaṭɔ́n-ɪ**
2A-C-be:COMPL	Tɔrəmaṭɔ̂n-Q

ɪn-ṭ-ɔká.t	**tán**	**máí**
1A-C-be:COMPL	up_on:ABS	a_short_while_ago

have you been in Tɔrəmaṭɔ̂n? we have just been there some hours ago

n-ṭ-ɔká.t	**ṭɔ-kakká-n-ɪ**
2A-C-be:COMPL	at.PERS-Kakka-PL-Q

ɪn-ṭ-ɔká.t	**ṭán**	**máí**
1A-C-be:COMPL	at:ABS	a_short_while_ago

have you been at Kakka's place? we have just been there some hours ago

n-ɔkkwɛ	**ɪ-attâl**
2A-beat:DEPINCOMPL	in-palms_of_hands

n-ɔpákkɔt	**ṭán**
2A-return:DEPINCOMPL	at:ABS

clap your hands! do it again! (lit.: go back there!)

Absolute prepositions are further used in grammatical constructions in which PPC and noun are separated. This is the case in passive constructions with subjects that, in a corresponding active

construction, are marked with a PPC. It is also found in constructions in which a prepositional phrase is relativized.

Absolute prepositions in passive constructions

In the first example below, with the passive verb **ʊrɛtta** 'be forgotten', the complement ('these things') of **nɔ** 'on, at' is present in the clause but, as the subject, stands before the verb. Functioning as subject, it cannot be marked by **nɔ**-. The verb, however, still requires the prepositional phrase, which is realized as **nán**. A corresponding active sentence is given in the second example.

lɔn	**ɛl-l-ɪ**	**l-a.ka**	**l-ʊrɛtta**	**nán**
words	DEM-C-NEARSP	C-be:INCOMPL	C-be_forgotten:INCOMPL	on:ABS

these things will be forgotten

ʊl	**w-ʊrɛ**	**nɔ-lɔn**	**él-l-í**
people	C-forget:INCOMPL	on-words	DEM-C-NEARSP

the people will forget these things

The next example has **wɔk** 'shoes' in instrument role, first as subject in a passive construction with **ŋŋɪn**, then in a corresponding active sentence. Some further examples of this construction can be found in chapter 14.4 on Passives.

wɔk	**ɛn-n-ɪ**	**w-a.llʊra**	**ŋ.ŋɪn**
shoes	DEM-C-NEARSP	C-be_run:INCOMPL	with:ABS

these shoes are for running (lit.: these shoes are run with)

ʊl	**w-a.llɔ**	**n-nɔk**	**én-n-í**
people	C-run:INCOMPL	with-shoes	DEM-C-NEARSP

people run with these shoes (people use these shoes for running), *also*:
people will run away with these shoes (a warning that they will steal them)

It was shown earlier in this chapter that **ń-** can mark common nouns with agent role in passive constructions. Agents, however, with the persona prefix, i.e. kinship terms, personal names and personal

pronouns, need a construction with **ŋŋɪn**. In such constructions the agent (pro)noun comes after the verb and is then followed by **ŋŋɪn**.

k-kw-ɔ́kkʊttát̪.ɛ	**ɔ-kʊkkʊ́**	**ŋ.ŋɪn**
3-C-be_killed:COMPL	PERS-Kʊkkʊ	with:ABS

s/he was killed by Kʊkkʊ

k-kw-ɔ́kkʊttát̪-ɔk	**ŋ.ŋɪn**
3-C-be_killed:COMPL-O3	with:ABS

s/he was killed by him / her

ŋŋɪn does not always follow the agent immediately:

mɛ́n	**m-á.ík**	**m-á.cʊ́rat̪-ɔ́k**	**nɔ-kwɛɾɛ**	**ŋ́.ŋɪn**
palm_fruits	C-be:PR	C-be_impaled_at:INCOMPL-O3	on-pointed_stick	with:ABS

the palm fruits are being impaled on a stick by him/her

Human agents lacking the persona prefix allow for both the construction with **ń-** and the construction with **ŋŋɪn**:

k-kw-ɔ́kkʊttát̪.ɛ	**ɲ-cʊt̪t̪ô**
3-C-be_killed:COMPL	with-Arab_person

s/he was killed by the Arab

k-kw-ɔ́kkʊttát̪.ɛ	**cʊt̪t̪ʊ́**	**ŋ.ŋɪn**
3-C-be_killed:COMPL	Arab_person	with:ABS

s/he was killed by the Arab

A comparable construction with an instrument after the verb followed by **ŋŋɪn** was initially rejected, but on a later occasion considered possible, though not preferred. The construction in the second example, with **ń-**, is the common expression.

***/?k-kw-ɔ́kkʊttát̪.ɛ**	**kəɾittaŋ**	**k-ɔ́-kʊkkʊ́**	**ŋ.ŋɪn**
3-C-be_killed:COMPL	knife	C-of.PERS-Kʊkkʊ	with:ABS

s/he was killed with Kʊkkʊ's knife

k-kw-ɔ́kkʊttáṭ.ɛ   **ŋ-kəɽɪ̣ttaŋ**   **k-ɔ́-kʊkkô**
3-C-be_killed:COMPL   with-knife   C-of.PERS-Kʊkkʊ

s/he was killed with Kʊkkʊ's knife

Absolute prepositions in reciprocal constructions

Reciprocal formation is another operation that can lead to the use of an absolute preposition, since reciprocals can be based on verbs that realize the other participant in the event in a prepositional phrase. Compare the following clauses:

ámmá   **ḿ-p-ápɔ́.t**   **ná-áṭərəpɛ́ ...**
if   1-C-grab:INCOMPL   on-rabbit

when I grab the rabbit ...

ámmá **ɔ́-nɪ́n** **ṭ-áp.árɔ́.t**   **nán** **ɔ́-nɪ́n** **áṭə́rə́pɛ́ ...**
if PERS-1A C-grab.REC1:INCOMPL on:ABS PERS-1A PERS.rabbit

when the rabbit and I grab each other ... (when we grab each other, I and the rabbit ...)

Some further examples were given in chapter 14.5 (on Reciprocals).

Relativized prepositional phrases

An absolute preposition is used in relativized prepositional phrases, irrespective of whether the head is human or not:

ɔ-kʊkkʊ́   **í-k-á**   **m-p-ɔ́cʊ́rɔ́ṭ.ɛ́**   **tɪ́t**
PERS-Kʊkkʊ   RES-C-COP   1-C-meet:COMPL   in:ABS

Kʊkkʊ, whom I met with in the way, …

caɽɪ   **ɪ-c-a**   **k-kw-á.ṭ-ʊnɔ**   **nán**
day   RES-C-COP   3-C-IT:INCOMPL-build:DEPINCOMPL   on:ABS

the day on which he will go and build

aɽəpʊ   **ɪ-ʊ́nta**   **ŋ.ŋɪn**
things   RES-(C-)be_built:INCOMPL   with:ABS

building materials (lit.: things which are built with)

The question word 'where' and place names, which can be used in combination with **ń-**, are relativized with **ná** 'where' (11.3). Thus:

k-kw-ákənn-ɪɽɛ　　**na**　　**k-kw-áa.t**　　**ŋ́.ŋɪn**
3-C-NEG-say:DEPCOMPL　　where:REL　　3-C-come:COMPL　　with:ABS

s/he did not say where s/he came from

tɔʊmáŋ　　**na**　　**k-kw-áa.t**　　**ŋ́.ŋɪn**
Tɔʊmâŋ　　where:REL　　3-C-come:COMPL　　with:ABS

Tɔʊmâŋ, where s/he came from

In constructions with a location as subject and 'have'

Preposition and noun are also separated in constructions with C-**ɔnû** 'have' in a locative interpretation. The prepositional phrase cannot function as subject, so that the PPC occurs in its absolute form. Compare the first with locative 'be' and a locative phrase with the second example:

cɛt̪ə́na　　**c-ɔ-t̪ərɔ́ma**　　**c-a.ɪk**　　**nɔ-kurrɔ̂ŋ**
ornamental_tail　　C-of-ram　　C-be:PR　　on-stick

the ram's tail is on the stick

kurrɔ́ŋ　　**k-ɔnʊ́**　　**cɛt̪ə́na**　　**c-ɔ-t̪ərɔ́ma**　　**nán**
stick　　C-have　　ornamental_tail　　C-of-ram　　on:ABS

the stick has a ram's tail on it

Two absolute prepositions figure in the next sentence. The complement of **t̪ɔ** (realized as **t̪án**) is the place name **t̪aɽʊ,** which functions as the subject of a clause with 'have'. The complement of **ń-** (realized as **ŋŋɪn**) are the three big roads:

t̪áɽʊ́　　**t̪-ɔ́nʊ́**　　**at̪ər**　　**w-əɽapʊ́rʊk**　　**ɪ-íttí~íttík**
Ṭaɽʊ　　C-have　　roads　　C-three　　RES-(C-)PLR~(C-)big

ɪ-ít̪ɪkakɔ　　　　**ŋ.ŋɪn**　　**t̪án**
RES(-C)-be_entered:INCOMPL　　with:ABS　　at:ABS

Ṭaɽʊ has three big roads for entering it (with which it can be entered into)

16.6.2. Absolute prepositions preceded by **ń**-

The absolute prepositions can be preceded by **ń**-:

n-tít   'from, out of'
n-nán   'away from'
n-tán   'away from up', 'fully', 'towards the deictic centre'
n-ṭán   'away from'

Some examples:

ɛṭ-ɪn	**aún**	**cəné**	**á-n-ɔṭɔ́**	**ŋərɛ**	**n.tít**
give:IMP-O1	bees	here	SUBJ-1-pull:DEPINCOMPL	honey	from:ABS

Give me the honeycombs here, so that I suck the honey out of them (App. IV, 90)

m-p-aá.t	**n.tít**
1-C-come:COMPL	from:ABS

I have just now arrived

appɛnṭíná	**w-árɔ́ṭâ**
groundnuts	C-where

ɔ-cɛccé	**p-á.ík**	**p-á.cárɔ**	**árɔl**	**n-nán**
PERS-Cɛccɛ	C-be:PR	C-peel:INCOMPL	shells	with-on:ABS

where are the groundnuts? Cɛccɛ is peeling them (lit.: peeling the shells from on)

ʋl	**w-a.nɔ́kɔ**	**árəpú**	**á-kín**	**ɔ́kéttɛ**
people	C-take:INCOMPL	things	SUBJ.PERS-3A	trade.PLUR:DEPINCOMPL

á-kín	**rɔt**	**âkúccị**	**n-nán**
SUBJ.PERS-3A	find:DEPINCOMPL	money	with-on:ABS

the people carry things in order to sell them, so that they make money from them

pʋrʋpé	**p-ɔká.t**	**tɔ-pɪrá**
bird	C-be:COMPL	up_on-tree

mə́ná	**á-p-íṛr.at**	**n-tán**
until	CONJ-C-jump:DEPPRFV	with-up_on:ABS

the bird was in the tree top, then it flew away from there

n-tán does not always have an ablative interpretation. It can express 'fully', 'to the bottom', as in the following sentence:

įkk.į   **n-tán**
drink:IMP   with-up_on:ABS

drink it all! (i.e. drink it to the bottom, finish it!)

It can also express rather the opposite from ablative meaning: 'towards, facing the deictic centre', as in the following example. Note that unlike in the second example, the Locative-applicative derivation is not used:

ɔll.ʊ   **n-tán**
run:IMP   with-up_on:ABS

run to me/here!

ɔllɔt̪.ɛ   **n-a-ôn**
run_at:IMP   on-PERS-1

run to me!

In the following sentence, **ntán** expresses 'towards the deictic centre'. It is as if the storyteller positions himself up in the tree, so that the tortoise climbed towards him:

akka   **k-kw-ɔ́kʊɾɔt̪.ɛ́**   **n-tán**   **a-kəɾɔ́l**   **ɔ́t̪-íat**
that   3-C-move_up:COMPL   with-up_on:ABS CONJ-tortoise IT:DEPINCOMPL-find:DEPPRFV

ɪttɪ   **mɛ́n**   **m-ɛllâ**
that   palm_fruits   C-be_absent:INCOMPL

when he_i had climbed up, the tortoise_i found there were no palm fruits (anymore) (App. IV, 118-119)

ntán in the sense of 'towards the deictic centre' has become a fixed part of the irregular Dependent Incompletive and Incompletive variants of the verb **aɔ** 'come', respectively **ânt̪án** and C-**ânt̪án**.

16.7. Attachment of **ń**- to an argument that is not its complement

Interestingly, in certain constructions **ń**- 'with, by, (away) from', can be attached to a noun that is not its complement. This happens when the complement is dislocated and an object argument follows the verb. **ń**- can attach to this object argument. In the first example below the complement is dislocated as the head of a relative clause, in the second as subject of a passive clause, and in the third as the head of a predicative adjectival phrase with a passive verb.

lɔn	**ɪ-l-a-kín**	**ɔ́cɔ́kkɪɛ**	**ɲ-ɲókʊ́l**
words	RES-C-COP.PERS-3A	make_grow:DEPINCOMPL	with-children

pápénnaŋ	**ɪttɪ̆ …**
well	that

things with which they bring up the children in a good way are …

kəṛɪttaŋ	**éŋ-k-í**	**k-ɔ́-ṭ-ɔkɛccɛtta**	**n-ṭûn**
knife	DEM-C-NEARSP	C-of-NOM-be_cut	with-onion

this knife is for cutting onions (lit.: this knife is of being cut with onions)

kəṛɪttaŋ	**é.ŋk.í**	**k-á.kéccɛtta**	**n-ṭûn**
knife	DEM-C-NEARSP	C-be_cut:INCOMPL	with-onion

this knife is for cutting onions / this knife is for onions to be cut with. (lit.: this knife will be cut with onions)

The construction is also possible when the instrument is the object of the preceding clause:

pʊl	**p-ʊ́mmɔ**	**kʊrɪ̆n**
person	C-take:INCOMPL	awl

á-kw-ɔkʊrrɔ	**ɲ-cakkɔ́ŋ**	**lɔ́n**	**l-ɔ́pə́ṭṭəré**
SUBJ-3-engrave:DEPINCOMPL	with-calabash(k.o.)	words	C-very_good

the person takes an awl, in order to engrave the calabash with it very nicely (App. III, 4-5)

Alternatively, constructions with **ŋŋɪn** are possible:

lɔn	**ɪ-l-a-kín**	**ɔ́cɔ́kkɪɛ**	**ɲókúl**
words	RES-C-COP.PERS-3A	make_grow:DEPINCOMPL	children

pápénnaŋ	**ŋ.ŋɪn**	**ɪttĭ …**
well	with:ABS	that

things with which they bring up the children well are …

kəṛịttaŋ	**éŋ-k-í**	**k-á.kéccɛtta**	**ṭún**	**ŋ.ŋɪn**
knife	DEM-C-NEARSP	C-be_cut:INCOMPL	onion	with:ABS

this knife is for cutting onions / this knife is for onions to be cut with (lit.: this knife will be cut with onions)

The same type of construction is not possible with any of the other absolute prepositions. The first sentence, with **tít**, is fine, the second was rejected.

pərɪt	**p-íttat**	**mị́l**	**tít**
granary	C-be_put:INCOMPL	sorghum	in:ABS

the granary is for storing sorghum (lit.: the granary is stored sorghum in)

*pərɪt	**p-íttat**	**ɪ-mị́l**
granary	C-be_put:INCOMPL	in-sorghum

the granary is for storing sorghum (lit.: the granary is stored sorghum in)

When the arguments are reversed, a grammatical sentence results:

mị́l	**m-íttat**	**ɪ-ttĭt**
sorghum	C-be_put:INCOMPL	in-granary

the sorghum is put in the granary

17. Adverbs, discourse markers and interjections

In this chapter I list adverbs and adverbial expressions of time and place, manner adverbs and adverbs with miscellaneous semantics, and discuss their morphological structure. I also present enclitic discourse markers and a few interjections.

17.1. Adverbs

Morphology

Adverbs can be morphologically simple or complex. Typical adverbial morphology consists of an initial vowel **ɪ** or **a** followed by a geminated consonant: **ɪ**CC, **a**CC. In some cases an adverb and an adjective are formed on the basis of the same root, for example:

ɪk-kíṭak 'badly'	C-**ɔkíṭak** 'bad'
ɪṭ-ṭíɔt 'tastily, with flavour'	C-**ɔṭɪɔ́t** 'tasty'

The shared root of these items is preceded in the adjective by a concord and the vowel **ɔ**, while in the adverb the root-initial consonant is geminated and preceded by **ɪ**. Note in the second case that the H-tone on the root part has changed position. Another example is the adverb **ɪppáppat** 'lightly, easily', which relates in the same way to the Completive verb C-**ɔpappât** (< **ɔpáppa** 'be(come) light'). C-**ɔpappât** can be used as a modifier 'light, easy'.

In other cases there is no root or stem that is attested elsewhere as well. **a** + gemination of the first consonant is probably a formative of **accʊŋkʊ̌r** 'straight ahead', but ***cʊŋkʊ̌r** does not exist as a word on its own or as a formative of another word. Some further examples which do not contain a root or stem that occurs elsewhere as well include:

ɪppʊ, **-ppʊ**	'really, seriously (intensifying)'
aŋŋəna	'very, very much'
aɲɲərɪŋ	'completely'

Another morphological feature found in adverbs is reduplication. Adverbs with full reduplication sometimes have an inserted schwa followed by a geminated consonant, in order to retain the same sound, for example **təŋ-əttə́ŋ** 'tightly'.

A case of partial reduplication and gemination is **ŋɔɽɔ́llɔt** 'the day after tomorrow'. Recall that **ɽ** does not geminate as **ɽɽ** but, often, as **ll** (see examples in 13.1). Recall also that the process of partial reduplication and gemination was also found in Pluractional verbs (see 13.1) and in adjectives (see 10.2.7). An example of partial reduplication and gemination in a related adverb and adjective is **ɪk-kíṭeṭṭak** 'very badly' vs. C-**ɔkíṭeṭṭak** 'very bad'.

In two cases of adverbs that are related through reduplication, the unreduplicated form contains an adverbial formative comparable to **ɪ** + geminated consonant, namely **a** + geminated consonant:

aṭ-ṭəman 'quickly'   **ṭəman-ṭəman** 'quickly'
ac-cəkɔt 'quickly'   **cɔkɔc-cɔkɔt** 'quickly'

The tones of an adverb with (partial) reduplication can be different from what is expected on the basis of the composing parts, and in some cases of (partial) reduplication a non-reduplicated form is lacking.

(Partial) reduplication in adverbs can express:

- intensification (**ɪnâ** 'now', **ɪná-ínâ** 'just now')
- repetition (**cɪŋkɪ̰-cɪŋkɪ̰** 'every day', lit.: 'sun-sun')
- duration (**nɔcɪ̰ŋkɪ́-nɔ́cɪ́ŋkɪ̰̂** 'the whole day' (lit. 'on sun-on sun)

Nouns or noun phrases preceded by a prepositional proclitic (PPC), as well as the absolute prepositions, can function adverbially. Some nouns can function adverbially without PPC, and some can function adverbially with as well as without PPC. In some cases, what is historically —probably— a PPC has become a fixed part of the adverb.

17.1.1. Adverbs and adverbial expressions of time

Deictic time adverbs and adverbial expressions include the following:

ɪnâ	'now'
ɪná-ínâ	'just now' (REDUP)
ɪn-ɛnní	'today, now' (probably < **ɪnâ** 'now' + **ɛnní** 'this')
ácca	'now' (< Sudanese Arabic *hassaʿ*)
mɛccín	'yesterday'
mamân	'this morning'
məlɛ-məla	'just a moment ago' (REDUP)
maí	'just recently'
mɛɲcên	'some time ago'
maɽɔt	'a long time ago'
ŋɔrrɔt	'tomorrow, the next morning'
ŋɔɽ-ɔ́ll-ɔt	'the day after tomorrow' (P.REDUP + G)
mɛccɪn ŋɔ́rrɔt	'yesterday morning'

Some further time adverbials:

pa-p-ɔtté-ík / pa-p-ɔʈʈé-ík	during a short time, after a while (< **papʊ pɔtté cɪk / papʊ pɔʈʈé cɪk** lit.: thing short)
kəppák	during a short time
púccʊk	(continuing) for some time

púccʊk is often used in combination with **mɔnɔ** expressing 'until', as in the following example:

a-kw-ɔ́ʈəkka.kat	**ménɪk**	**púccók**	**mɔ́nɔ́**
CONJ-3-become:DEPPRFV	like_this	for_some_time	until

a-kw-ɔ́ʈəkka.kat	**p-ɪnakɔ́.t**	**ŋ-ŋɔ́rɛ**	**pəɽɪn**
CONJ-3-become:DEPPRFV	C-be_known:COMPL	with-laziness	finally

he became like this continuing for some time (i.e. Aməntacɪ continued to be like this for some time) until he finally became known for his laziness (App. 1, 30-31)

Time adverbials can be formed with the nouns **caṛí** 'day' and **ṭʊpʊt** 'year', as well as with nouns for parts of the day. These nouns can be modified by a demonstrative or a connexive construction. In some cases a PPC must be used, in others a PPC is optional, in again others the noun lacks a PPC when used adverbially. Examples:

(nɔ-)caṛɪ cɔ́-mɛccín	'the day before yesterday (lit.: (on) the day of yesterday)'
(nɔ-)caṛɪ cên	'that time, that day'
ṭʊpʊt ɛnṭí / nɔ-ṭʊpʊ́t ɛnṭí	'this year'
(nɔ-)cɪpín	'in the evening, in the afternoon '
(nɔ-)cɪpɪn ɛɲcí	'this evening, this afternoon'
ŋŋíṛɪmak	'before daybreak: from ca. 4.00h till dawn (lit.: with darkness)'
ŋkɔṛâ	'in the night'
ŋkɔṛá éŋŋí	'tonight, this night'

ŋŋíṛɪmak consists **ń-** 'with, by, (away) from' and the noun **ŋɪṛɪmak** 'darkness'. **ŋkɔṛâ** '(in the) night' is most probably historically made up of the preposition **n-** and a noun ***kɔṛâ** (which is also recognizable in **nɔkəṛɔ́kkə́ṛâ** 'the whole night'), but this noun is synchronically not attested.

The year is divided into four seasons. On two seasons a PPC is optional (**ṭɔ-** resp. **nɔ-**), on one **ɪ-** must be used, while the fourth is used without a PPC:

Table 103 Seasons

kərrən / ṭɔ-kərrên	(in) the beginning of the wet season (ca. end of April-June)
cʊkkʊ / nɔ-cʊkkô	(in) the height and end of the wet season (ca. July-beginning of October)
ɪ-cəpɔ̂	(in) the first part of the dry season (ca. end of October-January)
pəṛú	(in) the last part of the dry season (ca. February-April)

A few reduplicated adverbs were already listed above. Some others follow here. **nɔ-** 'on, at' is a formative of **nɔ-kkɔ́-nɔ́-kkî** and **nɔ-kəɽɔ́-kkə́ɽâ**, but no synchronically attested noun is recognized in these words.

nɔ-kkɔ́-nɔ́-kkî	'in the daytime, during the day, the whole day'
nɔ-cįŋkɪ́ nɔ́-cįŋkî̧	'the whole day (lit.: at sun-at sun)'
nɔ-kəɽɔ́-kkə́ɽâ	'in the night, during the night, the whole night'
nɔ-cʊkkʊ́ nɔ-cʊkkô	'during the whole wet season'
nɔ-uɽu nɔ́-uɽú	'during the whole dry season'

ɛppɪn-ɛppɪn /appɪn-appɪn	'always, every day'
kɪt̪ɪ-kɪt̪í	'every moment, all the time'

Clock-time is expressed with **nɔ-cįŋkî̧** 'on sun' and a numeral. The period of the day can be added:

nɔ-cįŋkɪ́   c-əɽapʊ́rʊk   cɪpín
on-sun   C-three   afternoon

at three o'clock in the afternoon

17.1.2. Adverbs and adverbial expressions of place

All locative adverbs can be preceded by the locative proclitic **cík-** 'just, precisely' (see 15.3). Deictic adverbs relating to the location of the speaker are the following:

Table 104 Deictic adverbs

cəné	here, at a place near the speaker
cənékɛt, cə́nɛkɛt	there, at a place not far from the speaker, within sight
t̪ént̪ɪtɛ	over there, at a place at some distance from the speaker. Typically out of (clear) sight, but not really far.
téntərɛ	over there, at a place away from the speaker (but still belonging to a larger space to which the speaker belongs as well). Often not in sight.

téntərɛ is possibly related to the demonstrative **ɛn-c-ər̂ɛ** 'away from speaker and addressee'.

The deictic adverbs can express location as well as direction, and can be used gesturally as well as anaphorically. Some examples:

m-p-a.ɪk   cəné
1-C-be:PR   here

I am here

ɔ�origɔ̤ṭ.ɛ   kʊrrɛt   cəné
pull_at:IMP   line   here

pull a line up to here!

pəlla   p-a.ɪk   cənékɛt
cat   C-be:PR   there_not_far

the cat is there (in sight, at a little distance from the speaker)

ṭ-ɔŋáɛɔt   cɛ́nɛkɛt   / cənékɛt
IT:IMP-urinate_at:DEPINCOMPL   there_not_far   there_not_far

go and urinate there! (at a place somewhat away from the speaker)

ṭ-ɔ̂ṭʊrakɔt   téntɪṭɛ
IT:IMP-stretch_oneself_at.PLUR:DEPINCOMPL   there_out_of_sight

go and stretch yourself out somewhere else! (not where I am)

ɔ-patṭ-ɔ́n   téntɪṭɛ   ɪ-cáama[11]   ṭ-ɔpərɔ̂t
PERS-person-PL   there_out_of_sight   in-university   C-fine

the people here in the university are fine (in skype conversation Leiden-Khartoum, while the speaker is in Leiden, but not at the university)

nuṭṭəruk n-a.ɪk   téntərɛ
pigs   C-be:PR   there_at_distance

the pigs are over there (at a distance) (fr. written story)

There are also deictic adverbs relating to the place of the addressee:

---

[11] From Sudanese Arabic *jaamʿa* 'university'

cínâŋ   'there where you are (on or near that spot)'

ṭénṭɪaŋ   'there, near the place where you are (but typically out of your (clear) sight)'

cínâŋ and **ṭénṭɪaŋ**, respectively, contain **cəné** and **ṭénṭɪṭɛ** combined with the 2SG possessor morpheme -**ǎŋ**. No such adverbs exist on the basis of **cənékɛt**, **cɔ́nɛkɛt** or **téntərɛ.** Examples:

ŋ-kw-ɔ̌nṭa	**akka**	**a-íkkɔ**	**cɪk**	**cínáŋ**	**ákkʊ́mân**
2-C-why	that	CONJ-(2-)sit:DEPINCOMPL	VREF	there_where_you_are	since

why are you still sitting there (where you are)?

ɪpɪttɪ	**ɔ-paṭṭ-ɔ́n**	**appɪk**	**ṭénṭɪaŋ**
ask:IMP	PERS-person-PL	all	there_near_you

greet all the people there with you (i.e. in different places in your environment)

The deictic adverbs can also be used in relation to third persons, as in the next example:

k-kw-íkkɔ́.t	**ŋə́pák**	**í-ɔ́pʊ́n**
3-C-drink:COMPL	beer	RES-(C-)bitter

á-kw-í.at	**cínáŋ**	**nʊṭʊk**
CONJ-3-die:DEPPRFV	there_where_you_are	for_no_reason

he had drunk strong liquor and then just died there (at that place where he was) for nothing (fr. written essay)

There is no adverb based on **téntərɛ** in combination with the 2SG possessor -**ǎŋ**. A place that is distant from the addressee, but part of his/her larger space, is referred to through **ṭán** 'there' by a speaker whose actual location is not considered part of that larger space. This meaning of **ṭán** is a semantic development from **ṭán** 'at' as the absolute form of the PPC **ṭɔ** 'at'. The following question was asked by JS in Khartoum to the researcher in Leiden when talking about her family in Zwolle:

ɔ-paṭṭ-ɔ́n   **ṭan**   **ṭ-ɔpərɔ́r-ɪ**
PERS-people-PL   there   C-fine-Q

are the people there fine? (the people are nearer to the addressee than to
the speaker, but not in the immediate vicinity of the addressee)

ṭéntərɛ is appropriate in the answer, since for the researcher, Zwolle
belongs to the same space as where she is, but it is at a distance:

ɔ-paṭṭ-ɔ́n   **ṭéntərɛ**   **tʊan**   **ṭ-ɔpərɔ̂t**
PERS-people-PL   far_from_speaker   home   C-fine

the people there in their house are fine

When consultant and researcher are both in Khartoum and talk about
their family in Ṭɔɽî and Zwolle, **ṭán** is used in both cases. Seen from
Khartoum, both places belong to a different space.

ṭán as an adverb referring to a space outside the space of the speaker
is also a formative of **cɪṭṭán** 'far, far away', which further contains
the locative proclitic **cík-** 'just, precisely':

ɔ-kín **ṭ-ákə́nn-ʊ́nɔ**   **cɪṭ.ṭan** **n.tɪ** **ɪ-ccík** **k-ɔ-ṭṭan**   **p-ɔ-kkʊl**
PERS-3A C-NEG-build:DEPINCOMPL far   from   in-place C-of.PERS-father C-of-child

they will build not far from the place of the father of the boy (lit.: they will
not build far from …) (fr. written description)

ṭɔɽəṭán 'behind', which has **ṭán** as a formative, can be used as a
preposition but also as an adverb.

Some further adverbial expressions with place semantics follow here:

nɔppǎn	'inside' (< **nɔ-** 'on, at' + **tʊpan** 'room')
tʊǎn	'at the house, at home' (possibly < **tɔ-** 'up at' + **mǎn** 'room')
ṭəpə́t, **ṭəpʊ́t**	'outside' (possibly contains **ṭɔ-** 'at' as a formative)
ṭɔkkʊn wɔ́kʊ́rê	'on the left side' (lit.: at hand of left side)
ṭɔkkʊn wɔ́ṭarí	'on the right side' (lit.: at hand of right side)

napəṭṭôt, nɔpəṭṭôt   'near' (related to C-**ʊṭṭôt** 'short')
napəṭṭʊ́ṭṭôt, nɔpəṭṭʊ́ṭṭôt 'very near' (related to C-**ʊṭṭʊ́ʊ́ṭṭʊ́t** 'very short')

Some of the preposition-and-noun combinations that form part of a complex preposition (see chapter 16.4) also function as adverbs. As adverbs, they lack the connexive phrase introduced by C-**ɔ** 'of':

nṭɔcəkên   'from behind' (< **ń** 'from' + **ṭɔ** 'at' + **cəkên** 'lower back')
tɔkị́t   'firstly, as the first' (< **tɔ** 'up at' + **kị́t** 'eyes')
cɪttɔ́kị́t   'firstly, at first' (< **cík-** + **tɔ** 'up at' + **kị́t** 'eyes')

17.1.3. Manner adverbs

mɛník 'so, like this/that' is a deictic manner adverb:

ɔkkɔṭ.ɛ   **mêník**
do:IMP   like_this

do it like this!

It can also be used in inquiries after somebody's health or other problems, if the speaker knows there have been certain problems:

k-kw-ícca   **p-a.ɪk**   **mɛnɪk-î**
3-C-still   C-be:PR   like_this-Q

is s/he still in the same state?

k-kw-á.ɪk   **mɛník**
3-C-be:PR   like_this

s/he is still the same / there is no change

The conjunction word **ɪttɪnâ** 'so, like this' (see chapter 18.7) can also function as a deictic manner adverb:

ʊkʊl   **w-a.ɪk**   **w-ápʊkkwɔ**   **ɪttɪná**   **ɛppɪn-ɛppɪn**
child   C-be:PR   C-fall.PLUR:INCOMPL   so   always-REDUP
the child is falling like this all the time

ṭɔ́ma	ŋʊcʊl	ŋ-ɔ-ín-ṭa-ppʊ	ɛ́ŋ-ŋ-í	ŋírrʊ́k	íttínâ
friend	sauce	C-of-what-QW-really	DEM-C-NEARSP	sweet	so

friend, what, really, is this sauce that is so sweet made of? (App. IV, 28)

m-p-ŏn-ṭa	akka	m-p-ɔŋákɔṭ.ɛ	ɪttɪnâ	ɪttĭ ...
1-C-why-QW	that	1-C-be_loved:COMPL	so	that

why am I so loved, that ... ? (Luke 1:43)

Some further manner adverbs include the following, several of which have typical adverbial morphology:

kɪccɛ́	'properly, completely'
kɪccɛ-kɪccɛ́	'carefully, softly, slowly; also: later'
papênnaŋ	'properly' (< **papʊ** 'thing' + **p-ênnaŋ** 'properly sized')
ɪp-pɛ́rəṭṭərɛ́	'very well' (related to C-**ɔpɛ́rəṭṭərɛ́** 'very good')
ɪk-kíṭak	'badly' (related to C-**ɔkíṭak** 'bad')
ɪk-kíṭeṭṭak	'very badly, seriously' (related to C-**ɔkíṭeṭṭak** 'very bad')
ɪp-páppat	'lightly, easily' (related to Completive C-**ɔpappât** 'be light, have become light')

ɪkkíṭeṭṭak 'very badly, seriously' can be used as an intensifier. In the example below it intensifies its cognate adjective:

ɔ-paṭṭɪ	p-ɔkíṭak	ɪkkíṭeṭṭak
PERS-person	C-bad	very_badly

the person is extremely bad

The noun phrases **lɔn lɔpərɔ̂t** lit.: 'words are good', **lɔn lɔpɔ́ṭṭərɛ́** lit.: 'words are very good', **lɔn lɔkíṭak** lit.: 'words are bad' and **lɔn lɔkíṭeṭṭak** lit.: 'words are very bad' can be used adverbially:

m-p-i̧cáṭ.ɛ	lɔn	l-ɔpərɔ̂t
1-C-lie_down:COMPL	words	C-good

I slept well

Yet a few more manner adverbs, several of which (probably) have typical adverbial morphology, as indicated by the segmentation:

aṯ-ṭəman	'quickly'
ṭəman-ṭəman / ṭəmən-ṭəmən	'quickly, hurriedly'
ac-cəkkɔt	'quickly, earlier (than expected)'
cɔkɔc-cɔkɔt	'quickly'
kʊcʊk-kʊcʊk	'quickly'
pərrá	'slowly' (< Sud. Arabic *be-raaḥa*)

ıṯ-ṭíɔt	'sweetly, tastily' (related to C-**ɔṯɪɔ́t** 'sweet, tasty')
ıp-pǎ	'hotly' (related to C-**íppá** 'hot')
təŋ-əttə́ŋ	'tightly' (probably related to **əttə́ŋ** 'again'**)**
kəɽʊŋ-kəɽʊŋ	'seriously, with dedication'
cuŋkut cuŋkut	'groupwise, group by group' (lit.: group group)

17.1.4. Some adverbs with miscellaneous semantics

Intensifying adverbs include the following. Typical adverbial morphology has been indicated by segmentation:

cannán	'very, a lot'
aŋ-ŋəna	'very, very much
ṭɪaṯ-ṭɪak	'very'
aɲ-ɲərıŋ	'completely'
kɪr-əkkír	'completely, very; with negation: never'
aṯ-ṭík	'with negation: at all, never'
pəɽın	'finally, completely, enough; with negation: not anymore'
ıp-pʊ, **-p.pʊ**	'really, seriously (intensifying)'

A morphologically intensified adjective can be still further intensified by an intensifying adverb:

kurrɔ́ŋ	**k-ʊ́ṯṯ~ʊ́ṯṯʊ́t**	**cannán**
stick	C-INTS~short	very

the stick is *very* short

kɪrəkkír expresses 'completely, very' (first example below). In combination with a negated verb it expresses 'never' (second example below).

ịn-ṭ-ɔpərɔ́t	ana	ɔṭṭɛ¹²	p-ɔŋɔ	kɪr-əkkír
1A-C-good	and	your_father	C-ill	completely-REDUP

we are fine but our father (lit.: your father) is very ill

k-kw-ânn-ípɔ	púl	ém-p-í	kír-ə́kkír
3-C-NEG-obtain:DEPINCOMPL	person	DEM-C-NEARSP	completely-REDUP

s/he can never marry this person

aṭṭík combines with a negated (or inherently negative) verb expressing 'never':

lɔn	ɛl-l-ɪ	l-akə́nn-ɔcɔ́ɽɔ́	áṭṭík
words	DEM-C-NEARSP	C-NEG-stop:DEPINCOMPL	at_all

these things will never stop

In combination with a negated verb **pəɽɪn** expresses 'not anymore':

m-p-ănn-aŋkɔt	ɪttɪ	ɔ-rɪt	ṭ-áppʊṭa	pə́ɽɪn
1-C-NEG-want:DEPCOMPL	that	PERS-12	C-play:INCOMPL	finally

I don't want to play with you (SG) anymore (I don't want us to play anymore)

ɪppʊ, or its enclitic variant **-ppʊ** is an intensifying adverb that can be used, for example, with 'one' expressing '(really) only one'. It is glossed 'really':

ʊkʊl	ɛn-n-ɪ	w-ulukkû-ppʊ
child	DEM-C-NEARSP	C-one-really

this child is (really) the only one

---

¹² 'Your father' is the polite way to refer to an older male family member who is related to both the speaker and the addressee. The person can, for example, be the father of the speaker and the uncle of the addressee.

Question words ending in the question morpheme -ṭa can also be intensified with this adverb. The adverbs in the example below convey that the questions are urgent and important for the boy asking them:

caʈɪ	c-əɽɛk	c-ɔka.káṭɛ	cɪk	a-laló	ɔmɛntɛt	ól	ɪttɪ
day	C-some	C-be:PST	VREF	CONJ.PERS-Laló	tell.PLUR:DEPINCOMPL	people	that

ṭépá	ṭ-áráṭ-ṭa-ppʊ	ana	ṭ-ṭ-óŋkwɔ́.t	ŋín-ṭa-ppʊ
lion	C-how-Q-really	and	PRO-C-resemble:COMPL	what-QW-really

ana	ṭ-ṭ-íkkɔ	cɪk	kárə́.ṭâ-ppʊ
and	PRO-C-sit:INCOMPL	VREF	where:QW-really

there was a time that Lalʊ was all the time asking the people 'seriously, how is a lion (i.e. how big), and what does he look like and where does he live?' (fr. written story)

Some colour adjectives have special, cognate, adverbs for intensification. Some were already mentioned in chapter 10.2.7 in the context of intensified adjectives, notably iɲɲí 'very (black)', ɪppŏk 'very (white)' and ɪṭṭə́lɔ 'very grey, yellow'. Examples with iɲɲí modifying the (non-related) verb iŋkiɛt 'make black, dirty', and with ɪppŏk modifying the (related) verb ʊpʊkɪɛ 'make white') follow here:

m-p-a.ɪk	p-íŋkiɛt	pə́ṭɔk	iɲɲí
1-C-be:PR	C-make_black:INCOMPL	stone	very

I am making the stone very black

m-p-a.ɪk	p-úpʊkɪɛ	pə́ṭɔk	ɪppŏk
1-C-be:PR	C-make_white:INCOMPL	stone	very

I am making the stone very white

This construction cannot be made with an adjective:

*m-p-a.ɪk	p-úpʊkɪɛ	pə́ṭɔk	p-ɪpók / p-ɪpʊkɪppŏk
1-C-be:PR	C-make_white	stone	C-white / C-very_white

The adverb **ɪttʊăŋ** 'very' is used for intensification of C-**ɔɽɛ̆** 'red' and **ɔɽɪa** 'become red'. Alternatively, a variant **ɪttɪăŋ** may be used. It tends to fuse with C-**ɔɽɛ̆** 'red' to C-**ɔɽɛttɪăŋ** 'very red, very ripe':

pɪra   p-ɔɽɛ   ɪttʊăŋ / p-ɔɽɛ-ttɪăŋ
tree   c-red   very   /   c-red-very

the fruits are very ripe (lit.: the tree is very red)

'Spottedness', which is typically a colour of birds, is intensified by **pɪr,** which is typically pronounced with a long trill:

pʊɽʊpé   p-ɔʈɛrɛt   pîr
bird   c-spotted   very

the bird is very spotted

Some further adverbs with miscellaneous semantics include:

əttə́ŋ   'again'
nʊʈʊk   'for no reason, in vain'
kapɪk   'upright'
məna   'even'
tullúk   'only, just'
tərúk   'nevertheless'
ɪʈŏn   'together'
tɔʈŏn   'together'

The adverbs **tullúk** and **tərúk** share their roots with the respective adjective C-**ullúk** 'only, just' and C-**ərúk** 'only, just'. Examples with the adjectives are given in 10.4.4. Examples with the adverbs follow here.

m-p-ɔnú ɲʊkʊl   ɲ-əɽapúrʊk   tullúk
1-c-have   children   c-three   only

I have only three children

ŋ-kw-ɔnú   təruk   ɪttɪ   ŋ-kw-a.ccɪ́kɔt
2-c-have   only   that   2-c-hear:INCOMPL

you must nevertheless listen / still you must listen

ɪt̪ŏn 'together' and tɔt̪ŏn 'together' respectively contain the prepositions ɪ- 'in' and tɔ- 'up on, up at'; a noun *t̪ŏn is (synchronically) not attested on its own. The tonal behaviour of tɔt̪ŏn shows that the word (still) functions as PPC and noun, not as a single unit. Unlike proclitic ɪ- and unlike nouns with a rising tone, tɔ- can receive a high tone from a preceding element. ɪt̪ŏn typically expresses that people put their hands together, for example for eating from a shared plate or for doing certain work which requires joint manual effort. tɔt̪ŏn is used rather for being (physically) together. Examples:

ɔ-nɪ̪n	t̪-ɔɽəkɔ.t	kəpa	ɪ.t̪ŏn
PERS-1A	C-eat:COMPL	meat	together

we have eaten meat together (picture of people eating from one plate)

a-úl	áppík	ɛ́ɔ́	á-t̪-ɔ́ccɔ́rɪnɛ	ɪ.t̪ŏn
CONJ-people	all	go:DEPINCOMPL	SUBJ-IT:DEPINCOMPL-run_for:DEPINCOMPL	together

and all the people will be ready to give a hand (lit.: and all people go in order to go and run for it together)

n-íkkɔ-ɪk	tɔ́.t̪ʊn
12A-do:DEPINCOMPL	together

stay together!

ɔ-nɪn	t̪-ɔcɔɽɔ́t̪-ɔk	tɔ.t̪ŏn
PERS-12	C-stand_at:COMPL-O3	together

we stood together with him/her (i.e. we supported him/her)

17.2. Discourse particles

Lumun has a few enclitic discourse particles. The particles -a, -na, -tɪ, -mɛ́ and -mɛ are discussed in this section. Enclitic discourse particles that turn a statement into a question are discussed in chapter 20. Deviating from regular assimilation patterns, the initial consonants of -na, -tɪ and -mɛ́ assimilate to the place of articulation of a preceding consonant, as can been seen in some examples given here. Two further examples of this assimilation are provided in chapter 2.1.3 (one with -na and one with -mɛ́).

17.2.1. The particle -**a**

The particle -**a** is a particle with which the hearer's attention is claimed (hence the gloss ATT).[13] It has a low tone and does not coalesce with a preceding vowel. It is typically used in the final sentences of a story, when the story moves towards or reaches its climax. In this context the use of -**a** co-occurs with an acceleration of the narrative: descriptive details, which may be abundant in the beginning of a story, are omitted now. The use of the particle -**a**, asking for heightened attention, is part of this accelerated style. This is an example from the final stage of the 'The story of the jackal':

... **a-kín**	**ɔ́ṭə́kkar.at**	**a-kín**	**ɪkk.at**	**cɪk**
CONJ.PERS-3A	move_aside:DEPPRFV	CONJ.PERS-3A	sit:DEPPRFV	VREF

a-kín	**ɔ́ṭáttɔ**	**ménɪk-â**
CONJ.PERS-3A	fight:DEPINCOMPL	like_this-ATT

they moved aside and continued to fight like that ('The story of the jackal')

Another example comes from the final stage of 'The story of the tortoise':

akka	**ɔpa**	**w-aa.r-â**
that	piece_of_meat	C-come:COMPL-ATT

a-k-ʊ́.at	**ɪ-kəɽál**	**ɛŋ-k-ərɪk**	**k-ɔttê**
CONJ-C-descend:DEPPRFV	in-small_water_spot	DEM-C-NEARSP	C-small

when the wild animal came, he (tortoise) moved down into that small pool (App. IV, 153-154)

The particle is also typically used by adults or older children when talking to young children, and in songs (not just children's songs). In speech to children it is a way to make the message sound friendlier.

An example from speech to a child follows here. The situation is that a person has arrived at the house of a neighbour to whom she has lent a rope; she has come to take the rope back home. However, she finds only a child in the compound and the child does not know

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[13] There is also a question particle -**a** for recovery of information, see 20.2.3.

which rope is the borrowed one. The child invites the visitor to wait for her mother, and the visitor does this, but after a while decides to leave without the rope. The use of the particle makes the message that she is leaving sound softer:

ɔnnɛ	p-ícca	p-ɔccɔ́.t	cɪk	ána	m-p-ɛ́í	p-á.ɛ́ɔ́-a
your_mother	C-be_still	C-catch:COMPL	VREF	and	1-C-be_here	C-go:INCOMPL-ATT

your mother continues to be late and now I am leaving

An example from a song is the following. It has the particle three times, illustrating that it may be used in different positions in the sentence. Most typically though, it comes in the end. I have not written tone in this sentence, since it is sung on a melody. In speech the discourse particles would be absent.

kʊkkʊ	ana	ɔ-lɔttɪ-a
Kʊkkʊ	and	PERS-Lɔttɪ-ATT

m-pɔŋɔt̪.ɛ	ɪttɪ	n-t̪-ɛrɛnt̪-ɪn	ɪ-mʊpaɪl-a	m-ɪn-a
1-C-like:COMPL	that	2A-C-talk_to:INCOMPL-O1	in-mobile_phone-ATT	C-POSS1-ATT

Kʊkkʊ and Lɔttɪ, I want you to talk to me in my mobile phone

17.2.2. The particle **-na**

The particle **-na** is a particle that is attached as an enclitic to an Imperative or another verb form that (mildly) urges the addressee to do something. The nasal turns a preceding obstruent into a nasal, but adapts to its place of articulation. The resulting nasal is realized short. Unlike Imperatives and commands without the particle, a verb with the particle does not convey the desire of the speaker, but expresses allowance for the addressee to do something. The allowed action has often (explicitly or implicitly) been requested by the addressee in the first place, but can also be suggested by the speaker in the addressee's interest.

ɪpɪtt.ɪ-ná	á-n-íɽɛt̪-ʊ́ŋ
ask:IMP-ALLOW	SUBJ-1-tell:DEPINCOMPL-O2

ask it, so that I tell you!

aʈɪŋ-ŋá   **á-ʈ-ɪkkɪnɛ**   **ɔ-ɪáɪa**   **cɪk**
come:IMP-ALLOW   SUBJ-(2-)VEN:DEPINCOMPL-sit_for:DEPINCOMPL   PERS-my_mother   VREF

pá.pɔ́ttê
short_time

come and wait a little for my mother! (the addressee needs the mother and maybe the mother will come after some time) (fr. written dialogue)

ant-ɛɔ́-na
can:DEPINCOMPL-go:DEPINCOMPL-ALLOW

okay, you go now (for example after accompanying somebody on his way to a certain place. The speaker now takes leave and the addressee will continue on his road alone).

17.2.3. The particle -tɪ

The particle -**tɪ** 'you know' adapts to the place of articulation of the preceding consonant, after **l** it turns to its intervocalic allophone **r**.

The particle is used in unsolicited explanations for situations or behaviour that is unexpected or unusual, expressing that no offence is intended. The following may be said when there is visitor and the speaker feels very sleepy (first example) or as an excuse for being late (second example). The particle has a flavour of confidentiality:

m-p-ɔká.t   **cɪk**   **a-n-íɲcat**   **cɪk**   **ná-aʈaŋkal-rî**
1-C-be:COMPL   VREF   CONJ-1-lie_down   VREF   on-bed-you_know

I was lying down on the bed, you know

m-p-ɔká.t   **cɪk**   **a-n-ɔʈəkɔ**   **ŋuʈú-rɪ**
1-C-be:COMPL   VREF   CONJ-1-eat:DEPINCOMPL   asida-you_know

I was eating asida, you know

-**tɪ** also functions as a question particle. Such questions often start with **ɛ́kkərɛ** or **íkkərɛ** 'perhaps'. Here too, the particle conveys that no offence should be taken. In the translations I have used 'perhaps'. The question is typically answered with 'yes' or 'no'.

íkkərɛ   **ŋ-k-ʊrɛ́t**   **nán**   **íttí**

perhaps   2-C-forget:COMPL   on:ABS   that

ɔ́-rít   **ṭ-á.ík**   **ṭ-á.ṭ-íɲcɛttɔt**   **ɪnénní-rî**

PERS-12   C-be:PR   C-IT:INCOMPL-meet_each_other:DEPINCOMPL   today-you_know

did you perhaps forget that we were going to meet today?

íkkərɛ   **ŋ-kw-ɪɽɛ́ṭ.ɛ**   **pəlla**   **ɪttɪ**   **p-p-ânṭan-tî**

perhaps   2-C-tell:COMPL   cat   that   PRO-C-come:INCOMPL-you_know

did you perhaps tell the cat to come? ('The story of the jackal')

Possibly, this **-tɪ** is the same as the formative **tǐ** in the complementizer **ɪttǐ** 'that' (see 18.7) and in the defective verbs **attǐ** 'I hope that' and **ɔpərǐ** 'say, think' (see 12.21).

17.2.4. The particle -**mɛ́**

The particle -**mɛ́** turns a statement into a proposal for action. It can also be used on an imperative clause or on a polite command with **ant** 'can'. It can have an encouraging flavour, like 'just do it, trust me!' A clause with -**mɛ́** is often introduced by **ana** +H 'and' and typically continues on already communicated intentions, wishes or agreements. The solicited reaction is **ịị** 'yes'. -**mɛ́** is attached at the end of the clause and can be used with all persons. The **m** of the particle turns a preceding obstruent into a nasal, but adapts to its place of articulation. Some examples follow here; -**mɛ́** is glossed as PROP, from proposal:

ana   **m-p-ákkarɔ-mɛ́**

and   1-C-call:INCOMPL-PROP

so let me call (you) then

apɛllɛ   **ŋʊcʊl-ɛ́**

pour_some:IMP   sauce-PROP

pour some sauce! (App. IV, 70)

aɽɪŋ-ŋɛ́   (< **aɽík** + -**mɛ́**)

come:IMP-PROP

now come!

ɔccɔkɔṱ-ɪn-nɛ́
catch:IMP-O1-PROP

catch me! (but just do it when you are ready!)

17.2.5. The particle -**mɛ**

Also the particle -**mɛ** is used on imperative clauses and polite commands with **ant** 'can', but expresses urgency. The following example shows that a preceding nasal adapts to the place of articulation of the particle. Here, length of the nasal was retained, hence the writing with a double vowel:

ɔccɔkɔṱ-ɪm-mɛ̂
catch:IMP-O1-URG

catch me!! (i.e. do it now!!) (App. IV, 129)

17.3. Interjections

Interjections include the following:

i̩i̩	'yes'
ɛɛ	'yes (eager confirmation)'
ɪpɛ́	'sure (a confident yes)'
ɔɪ	'confirming response when you are called'
akwa	'okay, let's leave it here (signalling a switch to another subject or that the conversation is finished)'
á-a/ə́-ə̃/m̋-m	'no'
i̩cát	'true!, indeed!'
ɔ́kwɔɪ̌/ɔ́kwɪ̌	'goodness!, oh!' (conveys surprise)
ɔ̂kwɔ́ɪ	'oh!' (conveys shock, sadness)
ɛ́ɛ	'hey!' (call for attention)
nṱɛ̌	'no!, nonsense!' (ɛ can held on extra long)
mpa/mpaa/mpaak	'no!, nonsense!' (**a** can be held on extra long)
təll	'yuck!, ich! (expressing disgust)'
ŋáaɪ́	'conveys uncertainty'
cʊŋ	'conveys uncertainty'
káṱṱɪa	'say' (often introducing a question or

order/command. It can be followed by an encouragement from the hearer to the speaker to say what she wants to say)

Some examples:

a-parɪ-ɔ́n	ɔ́mɛ́kat	ɪttɪ	nt̪ɛɛ	ŋae	ŋ-ɔ́-ín-í
CONJ-wife-PL	say:DEPPRFV	that	nonsense	urine	C-of-what-Q

His wife and children said, nonsense, urine for what?? (App. IV, 52)

ana	m-p-a.kkɔt	tát̪-t̪a	cʊŋ
and	1-C-do:INCOMPL	how-Q	UNCERT

and what will I do?

ká t̪t̪ɪa	ɛt̪-ɪn	cátt̪ak
say	give:IMP-O1	calabash(k.o.)

say, give me the calabash!

Stories can typically contain sound symbolic interjections. They may involve sounds that do not belong to the Lumun sound inventory. Examples include:

appər̝ɔt	sound of cutting open lungs filled with air (App. IV, 158)
attáp	sound of palmfruit hitting the bottom of the tortoise (App. IV, 108)
attɔpɔk	sound of bird landing on a tree (fr. written story)
attʊl	sound of spear or small axe killing a bird (fr. written story)
kʊcʊk	sound of something falling into the water from a height (App. IV, 130)
ʊ ʊ	sound of bird coming down, sound of wind blowing (fr. written story)

There are also specific expressions to call or chase away animals. Some involve unusual sounds. Examples:

ku	sound for chasing a chicken away
kírr	sound for calling a chicken (**r** is held long)
t̪ur	sound for chasing a pig away

ʕɛ̂n	sound for calling a pig
ca, **cak**	sound for chasing a goat
ala, **alala**	sound for calling a goat
ɲa	sound for calling a young goat
ʃ�, **sʃ̩n**	sound for chasing a dog
sɪla	sound for calling a dog
haʊ	sound for chasing a cow
arrɛ	sound for calling a cow

18. Conjunctions

This chapter discusses conjunctions words and particles. Conjunction words and particles join phrases and/or clauses. Certain conjunction words and particles can (or must) be combined.

Lumun has the following conjunction words and particles: **ana** +H 'and', **á-** 'and, while', **â-** 'so that, in order to', **ámma** +H 'if, when', **akka** +H 'that, when, because', **mɔnɔ/məna** 'until' (always followed by **á-**), **ɪttǐ** 'that', **ɛrɛ** +H 'like' and **ámma** 'like'.

Tone

The representation of underlying tones of conjunction words and particles is not without problems. For most I nevertheless propose underlying tones. In addition I describe some tonal realizations that do not follow from the rules. A tonal feature that virtually all conjunctions share is that they have the ability to bring a high tone to a following element. At the same time, most can receive a high tone themselves, so that their own high tone is either a final high or a floating high tone (not a rising tone). In isolation, these conjunction words are realized with a final low tone. Though their isolated production is artificial —they do not occur in prepausal position since they always introduce a new phrase or clause—, I nevertheless represent them for this reason with a floating high tone (+H).

ɪttǐ 'that' cannot itself receive a high tone from a preceding element, for which reason I represent it with a rising tone. Also **á-** 'and, while' cannot receive a high tone from a preceding element. Since **á-** is monomoraic, a high and a rising tone would both be possible. As explained in 3.8, I assign a high tone in such cases.

18.1. **ana** +H 'and'

ana +H 'and' is used for the conjunction of noun phrases as well as clauses. When joining noun phrases, **ana** +H is realized with an

initial high tone when preceded by an element with final high or rising tone:

ṭʋʋlı ána pə́lla 'the hyena and the cat' (< **ṭʋʋlí ana** H **pəlla**)

In an enumeration **ana** +H is used between all enumerated elements:

aṛəpʋ	w-ɔ-rua	w-ɔká.t	ıttı
things	C-of-hair	C-be:COMPL	that

ṭʋk	ána	túṭṭəruk	ana	pápɔkıra	ana	ʋmaṭɔ̂n
dog	and	pig	and	leopard	and	elephant

the animals were the dog, the pig, the leopard and the elephant

ana +H is also a clause linker. An example of coordination of two clauses, both with an adjectival predicate, follows here:

ṭ-ıkkɔ	cık	káɾəṭṭúm	ṭ-ɔpərɔ́t	ana	ṭ-ṭ-ɔ́kıṭak
NOM-sit	VREF	Khartoum	C-good	and	PRO-C-bad

staying in Khartoum is good and bad (lit.: and it is bad)

A clause introduced by **ana** +H often contains a non-dependent verb. Its subject can be co-referent with (first example below) or different from the subject of the preceding clause (second and third example). Before **ana** +H linking clauses, a prosodic boundary can be realized (and will be if the preceding clause is an **ámma** +H or **akka** +H -clause). In that case, a preceding high tone is not realized on **ana** +H and a preceding falling tone is realized as falling. In the third example there is a prosodic boundary before **ana** +H ('outside' has itself a L.H pattern).

m-p-ıkkɔ́.t	cık	ána	m-p-ɔkıɲâ.t
1-C-sit:COMPL	VREF	and	1-C-become_tired:COMPL

I have been waiting and I am tired

ɔ-kakká	p-ɔɲı́	ana	ɔ-nenní	p-ıpʋ́k
PERS-Kakka	C-black	and	PERS-Nɛnnı	C-white

Kakka is black and Nɛnnı is white

ɔ-llɛ́	p-ɪn	p-ɔt̪i̯ɔt̪-ín	t̪əpút	ana
PERS-husband	C-POSS1	C-send:COMPL-O1	outside	and

ŋ-kw-a.t̪-ɔkkɔt	ŋín
2-C-IT:INCOMPL-do:DEPINCOMPL	what

my husband has sent me away and what are you going to do? (fr. written story)

The non-dependent verbs in the clauses linked through **ana** +H do not need to be in the same TAM, for example:

ɲʋkʋl	ɲ-ɔká.t	cɪk	a-ɲ-íc̱at	cɪk
children	C-be:COMPL	VREF	CONJ-PRO-lie_down:DEPINCOMPL	VREF

ana	ɲ-ɔ́t̪att.át̪ɛ
and	PRO.C-fight:PAST

the children were lying down and (then) they fought

Though the verb in a linked clause introduced by **ana** +H is typically a non-dependent main verb, it can also be a Dependent Incompletive. In such cases the second clause lacks overt reference to the subject. Its understood subject is co-referent with the subject of the preceding clause. The following sentence has two variants. The first has a linked clause with an overt subject and a non-dependent (Incompletive) verb, the second lacks an overt subject and has a Dependent Incompletive verb.

kərrən	ana	cúkkú	ʋl	w-ɛɛ́
early_wet_season	and	height_of_wet_season	people	C-plant_sorghum:INCOMPL

ana	w-á.ra	/	ana	ɔrâ
and	C-cultivate:INCOMPL		and	cultivate:DEPINCOMPL

In the early wet season and at the height of the wet season people plant sorghum and cultivate (second variant from calendar)

In such constructions, the non-dependent verb in the first clause is not necessarily an Incompletive, it can also be a Completive:

m-p-i̯cáṭ.ɛ   **mɛccɪn**   **ɲ-cɪk-ɪ-ci̯ŋkí̯**
1-C-lie_down:COMPL   yesterday   with-LOC-in-sun

ana   **úrəkɔ**   **a-cí̯ŋkí̯**   **c-ɛɔ́.t**   **cɪk-ɪ-ṭɪṛɔ̂t**
and   get_up:DEPINCOMPL   CONJ-sun   C-go:COMPL   LOC-in-sky

I slept early yesterday and got up when the sun was up in the sky (*ɲcɪkɪcɪŋki*, lit. 'from in the sun' expresses 'earlier than normal')

ana +H can be used for expressing a contrast, translating as 'but'. In both examples there is a prosodic boundary before 'and':

ɔ-ɪáɪa   **akk-ɪná**[14]
PERS-my_mother   FOC-know:INCOMPL

ana   **m-p-ɔmma**   **ɔ-ʋ́n**
and   1-C-not_know:INCOMPL   PERS-1

my mother knows, but I myself, I don't know (fr. written dialogue)

ɔ-lɔ́ttɪ **p-á-aíné.t**   **nɔ́n**   **ana**   **k-kw-ɔ́ka.káṭɛ**   **p-ɔŋɔ́**
PERS-Lɔttɪ C-IRR-come_to:COMPL   O2A   and   3-C-be:PST   C-ill

Lɔttɪ would have come to you, but he fell ill

In order to convey contrastive meaning more strongly, the adverb **tərúk** 'only' is added to **ana** +H, forming **anarrúk** 'but' (first example below). Alternatively, adjectival C-**ərúk** 'only, just' modifies the contrasted subject noun (second example below).

i̯n-ṭ-ɔpərɔ́t   **ana / ana.rruk**   **ɔ-ṭṭɛ**[15]   **p-ɔŋɔ**   **kɪr-əkkír**
1A-C-good   and / but   PERS-your_father   C-ill   completely-REDUP

we are fine, but our father is very ill

i̯n-ṭ-ɔpərɔ́t   **ana**   **ɔ-ṭṭɛ**   **p-əruk**   **p-ɔŋɔ**   **kɪr-əkkír**
1A-C-good   and   PERS-your_father   C-only   C-sick   completely-REDUP

we are fine, but our father is very ill (lit.: your father is very ill)

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[14] The Incompletive of **ɪna** 'know' is tonally irregular. It has a high tone on the second instead of the first mora.

[15] Polite form.

ana +H can introduce a new sentence, linking that sentence to preceding discourse, for example:

ana	**ɔ-nɔn**	**t̪-érɛ**	**tăt**
and	PERS-2A	C-speak:INCOMPL	how

and what do you (PL) have to say?

ana +H can be used sentence-initially in combination with **ámma** +H, **akka** +H, **mɔnɔ** and **məna**. It merges with **ámma** +H to **anámma** +H, and with **akka** +H to **anákka** +H. **ana** +H is also attested immediately before the conjunctive particle **á-**. These combinations function like **ámma** +H, **akka** +H, **mɔnɔ**, **məna** and **á-** alone.

ana +H is also part of the constructions **ámma** +H … **ana** +H 'if … then' and **akka** +H … **ana** +H 'when … then'. These constructions will be discussed under **ámma** +H and **akka** +H, respectively.

18.2. Conjunctive **á-** and subjunctive **â-**

Conjunctive **á-** 'and, while' and subjunctive **â-** 'so that, in order to' are clause-linkers, they do not join phrases. I distinguish between a conjunctive particle **á-** and a subjunctive particle **â-**. Compare the particles attached to the verb 'eat' in the examples below:

k-kw-ɔ́ká.t	**cɪk**	**a-kw-ɔ́kkɔ́t**	**t̪úɽít**	**a-kw-ɔ́ɽəkɔ**	**cɪk**
3-C-be:COMPL	VREF	CONJ-3-do:DEPINCOMPL	food	CONJ-3-eat:DEPINCOMPL	VREF

she was cooking food and eating (at the same time)

k-kw-ɔ́ká.t	**cɪk**	**a-kw-ɔ́kkɔ́t**	**t̪úɽít**	**á-kw-ɔ́ɽə́kɔ́**	**cɪk**
3-C-be:COMPL	VREF	CONJ-3-do:DEPINCOMPL	food	SUBJ-3-eat:DEPINCOMPL	VREF

she was cooking food in order to eat (to have something to eat)

In practice, it can be difficult to decide which of the two particles is involved. The conjunctive particle can be realized with a high tone due to tone bridge. Compare the following alternative realizations of the same sentence, the first without, the second with tone bridge:

ɔ-ʊn	p-ɛ.káṭ-ɔk	ŋəpak	a-kw-íkk.at
PERS-1	C-give:PST-O3	beer	CONJ-3-drink:DEPPRFV

I gave him beer and he drank it

ɔ-ʊn	p-ɛ.káṭ-ɔ́k	ŋə́pák	á-kw-íkk.at
PERS-1	C-give:PST-O3	beer	CONJ-3-drink:DEPPRFV

I gave him beer and he drank it

A further complicating factor is that, at least in some cases, tonal realizations are possible that cannot (just) be ascribed to the application or non-application of tone bridge. An example follows here. The verbs in this sentence refer to consecutive events, so that the conjunctive particle is expected in both cases. On the verb 'produce' the high tone can be ascribed to tone bridge, but not on the verb 'get married'.

ʊkʊl	w-a.cɔ́kká	á-ɪtta.kát
child	C-grow:INCOMPL	CONJ-(PRO-)get_married:DEPPRFV

á-kwɔ́n.at	ɲʊ́kʊl
CONJ-(PRO-)produce:DEPPRFV	children

the girl will grow up and get married and give birth to children

In the texts in the appendices, I am not always sure about whether the conjunctive or the subjunctive particle is used. This happens when I would expect the one, but the tones rather seem to point to the other. In such cases I gloss the particle as the one I expect.

18.2.1. The conjunctive particle á- 'and, while'

The conjunctive particle á- introduces a clause that contains a Dependent Incompletive, Dependent Perfective or Completive verb, or the Present of 'be'. It can also contain a complex verb of which the first auxiliary is the Present of 'be' or a Completive verb. The verb in a clause introduced by á- is not an Imperative, nor an Incompletive or a Past. á- procliticizes to the (pro)nominal subject of the verb. It is mainly used:

- for the expression of actions or events that happen (more or less) at the same time, or that, together, can be viewed as part of the same event. This includes use in certain complex verbal constructions;
- for linkage with a time-adverbial phrase or clause;
- for the conjunction of consecutive events;
- as complementizer.

á- is furthermore used in **ámma** +H … **á-** 'if … then' and **akka** +H … **á-** 'when … then' constructions, and after **mɔnɔ** 'until' and **məna** 'until'. These constructions will be discussed under **ámma** +H, **akka** +H, and **mɔnɔ** and **məna.**

Actions that happen —more or less— at the same time and actions that can be viewed as part of the same event

á- before a Dependent Incompletive verb expresses that something happens at the same time as the event in the preceding clause. The subject of the second clause can be co-referent with the subject of the first clause (first and second example below), but also with its object (third example).

k-kw-ɔ́ŋkáʈɛ́	**á-kw-íɽɛt**	**kín**	**ɪttɪ …**
3-C-go:PST	CONJ-3-tell:DEPINCOMPL	O3A	that

s/he left while telling them (that) … (situation: somebody is walking away while still speaking to the people staying behind)

ana	**ɔ-ʊn**	**cənɛ**	**a-n-ɔɽíkɔt**	**kîn**
and	PERS-1	here	CONJ-1-wait:DEPINCOMPL	O3A

and I am here, waiting for them

k-kw-áʈʈ-ɪɔt	**ɔ-nɛnní**	**a-kw-ɔ́ɽəkɔ**	**kəpá**
3-C-ITVEN:COMPL-find:DEPINCOMPL	PERS-Nɛnnɪ	CONJ-3-eat:DEPINCOMPL	meat

s/he found Nɛnnɪ eating meat

In the following example, **ana á-** is used. It could be translated as 'and at the same time'. It is from a story at the point that it reaches a series of events that rapidly take it to its (violent) climax:

ana   a-lɪk   ɔ̂ŋəttat   n-a-âk
and   CONJ-fires break_down_on.PLUR:DEPINCOMPL   on-PERS-3

and (at the same time) bundles of fire break down (falling) on him (fr. written story)

The conjunctive particle is also used when two verbs together describe one (main) action, as in the next example from an instruction how to make a 'singing whip' ('take' and 'polish'). The verb preceded by **á-** is a Dependent Incompletive:

ŋ-kw-úmmɔ   kupu   a-ccə́ṭa   kɪccé
2-C-take:INCOMPL   piece_of_bamboo   CONJ-(2-)polish:DEPINCOMPL   carefully

you take a piece of bamboo and you polish it carefully (App. II, 4)

Likewise, **ɪkkɔ cɪk** 'sit, stay' can be followed by **á-** introducing a clause with the (semantic) main verb, expressing 'start to x' (see 12.9):

a-kín   ɪkk.at   cɪk   a-kín   ɔ́râ
CONJ.PERS-3A   sit:DEPPRFV   VREF   CONJ.PERS-3A   cultivate:DEPINCOMPL

and they started to cultivate ('The story of the jackal')

The same construction can be made with the verb **apəṭa**, based on Sudanese Arabic *bada* 'start, begin':

akka   ɔ-kín   ṭ-apəṭá.t   á-kín   ɔ́rá   ɪttɪná …
that   PERS-3A   C-start:COMPL   CONJ.PERS-3A   cultivate:DEPINCOMPL   so

when they had started to cultivate like this … ('The story of the jackal')

á- is also part of certain complex TAMs with an auxiliary of 'be' (see 12.7.5). The examples have a Past Continuous (first one) and a Past Completive (second one):

m-p-ɔká.t   cɪk   a-n-ɔkə́ṭaccɛ
1-C-be:COMPL   VREF   CONJ-1-watch:DEPINCOMPL

I was watching it

k-kw-ɔ́ká.t   a-k-kw-âkkarɔ̂.t
3-C-be:COMPL   CONJ-3-C-call:COMPL

s/he had (already) called me

Linkage with a time-adverbial phrase or clause

The typical opening formula of a story **caʈı cəʈɛk cɔkát cık** 'once upon a time' or 'one day' is followed by **á-:**

caʈı   c-əʈɛk   c-ɔká.t   cık
day   C-some   C-be:COMPL   VREF

a-puʈúŋ   p-áʈʈ-ıɔt   ŋərrɔ̂ŋ …
CONJ-marten(?)   C-ITVEN:COMPL-find:DEPINCOMPL   squirrel

one day a marten(?) found a squirrel …

A comparable case is the following:

ŋ-kw-ɔká.t   cık   maʈɔ́t
2-C-be:COMPL   VREF   long_time_ago

â.mpəppɔnɛ   lįcɔk   áka.ín.ʈa
CONJ.(2.)loose.PLUR:DEPINCOMPL   goats   why

why was it that in the past you were always losing the goats? (lit.: you were long ago and you were always losing the goats why?)

When the clause expressing the time of the event is not the first of the sentence, conjunctive **á-** introduces the time adverbial clause:

m-p-įcáʈ.ɛ   mɛccın   ɲ-cık-ı-cįŋkį́   ana   úrəkɔ
1-C-lie_down:COMPL   yesterday   with-LOC-in-sun   and   get_up:DEPINCOMPL

a-cį́ŋkį   c-ɛɔ́.t   cık-ı-ʈıʈɔ̂t
CONJ-sun   C-go:COMPL   LOC-in-sky

I went to bed early yesterday and got up when the sun was up in the sky (lit.: and the sun had gone up in the sky)

The examples above with time-adverbial clauses can actually be regarded as events happening at the same time. The conjunctive particle can, however, also be used when a time-adverb is placed in sentence-initial position:

mɛɲcén   **a-ŋ-kw-ɔrənnâ.t**   **ana**   **ɪnénní**   **ŋ-kw-ɪttáṭ.ɛ**

some_time_ago   CONJ-2-C-become_thin:COMPL   and   today   2-C-become_fat:COMPL

last time you were thin, but now you are fat

Conjunction of consecutive events

á- is used for the conjunction of consecutive events in narratives. It is typically used to narrate a 'flow' of events: 'and then … and then … and then …'. In this context, clauses introduced by **á-** typically have a Dependent Perfective verb:

ana   **kɪt**   **k-á.k-k-ɔná.t**   **kaṭʋk**   **n-ʋkón**

and   wild_chicken   C-be:COMPL-C-bring:COMPL   spear   with-hand

a-kɪt   **ɔcéɽɛ.kat**   **kaṭʋk**   **cʋɽé**   **c-ɔ-pɪra**

CONJ-wild_chicken   make_stand.LOCT:DEPPRFV   spear   bottom   C-of-tree

a-kw-íkk.at   **ŋə́pak**

CONJ-3-drink:DEPPRFV   beer

and the wild chicken was holding a spear in his hand and the wild chicken made the spear stand against the bottom of the tree and drank beer ('The story of the jackal')

A sequence of events can also be placed in the future: this will happen, then this, then this. Here too, the verbs in the clauses introduced by **á-** are Dependent Perfectives:

an-ámmá **k-kw-íɔṭé** **k-kw-a.pɪra**   **nɔ-ká**

and-if   3-C-find:COMPL   3-C-become_good:INCOMPL   on-body

á-kw-ɔ́lləkkɛ.kat   **tɔ-cələ́k** **a-kw-ɔpákk.at**   **ŋ.ŋɪn**   **tʋan**

CONJ-3-put_down:DEPPRFV   up_on-neck   CONJ-3-return:DEPPRFV   with:ABS   home

and when he will have found it, he will be happy and he will put it on his shoulders and return home with it (Luke 15:5)

The conjunctive introducing a complement clause

With sensory verbs, **á-** introduces a complement clause, as in the two examples below. In the second example, pronominal **ɲ** refers to **ɲʋkʋl** 'children' (here: 'girls').

akka	a-kín	ɔ́rá		íttíná	a-kín	ɪmma
that	CONJ.PERS-3A	cultivate:DEPINCOMPL	so		CONJ.PERS-3A	see:DEPINCOMPL

a-ṭɛ́pa	ṭ-aá.t
CONJ-lion	C-come:COMPL

when they were cultivating like this, they saw that the lion had come ('The story of the jackal')

ámmá	ɲ-ɔ́ccɪ̧kɔ́ṭ.ɛ́	á-páŋɔ́n	ɛɛ ...
if	PRO.C-hear:COMPL	CONJ-sibling.PL	swing:DEPINCOMPL

as soon as they hear (lit.: have heard) their sisters swing them (their singing whips), ... (App. II, 27)

In this context, too, the combination **ana á-** is found:

ámmá	ɔ́-nɔ́n	ṭ-ɔ́ccɪ̧kɔ́ṭ.ɛ	lɔn	l-ɔ-ṭɔɽák
if	PERS-2A	C-hear:COMPL	words	C-of-war

ana	a-cɪk	c-ɔkɪ̧ttákɔ.t ...
and	CONJ-place	C-be_destroyed:COMPL

when you hear messages about war and that the place has been destroyed ... (Luke 21:9)

18.2.2. The subjunctive particle **â-** 'so that, in order to'

A clause introduced by the subjunctive particle **â-** 'so that, in order to' contains a Dependent Incompletive or a Completive verb. The Dependent Perfective is possible, but seems rather uncommon in this environment. Subjunctive **â-** is used:

- for the conjunction of a two clauses, with the second expressing the purpose of the first;
- for the conjunction of two clauses, with the second expressing a command to a first, second or third person

â- is used in **ámma** + H ... **â-** 'if ... then' constructions. In these constructions the clause introduced by the subjunctive particle typically expresses a (mild) command to second or third person.

The subjunctive particle has the special tonal effect of lowering the high tone that is induced by the 3SG subject clitic and the common noun pronominal subject clitics. This can be seen, amongst others, in the first and second example below.

Introducing a clause expressing the purpose of the preceding clause.

Examples of the subjunctive clitic introducing a clause that expresses the purpose of the preceding clause follow here. The verb in the clause introduced by the subjunctive marker is typically a Dependent Incompletive:

m-p-ɛɛ.káṭ-ɔ́k   **ŋə́pák**   **á-kw-i̥kkɔ**
1-C-give:PST-O3   beer   SUBJ-3-drink:DEPINCOMPL

I gave him/her beer to drink

pʊl   **p-ɛɔ́.t**   **á-p-ɪʈɛt**   **kín**   **ɪttǐ …**
person   3-C-go:COMPL   SUBJ-PRO-tell:DEPINCOMPL   O3A   that

the person left (in order) to tell them (that) …

m-p-a.ɪk   **p-a.ɛɔ́**   **á-n-ɔṭ-íṭṭɔ**   **ʊa**   **nɔ-pɪrâ**
1-C-be:PR   C-go:INCOMPL   SUBJ-1-IT:DEPINCOMPL-pick:DEPINCOMPL   fruit(sp.)   on-tree

I am going to pick *ʊa*-fruits in the tree

untɛ   **ŋəʈɪ**   **á-n-ɔnékɔ**   **makkə́lɔ́k**
pour:IMP   water   SUBJ-1-take:DEPINCOMPL   calabashes(k.o.)

pour the water away so that I take (collect) the (empty) calabashes

Also the final high tones of L.HL/L.L.HL verbs are lowered by the subjunctive particle: **â + ŋ + ɔrəpɔ̂ > á-rəpɔ** and **â + kw + ɔʈəkɔ̂ > á-kw-ɔʈəkɔ**. After this, tone bridge is applied:

aləpaccóṭ   w-ɪɾɛ.káṭɛ   nɔ-cịkịt   c-ʊŋ   ɪttɪ
jackal   C-say:PST   on-heart   C-POSS3   that

k-kw-á.mɪkkɔt   ŋərrɔ́ŋ
3-C-deceive:INCOMPL   squirrel

á-rə́pɔ́   ń-tɔ́-pírá   á-kw-ɔ́ɾə́kɔ́-kɔ̂k
SUBJ-(PRO-)move_down:DEPINCOMPL   with-up_on-tree   SUBJ-3-eat:DEPINCOMPL-O3

the jackal said in his heart that he is going to trick the squirrel so that it
comes down from the tree so that he (the jackal) can eat it (fr. written story)

In these constructions, subjunctive **â-** can alternatively be preceded
by **ɔṭə́kka ɪttɪ̌** (literally 'become that') or just by **ɪttɪ̌** 'that' (the
complementizer **ɪttɪ̌** is discussed in 18.7):

tʊpʊ   ɪ-r-a   k-kw-á.k-kw-ɪɾɪkɔ́.t[16]   n-tan   ŋ-ŋíɾɪmak
hole_in_ground   RES-C-COP   3-C-be:COMPL-C-pass_entrance:COMPL   with-up_on:ABS   with-darkness

á-kw-aṭ-ɪpɔt   ɔṭə́kka   ɪttɪ
SUBJ-3-VEN:DEPINCOMPL-dig:DEPINCOMPL   become:DEPINCOMPL   that

á-paṭṭ-ɔ́n   ɛn-ṭ-ərɪk   áṭ-apɔt   ṭán …
SUBJ-person-PL   DEM-C-NEARADD   VEN:DEPINCOMPL-fall_at:DEPINCOMPL   there

the hole in the ground which he had entered when it was still dark in order
to dig it (out deeper), so that those persons would come and fall into it …
('The story of the jackal')

*Conjunction of two clauses, with the second expressing a command to a
second or third person*

A second clause introduced by **â-** can express a command to second
or third person:

ana   ṣabááḥ[17]   á-ɪṭa
and   morning   SUBJ-(2-)cook:DEPINCOMPL

and in the morning you must cook (asida) (App. IV, 40)

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[16] The expected form would be **k-kw-á.p-p-ɪɾɪkɔ́.t** (< **k-kw-ɔká.t p-ɪɾɪkɔ́.t**).
Here, however, the verb was realized as **k-kw-á.k-kw-ɪɾɪkɔ́.t**.

[17] Sudanese Arabic word.

ana   ɔ́k.kw.í   í-p-úrrɔ́t   ɔ-páŋ
and   the_one   RES-C-beat:DEPINCOMPL   PERS-sibling

á-kw-ɔ́nɔ́kɔ   kəpa   áppɪk
SUBJ-3-take:DEPINCOMPL   meat   all

and the one who beats his brother, let him take all the meat

The subjunctive particle can be followed by a Dependent Perfective verb. The action/event is then explicitly presented as consecutive:

ámmá   k-kw-ɛ́ɔ́.t   á-kw-ɪɽɛ.kat   kín   ɪttǐ ...
if   3-C-go:COMPL   SUBJ-3-tell:DEPPRFV   O3A   that

after s/he has arrived (lit.: has gone), s/he must then tell him/her (that) ...

18.3. **ámma** +H 'if, when'

In context, **ámma** +H is always realized with two high tones. This is due to tone bridge spanning from its own initial high to the first high on a following item.

ámma +H 'if, when' introduces a temporal or conditional clause. The **ámma** +H -clause is typically used in irrealis statements. A first clause with **ámma** +H can be followed by a clause introduced by **ana** +H, by conjunctive **á-**, or by subjunctive **â-** in a construction 'if, when … then'. A conjunction morpheme can also be absent from the second clause. There is prosodic boundary before the second clause, so that **ana** +H cannot receive a high tone from a preceding element in this construction. An initial **ámma** +H clause can have a pragmatic high tone (boundary tone) on its last mora (see 3.6). To the same effect, and in spite of the following prosodic boundary, an underlying final falling tone on the last mora of the **ámma** +H clause is generally realized as high.

The verb in an **ámma** +H clause is very often a Completive, but can also be a Present. The verb can also be a Dependent Incompletive; in such cases **ámma** +H is often immediately followed by the conjunctive particle **á-**, but not necessarily so. Incompletives, Pasts and Dependent Perfectives are not attested in clauses introduced by **ámma** +H.

Examples with the constructions **ámma** +H … **ana** +H, **ámma** +H … **á-** and **ámma** +H … **â-** follow here.

ámma +H … **ana** +H … 'if/when … then …'

ámmá	**ḿ-p-á.p-p-ɪná.t**	**ana**	**m-p-á-akkwɔṭ-ʊ́ŋ**
if	1-C-be:COMPL-C-know:COMPL	and	1-C-IRR-kill:COMPL-O2

if I had known, I would have killed you

ámma +H … **á-** … 'if/when … then …'

ámmá	**ḿ-p-ʊ́llɔ́.t**	**cərúk**	**á-n-íɽɪkɛ**	**ṭɔɽək**	**tít**
if	1-C-pierce:COMPL	opening	CONJ-1-make_enter:DEPINCOMPL	rope	in:ABS

when I have made a hole, then I pass a thread through it

ámma +H … **â-** … 'if/when … then …'

ámmá	**ŋ́-k-ʊ́llɔ́.t**	**cərúk**	**á-ɪɽɪkɛ**	**ṭɔɽək**	**tít**
if	2-C-pierce:COMPL	opening	SUBJ-(2-)make_enter:DEPINCOMPL	rope	in:ABS

when you have made a hole, you must pass a thread through it

ámmá	**k-kw-ɛ́ɔ́.t**	**á-kw-ɪɽɛt**	**kín**	**ɪttǐ …**
if	3-C-go:COMPL	SUBJ-3-tell:DEPINCOMPL	O3A	that

when s/he arrives (lit.: has gone), s/he must tell them (that) …

A conjunction word or clitic introducing the second clause is absent in the following case:

ámmá	**ŋ́-kw-íɽé.t**	**mɛník**
if	2-C-say:COMPL	like_this

ɔ-nị̆n	**ṭ-a.ŋállɛnṭ-ʊŋ**	**ɪ-lɔntərɔ̂**
PERS-1A	C-urinate_for:INCOMPL-O2	in-calabashes(k.o.)

if you say so, we will urinate for you in the calabashes (App. IV, 53-54)

The next example illustrates that a Completive is also used in the **ámma** +H-clause when the clause does not express a finished action and/or a resulting state or situation. The final high tone on **cənékɛt**

'there, at that place (not far from the speaker, within sight)' is a pragmatic high tone at the clause boundary (see 3.6):

ámmá   k-kw-ɔ́ppɔ́.t   cánέkét   ana tį̱   ṭ-íkkɔ   ṭ-a.ccɔ́kɔṭ-ɔ̂k
if   3-C-pass:COMPL   there   and thorn C-may   C-catch:INCOMPL-O3

when s/he passes there, a thorn may catch him/her

In the next example, **ámma** +H immediately precedes the conjunctive particle **á-**. The verb 'pass' is a Dependent Incompletive:

ámmá   á-cíŋkị́   ɔ́kkɔ́   cík-í-ṭíṛɔ́t
if   CONJ-sun   pass:DEPINCOMPL   LOC-in-sky

á-kw-ɪkkɔ   cɪk   ɪ-cʊṛέ   c-ɔ-pɪra
SUBJ-3-sit:DEPINCOMPL   VREF   in-bottom   C-of-tree

when the sun reaches high in the sky, s/he must sit under a tree

ámma +H is typically used in situations that have not (yet) happened: counterfactuals, hypothetical situations or situations that can or will happen in the future. In storytelling, however, it is also used in realis descriptions, creating expectation and tension that something is going to happen next. The verb in the **ámma** +H clause is a Dependent Incompletive. Here, **ámma** +H is not immediately followed by the conjunctive particle, because, in connected speech, **a** and **ɔ** coalesce here to **ɔ** (**ámm-ɔ́-kín**):

ámmá   ɔ́-kín   įkkɔ   ŋə́pak   ɪttɪná …
if   PERS-3A   drink:DEPINCOMPL   beer   so

when they were drinking beer like this … ('The story of the jackal')

The **ámma** +H clause can also be the second clause. In this case, too, the verb in the irrealis statement introduced by **ámma** +H is a Completive, Present or Dependent Incompletive. In the latter case the conjunctive particle tends to immediately follow after **ámma** +H. Examples with a Completive verb in the **ámma** +H clause:

kəllán   k-á.ṛə́kɔ́   ṭʊ́ṛít   ámmá   k-k-íamâ.t
old_woman   C-eat:INCOMPL   food   if   PRO-C-become_hungry:COMPL

the old woman will eat food when she is hungry

m-p-á-ananɛ.t   kín ṭúɽít ámmá ḿ-p-íná.t   ɪttɪ ṭ-ṭ-éllâ.t
1-C-IRR.bring_for:COMPL O3A   food   if   1-C-know:COMPL that PRO-C-be_absent:COMPL

I would have brought them food if I had known that it was not there

With a Present verb in the **ámma** +H clause:

n-íttararɔt   ámmá   ŋə́ɽɛ ŋ-əɽek ŋ-a.ɪk   ŋ-ɔnṭɔ́mat
2A-help_each_other:DEPINCOMPL if   work   C-some C-be:PR   C-hard

you must help each other when there is some difficult job

With **ámma á**- and Dependent Incompletive:

ka   k-úrə́ttá   ámmá   á-rít   ɔ́rékɔ
body   C-be_woken_up:INCOMPL   if   CONJ.PERS-12   work:DEPINCOMPL

the body will be woken up when we work (we feel sleepy now, but if we start working we will become awake)

aɽɪŋá   áṭ-ɪkkɪnɛ[18]   ɔ-ɪáɪa   cɪk pá.p.ɔ́tté
come:IMP.ALLOW CONJ.(2.)VEN:DEPINCOMPL-wait_for:DEPINCOMPL PERS-mother VREF short_time

ámmá   á-kw-ântán
if   CONJ-3-come:DEPINCOMPL

come and wait a little time for my mother, if she comes (i.e. maybe she will come) (fr. written story)

Finally, verbless **ámma** +H-clauses were found, but considered not really grammatical by my consultant (JS). It concerns **ámma** +H clauses with a prepositional phrase (first example below). The clause with verb was preferred (second example below). Both have a clause-final pragmatic high tone on 'four'.

?ámmá ná-ánɔ́k   w-ɔ́cɔ́ɽín   a-úl ...
if   on-moons   C-four   CONJ-people

when on four months (in April), the people ... (fr. written text)

---

[18] The conjunctive particle **á** seems involved here. The 2SG pronoun clitic **ŋ́** is deleted between vowels. Derivation: **á** + **ŋ́** + **aṭ-ɪkkɪnɛ** > **aáṭɪkkɪnɛ** > **ăṭɪkkɪnɛ** > **áṭɪkkɪnɛ**.

ámmá ánɔ́k w-aa.t w-ɔ́cɔ́ɽín a-úl …
if   moons C-come:COMPL four CONJ-people

when the months have reached four (when it is April), the people …

18.4. **akka** + H 'that'

akka + H 'that' can join clauses and also noun phrases. It can function as a complementizer and it can introduce clauses with a temporal or causal interpretation. Whereas a clause introduced by **ámma** + H and a Completive verb typically has an irrealis reading, a cause introduced by **akka** + H with a Completive verb typically has a realis reading. Followed by the conjunctive particle **á-**, **akka** + H can have a negative interpretation ('and not x', 'and so that not x'). Joining noun phrases it expresses 'or'.

18.4.1. **akka** + H as complementizer

akka + H can also be used as a complementizer:

l-ɔ́pərɔ́t akka m-p-akánn-ɛlɪkkɔ
PRO.C-good   that   1-C-NEG-release:DEPCOMPL

it is good that I did not release it

m-p-ɔŋɔt̪.ɛ́ akka kéccók k-ín k-ɔ́nú aɽəpʊ cɪk áppɪk
1-C-like:COMPL that market C-POSS1A C-have things VREF all

I like (it) that our market has everything (fr. written story)

The previous examples have a non-dependent verb in the **akka** + H clause, the next a dependent verb (a Dependent Incompletive). The first example below has a two-clause construction with **ámma** + H … **ana** + H … 'if/when … then …' as its complement.

ana úl w-ɔŋɔt̪.ɛ́ cannan áŋŋəna akka
and people C-like:COMPL very very that

ámmá w-ɛ́ɔ́.t ana w-íɔt úl ɲ-cɪk áppɪk
if   PRO.C-go:COMPL and PRO.C-find:INCOMPL people with-place all

and the people like it very much that, when they go (lit.: have gone), they find people from everywhere (fr. written story)

m-p-ɔmmá	**akka**	**ɔ-ʊn**[19]	**ɔkkɔ̂t**
1-C-know_not:INCOMPL	that	PERS-1	do:DEPINCOMPL

I don't know what to do (lit.: that I do (it))

m-p-ɔmmá	**akka**	**ɔ-ʊn**[20]	**ákɔ**
1-C-know_not:INCOMPL	that	PERS-1	wear:DEPINCOMPL

I don't know how to wear it (lit.: that I wear (it) (for example a tobe[21]))

In the next case, **akka** +H complements **tɔkɪ́t** 'before':

mɛɲcén	**tɔ́.kɪ́t**	**akka**	**ṭ-ɔkʊrrɔ**	**én-ṭ-í**
some_time_ago	before	that	NOM-engrave	DEM-C-NEARSP

ṭ-úrrən-ɔṛəkkétta.t	**cɪc-cəné**	**ṭáṛʊ**	**a-ṭʊṛít**	**ṭ-á.ṭ-ṭ-ɔpərɔ̂t**
C-just_now-be_put:COMPL	LOC-here	Ṭaṛʊ	CONJ-food	C-be:COMPL-C-good

some time ago, before (that) this writing workshop was organized right here in Ṭaṛʊ, there was enough food (fr. written story)

akka + H as complementizer is also part of the constructions **ɪlên akka** +H 'that's why' (see 8.2.4), **ŋɪmpén akka** +H 'that's what, that's why' and **tat akka** +H 'that's how' (20.1.2 and 20.1.4). It is furthermore applied in non-subject focus constructions (see 19.2) and in constructions with question words questioning non-subject constituents (see 20.1). These constructions involve left-dislocation of the focussed constituent or the question word, followed by **akka** +H.

18.4.2. **akka** +H with temporal or causal reading

When the first clause of a sentence is introduced by **akka** +H, the second is generally introduced by the conjunctive particle **á-** 'and, while' or by **ana** +H 'and'. This first **akka** +H clause contains a non-dependent verb —often a Completive—, or an adjective, and expresses a realis situation. It can have a temporal or a causal interpretation. The first pair contrast a (realis) **akka** + H clause with an (irrealis) **ámma** + H clause. Note that completiveness of the verb

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[19] Realized in connected speech as **mpɔmmá-kk-ɔʊn.**
[20] Realized in connected speech as **mpɔmmá-kk-ɔʊn.**
[21] Large cloth worn by many Sudanese women. It is wrapped around the body in a specific fashion.

is established by the auxiliary 'again' and that there is no prosodic boundary before **ana** in the first example:

akka   **ŋ-kw-áppər-ɔ́múɲɛ**   **ána**   **ŋ-kw-íɔ**
that   2-C-again:COMPL-steal:DEPINCOMPL   and   2-C-die:INCOMPL

now that/because you have stolen again, you will die

ámmá   **ŋ́-kw-áppər-ɔ́múɲɛ**   **ana**   **ŋ-kw-íɔ**
if   2-C-again:COMPL-steal:DEPINCOMPL   and   2-C-die:INCOMPL

if you steal again, you will die

Some examples with a temporal reading of the first clause follow here. In the first, the subjects of the joined clauses are different, in the second and third they are co-referent. The verb in the second clause with co-referent subject is typically a Dependent Perfective, also when the action is not consecutive (last example below).

Note that the final high of **mpaát** 'I have come' in the first example shifts (and gets deleted), whereas **kkwáát** 's/he had come' in the second example retains the high tone on its last mora.

akka   **m-p-aa.t**   **a-k-kw-ɔ́ká.t**   **á-kw-ɔ́kətaccê-k**
that   1-C-come:COMPL   CONJ-3-C-be:COMPL   CONJ-3-watch:DEPINCOMPL-O3

when I arrived, s/he was watching him/her

akka   **k-kw-áá.t**   **a-kw-íɽɛkat**   **kín**   **ɪttǐ …**
that   3-C-come:COMPL   CONJ-3-tell:DEPPRFV   O3A   that

when s/he arrived, s/he told them …

maɽɔ́t   **akka**   **m-p-ɔtté**   **cík**   **a-n-élɪkk.at**   **lɪ̧cɔk**
long_ago   that   1-C-small   VREF   CONJ-1-release:DEPPRFV   goats

long ago, when I was small, I released the goats

A particular **akka** +H clause can have both a temporal and a causal reading:

akka	mə́ɽɛ	m-ɔká.t	cɪk
that	cultivating_party	C-be:COMPL	VREF

a-púl	ant-íkkɔ	ŋə́pak
CONJ-person	can:DEPINCOMPL-drink:DEPINCOMPL	beer

when/because there was a cultivating party, the man could drink beer

In the following example, the **akka** +H clause, with Present Continuous verb, has a causal reading:

akka	m-p-a.ɪk	p-a.ɛ̃	nɔ-kaɽə́n
that	1-C-be:PR	C-go:INCOMPL	on-place

ana	ɔ-rɪt	ṭ-íkkɔ	ṭ-a.kə́nn-ɔrɛ́kɔ
and	PERS-12	C-may	C-NEG-work:DEPINCOMPL

now that/because I am going to that place, we may not be able to do work

The clause introduced by **akka** +H can also be the second clause. The first example below, with Completive verb in **akka** +H clause has a temporal reading:

m-p-ɔká.t	p-úrrən-áɔ	ákka	k-kw-íɔ́.t
1-C-be:COMPL	1-C-just_now-come:DEPINCOMPL	that	3-C-died:COMPL

I had just arrived after s/he had died (I was just too late)

Some examples of second **akka** +H clauses with causal reading follow here. Note that in the first, there is a prosodic boundary realized before **akka**. The sentence can also be said without prosodic boundary, in which case 'tree' is realized with a final high tone:

m-p-a.ɪk	p-a.ɛ̃́	á-n-ɔṭ-íṭṭɔ
1-C-be:PR	C-go:INCOMPL	SUBJ-1-IT:DEPINCOMPL-pick:DEPINCOMPL

ʊa	nɔ-pɪrâ	akka	w-élla	nɔ-ʊɽɪ	w-ɔ́-nɔ-capʊ́
fruits(k.o.)	on-tree	that	PRO.C-be_absent:INCOMPL	on-branches	C-of-on-ground

I am going to collect *kʊa*-fruits up in the tree because they are not there on the branches near the ground

ɔ-kín	ṭ-á.ík	ṭ-íkkɔt	púl	cɪk	ákka[22]	p-p-ɔ́ŋɔ́
PERS-3A	C-be:PR	C-sit_at:INCOMPL	person	VREF	that	PRO-C-ill

they are sitting with the person now that/because he is ill

A conjunction morpheme linking the clauses is absent if the second clause has a hortative pronoun on the verb:

akka	k-kw-áá.t	tír-ɛ̂ɔ̂
that	3-C-come:COMPL	HRT12-go:DEPINCOMPL

now that/because s/he has arrived, let's go

18.4.3. **akka** + H introducing a noun phrase

akka + H does not always introduce a full clause. In the next examples, where it expresses 'because', it is followed by just a noun phrase. In these cases there is never a prosodic boundary before **akka** + H:

ŋ-kw-a.pə́llɛn-ɪn	ákka	tacɔk	t-în-r[23]
2-C-fear_for:INCOMPL-O1	that	legs	C-POSS1-Q

are you afraid of me because of my feet?

ɔ-kʊkkʊ́	p-á.ík	p-ímmakɔ	ákka	kápɪk
PERS-Kʊkkʊ	C-be:PR	C-shelter:INCOMPL	that	rain

Kʊkkʊ is sheltering because of the rain

18.4.4. **anakka** + H 'and when, and after' and **mənnakka** + H 'and when, and after'

akka + H introducing a first clause can be preceded by **ana** + H 'and', forming **anakka** + H. It can have a reading as 'and when' or as 'and because'. Examples:

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[22] **akka** can also be realized here with low tones. In that case there is a prosodic boundary before it.

[23] ɪ was pronounced with some length and a falling tone, for which I have no explanation.

an-ákka   **k-kw-árət̪uk**   **íllɔ**   **ɪ-rut̪t̪ərúk**
and-that   3-C-still   divide_in_two:DEPINCOMPL   in-pig

a-kw-ɔ́mpun.at   **nə́mámá**   **í-n-ɔ́pôn**
CONJ-3-roast:DEPPRFV   inside_of_pumpkin   RES-C-bitter

and when he was still to divide the pig in two, he roasted the bitter inside of a pumpkin (and before he divided the pig in two …) (fr. written story)

an-ákka   **m-p-ɔnú**   **nə́ɽέ**   **n-ɔ-pəllá**
and-that   1-C-have   fear   C-of-cat

ana   **m-p-a.kkɔt**   **kát̪-t̪a**   **cʊŋ**
and   1-C-do:INCOMPL   how-QW   UNCERT

and because I am afraid of the cat, what am I going to do?? ('The story of the jackal')

mənnákkă consists of **mənnă** 'even' and **akka** + H. The combination expresses 'when, after' and introduces a clause preceding the main clause. **mənnákkă** can itself again be preceded by **ana** + H 'and'. In the first two examples the second clause is introduced by **á**- and has a Dependent Perfective verb. The last example lacks a conjunction between the two clauses, and has a Past verb in the main clause.

mənn.ákka   **k-kw-ɔ́ná.t**   **ŋáák**
when   3-C-bring:COMPL   oil

a-kw-íp.ant̪ɛt   **t̪akəɽuk**   **ɪ-ʊɽəccô**
CONJ-3-dig_for:DEPPRFV   chicken   in-feathers

when/after he had brought the oil, he applied it between the feathers of the chicken

mənn.ákka **k-kw-ímmá.t** **pá-p-έn** **á-p-úrəkɔ**   **nɔ-kaɽən**
when   3-C-see:COMPL   thing-C-DEM   CONJ-PRO-get_up:DEPINCOMPL   on-place

ŋ-ká   **appɪk**   **a-nəɽέ**   **ɔ́ccɔ́k.at̪-ɔ̂k**
with-body   all   CONJ-fear   catch:DEPPRFV-O3

when he saw that thing getting up from the place with its whole body, fear took hold of him (fr. written story)

mənn.ákka	**ɔ-nǐn**	**ṭ-ɔrɛkɔ́.t**	**maʈɪ**	**m-ɔtté**	**cík**
when	PERS-1A	C-work:COMPL	days	C-small	VREF

ɔ-nɛnní	**p-ɔṭəkkán-ín**	**ɛ́rɛ́**	**ɔ́-páŋ-k-în**
PERS-Nɛnnɪ	C-become_for:COMP-O1	like	PERS-sibling-C-POSS1

ana	**m-p-ɔṭəkkán-ɔ́k**	**ɛ́rɛ́**	**ɔ́-páŋ**
and	1-C-become_for:COMPL-O3	like	PERS-sibling

when/after we had worked for some days, Nɛnnɪ had become like a sister to me and I had become like a sister to her (fr. letter)

18.4.5. **akka** +H + **á-** introducing a negative purpose clause

akka +H directly followed by conjunctive **á-** can express a negative purpose 'so that not':

ana	**ɔ-nɔn**	**ṭ-ɛllá**	**ʈʊk**	**ákka**	**a-ṭ-ɔ́kəʈɔ́-kín-î**
and	PERS-2A	C-not_have:INCOMPL	dog	that	CONJ-PRO-bite:DEPINCOMPL-O1-Q

and you do not have a dog, so that it will not bite me? (fr. written story)

ɛɛ	**kʊʈɪ**	**cɪʈ.ʈán**	**á-ʊl**	**aṭ-ɔnṭɔ-kɔ́k**		**n-n-a-ɔ́n**
stab:IMP	cry	far	SUBJ-people	VEN:DEPINCOMPL-pull:DEPINCOMPL-O3		with-on-PERS-1

akka	**a-n-íɔ**
that	CONJ-1-die:DEPINCOMPL

cry out loudly so that people will come and pull him away from me, so that I do not die (fr. written story)

ɔ-nǐn	**ákk-áŋkwɔt**	**kamʊʈɛ**	**k-árrɔ̂**
PERS-1A	FOC-guard:INCOMPL	celebration	C-of.Lumun_people

akka	**a-k-ʊ́rat**		**cɪk**	**ʈúpʊt**	**ṭ-əʈɛk**
that	CONJ-PRO-become_lost:DEPINCOMPL		VREF	year	C-some

we are the ones that take care of the Lumun celebration, so that it will not be lost some year (we are the ones who organize it every year) (fr. song text)

ṭ-ícat   **pə́ɽɪn á-ʊrəkɔ**   **ŋ-ŋírɪmak**
IT:IMP-lie_down:DEPINCOMPL   finally SUBJ-(2-)get_up:DEPINCOMPL   with-darkness

akka a-ṭ-ɔccɔ́²⁴   **nɔ́-ńṭɛ́ á-ə́rɛ́ ɔ́kị̈ttakɔ**
that   CONJ-(2-)IT:DEPINCOMPL-receive:DEPINCOMPL on-sleep SUBJ-work spoil:DEPINCOMPL

go and lie down now, so that you can get up early in the morning and do
not sleep late (and do not take on sleep), so that the work will not be spoilt
(fr. written skype conversation)

However, **akka** +H immediately followed by **á-** does not always
have a negative purpose reading. In the sentence below the
constructions draws attention to the action as a process with some
duration:

m-p-ɪmmá.t   pʊl   akka   a-p-ɛ́ɔ̃   ń-tʊ́án
1-C-see:COMPL person that CONJ-PRO-go:DEPINCOMPL with-home

I saw the man while he was busy leaving the house

m-pɪmmá.t   ɔ-kʊkkʊ́   akka   a-kw-ɔ́mʊɲɛ   ị̈mít
1-C-see:COMPL PERS-Kʊkkʊ   that CONJ-3-steal:DEPINCOMPL goat

I saw Kʊkkʊ while he was busy stealing a goat

In this construction it is, in principle, possible to leave **akka** +H (not
á-) out. The action is then conveyed as a simple action, not as a
process:

m-p-ɪmmá.t   pʊ́l   á-p-ɛ́ɔ̃   ń-tʊ́án
1-C-see:COMPL person CONJ-PRO-go:DEPINCOMPL with-home

I saw the man leaving the house

When **akka** +H functions as complementizer, a combination with
the conjunctive particle **á** appears to be used before a pronoun clitic,
(not before full pronouns though, as demonstrated by examples in
18.4.1):

---

²⁴ **a-ṭ-ɔccɔ́** (< **á-** + **ŋ** + **ɔṭ** + **ɔccɔ̂**)

m-p-ɔmma   **ákka**   **a-n-ɔkkɔ́t**   **kın**
1-C-not_know:INCOMPL   that   CONJ-1-do:DEPINCOMPL   O3A

I do not know what to do with them

It must be remarked, that, like after **ámma** +H, some uncertainty remains about presence or absence of the conjunctive particle immediately after **akka**, due to coalescence of the **a**'s across the word boundary.

18.4.6. **akka** +H 'or' linking noun phrases

akka +H can also link noun phrases, expressing 'or'. According to my consultant (JS) this is found particularly in the speech of elderly people. Younger people generally use the Arabic loan word **ala** +H 'or' (< Sudanese Arabic *wala*). Two examples follow here.

lʊ́kka   **akka/ala**   **ɔ-lɔ́ttí**   **á.pəllın**   **ântán**
Lʊkka   that/or   PERS-Lɔttı   SUBJ.PERS-one_from_group   come:DEPINCOMPL

Lʊkka or Lɔttı, one of you must come

įcat   **akka/ala**   **karrǎ**
true   that/or   lie

it is true or false

18.5. **ámma**, **ámmakka** +H and **ɛrɛ** +H '(just) like, as if'

ámma and **ɛrɛ** +H are used for linking a clause and a noun phrase, expressing 'like'. Note that **ámma** 'like' is tonally different from **ámma** +H 'if, when'. There is also **ámmakka** +H 'like', which is a combination of **ámma** and **akka** +H. Some examples follow here.

aʊn   **w-įcat**   **ámma**   **kwa**
rats   C-be_abundant:INCOMPL   like   chaff

the rats are many like chaff

ŋ-kw-ɔ́n-ṭ-akka   **ŋ-kw-ɔttɛ́kállán**   **ɛ́rɛ́**   **ṭɔ́ɽək**
2-C-why-QW-that   2-C-thin   like   rope

why are you thin like a rope?

ɛrɛ   ámm.akka   ôl
speak:IMP   like   people

speak like people! (i.e. 'speak like everybody', 'speak normally')

ʋl   w-a.rá   aɽəpʋ   ámm.akka   ʈún   ana   áʈʈɔ́pâ
people C-cultivate:INCOMPL   things   like   onion   and   tobacco

the people cultivate things such as onions and tobacco

The example below has the copula C-**á**, preceded by the 3SG pronoun clitic, attached to **ámmakka**:

k-kw-ámm.akka   púl   í-p-íná   cɪk
3-C-COP.like   person   RES-C-know:INCOMPL   VREF

he is like a wise man (Matthew 7:24)

ámmakka +H and **ɛrɛ** +H can also link two clauses:

lɔn   ɪ-l-a.kə́rənnɔ   púl   á-p-ɔ́ká   púl
words   RES-C-let:INCOMPL   person   CONJ-PRO-be:DEPINCOMPL   person

ámm.akka   p-p-ɔ́ŋɔʈ.ɛ́
like   PRO-C-like:COMPL

things that allow a person to be the person s/he wants (lit.: while s/he is the person in the way s/he wants)

tɔr   t-ɔkkwɔʈ-ín   ɛ́rɛ́   m-p-á.ɽə́kɔ́   kə́pá
appetite   C-kill:INCOMPL-O1   like   1-C-eat:INCOMPL   meat

appetite kills me like (as if) I will eat meat (meaning: I am craving for meat)

In some cases **ámmakka** rather translates as 'how, the way in which' than as 'like':

m-p-a.ɪk   p-a.ʈ-érɛ   nɔ́-cákkɔ̂ŋ
1-C-be:PR   C-IT:INCOMPL-speak:DEPINCOMPL   on-calabash(k.o.)

ámm.akka   úl   ɔkʋrrɔ   makkɔ̂ŋ
how   people   engrave:DEPINCOMPL   calabashes(k.o.)

I am going to talk about the calabash, how the people decorate calabashes (App. III, 2-3)

ana	l-ɛl-l-ɪ	ámm.akka	l-éréṯ-ɔ́k		l-ɔ́kíṯak
and	C-DEM-C-NEARSP	like	PRO.C-speak_about:COMPL-O3		C-bad

and these (words), the way they (the words) spoke about him, were bad (i.e. the words were bad)

18.6. **mɔnɔ** 'until', **məna** 'until'

mɔnɔ and **məna**[25] both express 'until'. It seems that they can be used interchangeably. They are immediately followed by the conjunctive particle **á-** and the clause they introduce contains a Dependent Perfective or Dependent Incompletive verb. They are (probably) both low-toned, but are often realized high due to tone bridge. A case of **mɔnɔ** with high tones which cannot be ascribed to tone bridge is presented here as well. The first high tone there is from regular tone shift, while the second (probably) is a boundary tone of the same type as can be found at the end of a first **ámma** +H or **akka** +H-clause (see chapter 3.6). Some examples with **mɔnɔ**:

a-ṯɔ́mɔ́ccɔ́	ɔ́ném.at	kaṯʊk	ɪ-ṯɔ́n	ṯ-ɔ́-pá-p-én
CONJ-old_man	press:DEPPRFV	spear	in-mouth	C-of-thing-C-DEM

mɔ́nɔ́	á-p-í.at
until	CONJ-PRO-die:DEPPRFV

and the old man pressed the spear into the mouth of that animal (the leopard) until it died (fr. written story)

ámmá	árrʊ́	w-ʊɔ́.t	ɪ-cɛkérék	ṯɔ́ɽí
if	Lumun_people	C-descend:COMPL	in-price	Ṭɔɽî

mɔ́nɔ́	á-kín	i̧kkɔ	ŋəɽɪ	n.tɪ	ɪ-rɔ́k...
until	CONJ.PERS-3A	drink:DEPINCOMPL	water	from	in-water_place

when the Lumun people have descended to the market in Ṭɔɽî until they drink water from the well (then …)(situation: the Lumun descend to the market, reach the Tocho area in the valley and drink water from the well of the Tocho people, when this happens then …)

mɔnɔ and **məna** are often used in combination with **pʊ́ccʊk** 'for some time'. The combination generally translates just as 'until':

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[25] There is also **məna** 'even' (mentioned in 17.1.4).

ɲʊkʊl	ɲ-ɔppéʈ.ɛ	ʈɔntərrɔ	ŋaɛ	púccók
children	C-fill:COMPL	calabash(k.o.)	urine	for_some_time

mɔ́nɔ́	á-ɪŋkat[26]	ɪ-pʊɽôt
until	CONJ-(PRO-)go:DEPPRFV	in-middle

the children filled the calabash with urine until it was half-full (i.e. until the urine went half-way)

The next example has the aforementioned boundary tone. Interestingly, the across-word boundary sequence **k-m** (**lị̃cɔk mɔ́nɔ́**) was not pronounced as the expected [m] (with full deletion of the final obstruent before the nasal), but as [ŋ], with the nasal adopting the place of articulation of the preceding (deleted) obstruent: [lịɟo-ŋɔ́nɔ́]. The nasal discourse enclitics -**na** and -**mɛ́** (see under 17.2) display the same type of assimilation.

a-n-úrɛ.kat	nɔ́-lị̃cɔk	mɔ́nɔ́
CONJ-1-forget:DEPPRFV	on-goats	until

a-l-ɔ́ɽəkkanʈɛt	púl	p-əɽek	mî̃l
CONJ-PRO-eat_for:DEPPRFV	person	C-some	sorghum

and I forgot about the goats until they ate somebody's sorghum

In the following construction **mɔnɔ** is not followed by **á-** but immediately by a Dependent Incompletive verb. The **mɔnɔ**-clause here is part of a complex two-clause construction introduced by **ámma** +H:

ámmá	ɔ́-rʊ́n	ʈ-éɔ́.t	mɔ́nɔ́	ɔ́ʈ-íɔt	ana ...
if	PERS-12A	C-go:COMPL	until	IT:DEPINCOMPL-find:DEPINCOMPL	and

when we will have found it, then ... (lit.: when we have gone until going and finding (it), then ...)

---

[26] The high tone is due to deletion of pronominal **ŋ** (which causes the high tone to change from **ɪ** to **ɔ**) followed by vowel assimilation and vowel shortening (**á-** + **ŋ-** + **ɔíŋkat** > **á-** + **ŋɔ́ɪŋkat** > **aɔ́ɪŋkat** > **aáɪŋkat** > **áɪŋkat**)

18.7. The complementizer ɪttĭ 'that'

The common complementizer, typically used with verbs of speech
but also in other contexts, is **ɪttĭ** 'that'. **ɪttĭ** contains a formative **tĭ**,
which also occurs, amongst others, in the defective verb **attĭ** 'I hope'
(see 12.21). **ɪttĭ** can also serve as a purposive conjunction between
two clauses expressing 'so that, in order to'. As such it can alternate
with **ɔt̪ə́kka ɪttĭ** 'so that, in order to' (literally: 'become that').

With some verbs the use of **ɪttĭ** introducing the complement clause is
obligatory, with some others it is optional. **ɪttĭ** is not used with
sensory verbs. As described earlier in this chapter, such situations are
construed with the conjunctive particle **á-** 'and, while': 'I saw X,
while s/he …'.

A clause introduced by **ɪttĭ** contains a subject and a non-dependent
verb:

m-p-ănn-aŋkɔt   **ɪttɪ**   **m-p-ítta**
1-C-NEG-want:DEPCOMPL   that   1-C-get_married:INCOMPL

I do not agree to get married

Examples of **ɪttĭ** in different contexts follow here.

ɪttĭ introducing the complement of a speech verb

Verbs of speech and speech content are connected through **ɪttĭ**,
independent of whether the speech content is direct speech or
indirect speech. An example with direct speech and one with indirect
speech follow here:

ɪttɪná   **k-kw-ákkar.áţɛ**   **ɔ-ɪáɪa**   **ɪttɪ**
so   3-C-call:PST   PERS-my_mother   that

ɪáɪa   **ant-áɔ**
mother   can:DEPINCOMPL-come:DEPINCOMPL

so s/he called my mother: "mother, please come"

m-p-ɔká.t	**cɪk**	**a-n-ɔ́mɛntɛ̱-ɔ́k**	**ɪttɪ**
1-C-be:COMPL	VREF	CONJ-1-tell.PLUR:DEPINCOMPL-O3	that

k-kw-á.kərənnɔ	**karră**
3-C-let:INCOMPL	lie

I was always telling him/her that s/he should not lie

Complement clauses with an embedded question are linked to a preceding clause with a speech verb through **ɪttĭ** (first example below); not, however, when the locative relative **ná** 'where' is used (second example).

ɔ-kín	**t̪-ɔt̪i̱ɔt̪.ɛ́**	**tít**	**íttí**	**ŋímpén**	**akka**	**ɔ-kín**	**ɔkkɔ̂t**
PERS-3A	C-answer:COMPL	in:ABS	that	what	that	PERS-3A	do:DEPINCOMPL

they answered saying what they would do

k-kw-á.kənn-ɪɽɛ	**na**	**k-kw-áa.t**	**ɲ́.ŋɪn**
3-C-NEG-say:DEPCOMPL	where:REL	3-C-come:COMPL	with:ABS

s/he did not say where s/he came from

Complementing ɔŋɔt 'like, want'

The verb **ɔŋɔt** 'like, want' and its clausal complement can be linked through **ɪttĭ** but also through **akka** + H. With **ɪttĭ**, the verb expresses desire ('want'), with **akka** + H appreciation ('like'). Compare:

m-p-ɔŋɔt̪.ɛ́	**ɪttɪ**	**kéccók**	**k-ín**	**k-ɔ́nú**	**aɽəpʊ**	**cɪk**	**áppɪk**
1-C-like:COMPL	that	market	C-POSS1A	C-have	things	VREF	all

I want our market to have everything

m-p-ɔŋɔt̪.ɛ́	**akka**	**kéccók**	**k-ín**	**k-ɔ́nú**	**aɽəpʊ**	**cɪk**	**áppɪk**
1-C-like:COMPL	that	market	C-POSS1A	C-have	things	VREF	all

I like it that our market has everything

Compare also the following examples. 'I like meat' is expressed with a nominal phrase as complement and without complementizer. 'I want meat', on the other hand, is expressed with a verbal complement clause and **ɪttĭ**.

m-p-ɔŋɔt̪.έ   **kəpá**
1-C-like:COMPL   meat

I like meat

m-p-ɔŋɔt̪.έ   **ɪttɪ**   **m-p-a.ɽəkɔ**   **kəpá**
1-C-like:COMPL   meat   1-C-eat:INCOMPL   meat

I want to eat meat (I want meat)

Complementation of some other verbs: optional use of ɪttɪ̆

With some verbs **ɪttɪ̆** is optional when introducing a verbless clause
or a clause with non-dependent verb. Examples are **ɔkwárɪkɔt** 'recall,
remember' and **ɪɔt** 'find':

ant-ɔkwárɪkɔt   **(ɪttɪ)**   **ɔ́t̪-t̪á**   **έm-p-í**
can:DEPINCOMPL-remember:DEPINCOMPL   that   who-QW   DEM-C-NEARSP

please (try to) recall who this is!

akka   **k-kw-ɔ́kʋɽɔt̪.έ**   **n-tán**
that   3-C-move_up:COMPL   with-up_on:ABS

a-kəɽɔ́l   **ɔ́t̪-í.at**   **(ɪttɪ)**   **mén**   **m-ɛllâ**
CONJ-tortoise   VEN:DEPINCOMPL-find:DEPPRFV   that   palm_fruits   C-be_absent:INCOMPL

when he climbed up, tortoise found that the palm fruits were finished (App.
IV, 118-119)

Compare also the following cases with **ɪɔt** 'find' with and without
ɪttɪ̆. In the second, with Dependent Incompletive verb, **ɪttɪ̆** cannot be
used:

… a-n-íkk.at   **cɪk**   **pá.p.ɔ́tté**   **a-n-ɔt̪í.at**   **(ɪttɪ)**
CONJ-1-sit:DEPPRFV   VREF   short_time   CONJ-1-find:DEPPRFV   that

m-p-a.ɪk   **p-íɽɪmat**   **n.tɪ**   **ɪ-kį́t**
1-C-be:PR   C-become_dark:INCOMPL   from   in-eyes

… I sat for a while and found (experienced) that I was getting blind

... a-n-íkk-at	cɪk	pá.p.ɔ́tté	a-n-ɔt̬í.at
CONJ-1-sit:DEPPRFV	VREF	short_time	CONJ-1-find:DEPPRFV

a-n-íṛɪmat	n.tɪ	ɪ-kį́t
CONJ-1-become_dark:DEPINCOMPL	from	in-eyes

... I sat for a while and found (experienced) that I was getting blind

C-ɔnʊ́ ɪttǐ 'must'

ɪttǐ is obligatory in the expression C-ɔnʊ́ ɪttǐ 'must' ('have that'):

ŋ-kw-ɔnʊ́	ɪttɪ	ŋ-kw-a.ccį́kɔt
2-C-have	that	2-C-hear:INCOMPL

you must listen

With evaluating adjectives

ɪttǐ complements evaluation adjectives such as 'good' and 'forbidden'. In the first example the pronominal proclitic **l** refers to **lɔn** 'words, matters', in the second **pa** is short for **papʊ** 'thing'.

l-ɔ́pərɔ́t	ɪttɪ	ŋ-kw-aá.t
PRO.C-good	that	2-C-come:COMPL

it is good that you have come

pa-p-ɔt̬ʊ́n	ɪttǐ...
thing-C-forbidden	that

it is forbidden that ...

ɪttǐ complementing ɪttɪnâ 'so, like this'

When **ɪttɪnâ** 'so, like this' is complemented, **ɪttǐ** must be present:

m-p-ɔ́nt̬a	akka	m-p-ɔŋakɔ́t̬.ɛ	ɪttɪnâ	ɪttǐ ...
1-C-why	that	1-C-be_loved:COMPL	so	that

why I am so loved that ...

ɪttǐ complementing **ámma** +H 'if, when'

ámma + H 'if, when' can be complemented by a clause with **ɪttĭ**:

an-ámmá	íttí	ŋ-ŋ-ɔ́kkwɔ́.r-ín	ɲ-cík
and-if	that	PRO-C-hit:COMPL-O1	with-VREF

á-ɛɛ́		kʋrɪ	cɪk-ɪ-ṭɪɽɔ̂t
SUBJ-(PRO-)stab:DEPINCOMPL		cry	LOC-in-sky

and if it will be so that he (the rabbit *ŋaṭṭərəpɛ*) has hit me down, you must cry out in the sky (fr. written story)

ɪttĭ introducing the complement of a noun phrase

ɪttĭ can also introduce an elaboration on generic nouns, including **lɔn** 'words, matters' and **papʋ / aɽəpʋ** 'thing / things'.

ɔ-nɛnní	p-íccá	p-ɔ́nʋ́	lɔn	ɪttɪ	k-kw-ântan-î
PERS-Nɛnnɪ	C-still	C-have	words	that	3-C-come:INCOMPL-Q

is Nɛnnɪ still planning to come?

ana	áɽəpʋ	w-ɔ-rʋa	w-ɔká.t	ɪttɪ	ṭʋk	ána	túṭṭəruk
and	things	C-of-hair	C-be:COMPL	that	dog	and	pig

ana	pá-p-ɔ-kɪra	ana	ʋmaṭɔ̂n
and	thing-C-of-trees	and	elephant

and the animals were the dog, the pig, the leopard and the elephant

The noun **kəɽan** 'name' is complemented by **ɪttĭ**:

ŋ-kw-ɔccɔ́.t	kəɽan	ɪttɪ	ɔ́ṭ-ṭa
2-C-receive:COMPL	name	that	PERS.3-QW

what is your name?

m-p-ɔnʋ́	kəɽan	ɪttɪ	ɔ-kʋmâŋ
1-C-have	name	that	PERS-Kʋmaŋ

my name is Kʋmaŋ

ɔṭə́kka ɪttĭ 'so that, in order to' / ɪttĭ introducing a purpose clause

ɔṭə́kka ɪttĭ (literally 'become that') expresses 'so that, in order to'. In these cases, alternatively, just **ɪttĭ** can be used:

ɔ-kʊkkú	p-á.ík	p-á.lıkınɛ	ɔ-kakká	cık
PERS-Kʊkkʊ	C-be:PR	C-stop:INCOMPL	PERS-Kakka	VREF

(ɔt̪ə́kka)	ıttı	ɔ-kín	t̪-íkkɔ	cık
become:DEPINCOMPL	that	PERS-3A	C-sit:INCOMPL	VREF

Kʊkkʊ is stopping Kakka in order to sit together

m-p-ɔká.t	p-ɛɔ́.t	ıttı	m-p-a.t̪-ícat
1-C-be:COMPL	C-go:COMPL	that	1-C-IT:INCOMPL-lie_down:DEPINCOMPL

a-n-ɔccík.at	púl	p-ər̪ɛk	a-p-ɔ́ɔ
CONJ-1-hear:DEPPRFV	person	C-some	CONJ-PRO-cry:DEPINCOMPL

I had just left (in order) to go and sleep when I heard a person cry

As mentioned in the section on the subjunctive particle **â-**, **ɔt̪ə́kka ıttı̆**, or just **ıttı̆** can be followed by **â-**. In such cases the verb is a Dependent Incompletive:

ɔ-kʊkkú	p-á.ık	p-á.lıkınɛ	ɔ-kakká	cık
PERS-Kʊkkʊ	C-be:PR	C-stop:INCOMPL	PERS-Kakka	VREF

(ɔt̪ə́kka	ıttı / ıttı)	á-kın	ıkkɔ	cık
become:DEPINCOMPL that	that	SUBJ.PERS-3A	sit:DEPINCOMPL	VREF

Kʊkkʊ is stopping Kakka in order to sit together

ıttı̆ introducing the phrasal complement of a question word

ıttı̆ introduces the complement of the fronted question word **ŋínt̪a** 'what' if this complement is a noun phrase. By contrast, a clausal complement of **ŋínt̪a** is introduced by **akka** +H. The next example contains both:

ŋín-t̪a	ıttı	t̪-ɔmɛkɔ
what-QW	that	NOM-be_scarified

ána	ŋín-t̪a	akka	úl	ɔ́mékınɛ
and	what-QW	that	people	be_scarified_for:DEPINCOMPL

what is scarification and why (lit. for what) are people being scarified?

ıttı̆ preceding the question word 'how'

'How'-questions generally involve **ıttı̆**:

ŋ-kw-a.ɪk	p-a.ɛɔ̃	ɪttɪ	káṭ-ṭa / táṭ-ṭa
2-C-be:PR	C-go:INCOMPL	that	how-QW / how-QW

how will you be going (i.e. by which road or path)

Some further examples with question words are given in chapter 20.

19. Focus

This chapter discusses subject focus marking and constructions for focusing constituents other than subjects.

19.1. Subject focus marking

Subject focus constructions involve the focus marker **akk-** or alternatively, a marker that is (synchronically) analysable as **a**-C-C-, having a double concord agreeing with the subject. Both **akk-** and **a**-C-C- may have developed from an earlier form *****ak**-C- (related to **ɔkâ** 'be'?). In this scenario the form would historically not involve double concord. The only other case in the language that might involve double concord is the associative marker **aṯṯʊt/áṯṯʊ́t** (see 6.8) (including the associative + numeral **at**-C-**ʊt**-NUM/**át**-C-**ʊ́t**-NUM, see 10.4.2). Here too, a development from **at**-C-**ʊt**, rather than a historical form with double concord, seems the more likely possibility.

The construction **a**-C-C- is mainly used in Tɔɽəmaṯɔ̂n, whereas in Ṭaɽʊ and Ṭɔɽî mostly **akk-** is used. **akk-/a**-C-C- is attached to a non-dependent verb (an Incompletive, a Completive, or the Present of 'be') or adjective, replacing its concord. The focus marker can receive a high tone from a preceding element. It cannot be excluded that it has a floating high tone of its own, however, if such a tone were there it would not have an opportunity to be realized, because the verbs to which the focus marker can be attached always have a high tone. I therefore consider **akk-/a**-C-C- as low-toned. Compare the two pairs of examples below. The second example of each pair has (contrastive) subject focus.

ṯakəɽʊk	**ṯ-aa.t**	**n-ṯɛ-ṯṯŭk**
chicken	C-come:COMPL	with-at-fenced_place_for_livestock

the chicken came out of the animal shelter

ṭakəɾʋk ákk-aa.t / á-ṭ-ṭ-aa.t   n-ṭɛ-ṭṭŏk

chicken   FOC-come:COMPL   FOC-C-C-come:COMPL   with-at-fenced_place_for_livestock

the *chicken* came out of the animal shelter (it was the chicken who came out of the animal shelter)

ɔ-ɪáɪa   p-ɪná

PERS-my_mother   C-know:INCOMPL

my mother knows it

ɔ-ɪáɪa   akk-ɪná   / a-p-p-ɪná

PERS-my_mother   FOC-know:INCOMPL / FOC-C-C-know:INCOMPL

my mother knows it (it is my mother who knows it)

In the next example the focus marker is attached to an adjective:

ɛm-p-ɪ   ákk-ɔpərɔ̂t

DEM-C-NEARSP   FOC-good

this one is good (also: this one is the best)

In a focus-construction the full form of the subject pronoun is used instead of the pronominal proclitic:

ŋ-kw-á.mɛntɛ   ɪttɪ   ɔ-ʋn   ákk-a.ɲúlɛ   kappɛnṭína

2-C-say.PLUR:INCOMPL   that   PERS-1   FOC-eat.PLUR:INCOMPL   groundnut_paste

you are always saying that it is me who is always eating groundnut paste (but now it is you who has been eating groundnut paste)

In some constructions of auxiliary and main verb the focus marker can precede the main verb, the auxiliary or both:

ɔ-kín   akk-íra   ṭ-a.nán-ʋŋ   lɔ́n   appɪk

PERS-3A   FOC-should   C-bring_to:INCOMPL-O2   words   all

it is them that should explain everything to you

ɔ-kín   ṭ-íra   akk-a.nán-ʋŋ   lɔ́n   appɪk

PERS-3A   C-should   FOC-bring_to:INCOMPL-O2   words   all

it is them that should explain everything to you

ɔ-kín   akk-íra   akk-a.nán-ʊŋ   lɔ́n   appɪk
PERS-3A   FOC-should   FOC-bring_to:INCOMPL-O2   words   all

it is them that should explain everything to you

This is not the case in verbal complexes with an auxiliary of 'be'. They have the focus marker on the auxiliary:

ɔ́ṭ-ṭa   akk-a.ɪk   p-a.kɛk-ʊ́ŋ
PERS.3-QW   FOC-be:PR   C-shave:INCOMPL-O2

who is shaving you?

Question words replacing the subject use the same focus markers **akk-/a**-C-C- (example above). More examples are provided in chapter 20.1.1 and 20.2.2.

Contrastive negative focus of the subject ('it is/was not X') is expressed by Dependent Incompletive negated 'be' ('not being') preceding the subject and **akk-/a**-C-C- on the verb:

ɔkә́rә́nn-ɔ́ká   pa-p-ɔ-kɪra   akk-ɔkị̣ccé.r-ʊ́ŋ
NEG:DEP-be:DEPCOMPL   thing-C-of-trees   FOC-chase:COMPL-O2

it was not a leopard that chased you ('A boy and a goat')

19.2. Non-subject focus marking

Constituents other than the subject are contrastively focussed through left dislocation followed by **akka** +H 'that' and the rest of the clause. Two examples with focussed objects follow here:

íkkәrɛ   lịcɔk   ákka   ŋ-kw-ɪmmâ.t
perhaps   goats   that   2-C-see:COMPL

it seems you saw *goats* (it was goats that you saw (and not a leopard)) ('A boy and a goat')

a-a   kәllán   akka   ɔ-kʊkkʊ́   p-ɪp.ánṭét   áôn
no-REDUP old_woman   that   PERS-Kʊkkʊ   C-collect_for:PST   bees

no, Kʊkkʊ collected honey for the *old woman* (it is for the old woman that Kʊkkʊ collected honey)

Unlike the subject focus marker **akk-**, **akka** +H has no variant that can agree with the element on which it puts focus. **akka** +H in non-subject focus constructions functioning as complementizer seems to be the same element as the conjunction word **akka** +H. If and how **akka** +H and the focus markers **akk-/a**-C-C- (which replace the verbal or adjectival concord) historically relate to each other is not clear.

The possessor noun from a connexive construction is focused in the first example below, the noun from a prepositional phrase in the second. The connexive (first example) and preposition (second example) remain in place in their absolute form.

ṭakəɽʊk	**ákka**	**m-p-ɔɽəkɔ.t**	**ṭúŋkɛ**	**ṭ-ɛn**
chicken	that	1-C-eat:COMPL	liver	C-of:ABS

I ate the liver of the *chicken* (it was of the chicken that I ate the liver)

kaṭər	**k-ɔ́-ṭɔ́ɽɪ́**[27]	**akka**	**m-p-ɔkəttɔ́.t**	**ɪ-a-kʊmáŋ**	**tít**
road	C-of-Ṭɔɽî	that	1-C-run_into:COMPL	in-PERS-Kʊmaŋ	in:ABS

it was on the road to Ṭɔɽî that I ran into Kʊmaŋ

In coordinated clauses locative adjuncts can also be contrasted without **akka** +H, namely through fronting of the adjunct in the second clause. 'Khartoum' in the first clause can be left-dislocated as well, but the sentence as given below was preferred. It was elicited with 'in Khartoum the water …, but in Lumun country the water …'.

ŋəɽɪ	**ŋ-á.ɽʊŋkwɔt**	**nɔ́-capʊ**	**kârəṭṭôm**
water	C-remain:INCOMPL	on-ground	Khartoum

ana.rruk	**tɔ́rrʊ́**	**ŋ-ŋ-íntat**	**cɪk**	**cɔ́kɔc-cɔkɔt**
but	Lumun_country	PRO-C-disappear:INCOMPL	VREF	quickly-REDUP

in Khartoum the water remains on the ground, but in Lumun country it disappears quickly

---

[27] Several paths go to Ṭɔɽî, coming from different places, as well as taking a different course. Which road is meant must be understood from the context.

20. Question words and particles

In this chapter I discuss pronominal, adverbial, clausal and modifying content question words, as well as the marking of polar questions.

20.1. Content question words

Lumun has pronominal, adverbial, clausal and modifying content question words. Modifying question words always have a concord. The pronominal, adverbial and clausal question words are listed in table 105, the modifying question words in table 106. Question words can be divided into those ending in the question word marker -ṭa (first columns of both tables), the same forms without -ṭa (second columns), and question words containing the (concord and) demonstrative pronominal base (C)-ɛn (third columns).

Table 105 Content question words

	ending in -ṭa	*without -ṭa*	*ending in (C)-ɛn*
pronominal	ɔ́ṭṭa/ɔ́ṭṭân 'who'		ɔkkwên/ ɔkkwéŋɔ̂n 'who'
	ŋínṭa 'what'		ŋımpên 'what'
clausal	akkaínṭa, akaínṭa 'why'	akkaîn, akaîn 'why'	
adverbial	karəṭâ, karəṭa 'where'		kərɛn 'where'
	acínṭa 'when'	acîn 'when'	
	táṭṭa, káṭṭa 'how'	tât, kât 'how'	
	akkáraṭṭa 'what time'	akkárat 'what time'	

Table 106 Modifying content question words

ending in -ṭa	*without -ṭa*	*ending in (C)-ɛn*
C-**ɔ́ṭṭa**/C-**ɔ́ṭṭân** 'whose'		C-**ɔkkwên**/ C-**ɔkkwéŋɔ̂n** 'whose'
C-**ɔínṭa** 'what kind of'	C-**ɔîn** 'what kind of'	C-**ɔɪmpên** 'what'
C-**árəṭa** 'where'		C-**árɛn** 'where'
C-**aráṭṭa** 'how'	C-**árat** 'how'	
C-**ɔṭénṭa** 'for what purpose, why'	C-**ɔṭên** 'for what purpose, why'	
C-**ɔ̌nṭa** 'why'		
C-**ɔrənɔ́ṭṭa** 'how many'	C-**ɔrənɔ̂k** 'how many'	
C-**ɪaṭâ** 'which'	C-**ɪa** 'which'	

Morphophonology

Before **akka** +H and before the subject focus marker (**akk**- or **a**-C-C-, see 19.1), the final **a** of the question word marker -**ṭa** is deleted and the question word and the complementizer/focus marker fuse together, e.g.,

ɔ́ṭṭa akk-   [ɔ́ṭakˀ]
ŋínṭa akka   [ŋíṇðaka]

Use of the question words

Question words ending in -**ṭa** are typically used in neutral questions for information. They can be employed thetically. The question words lacking -**ṭa** are used in:

1) quick and informal (interruptive) inquiries after a further detail;
2) questions that solicit no answer, communicating a negative view of the speaker. Some emotion is typically involved.

Some of the question words without **-ṭa** are used in complement clauses. In that environment they are used in a neutral way.

Question words ending in **-ṭa** have their own intensifying adverb **ɪppʊ**, or **-ppʊ**, which gives a sense of urgency to the question. An example was provided in 17.1.4.

Because one way of question formation involves left-dislocation of the content (non-subject) question word, the word order in neutral affirmative statements is recalled here: S V O Adj.

Position in the clause and question constructions

Question words can be used alone. With a verbal or adjectival predicate, they occur in one or two of the following positions or constructions:

- in situ. Subject question words, which always remain in situ, are followed by the focus marker **akk-** replacing the subject concord;
- left-dislocated before the subject. In these constructions the question word is followed by **akka** +H 'that' or, in case of 'where', by the locative relative **ná**;
- at the right edge of the clause, preceded by **ɪttǐ** 'that'.

Next to being used in situ, several of the question words in the first column of table 105 allow for a clause-initial construction with **akka** +H, as do **ɔkkwên** 'who' and **ŋɪmpên** 'what' (third column). The forms without **-ṭa** (second column) are not used clause-initially with **akka** +H. **karəṭâ** 'where' can be used clause-initially, but is then followed by the locative relative **ná** (see 11.3).

A question with a question word in situ and the same question with an **akka** +H -construction follow here.

ʊkʊl	**w-a.ɽəkɔ**	**ŋín-ṭa**
child	C-eat:INCOMPL	what-QW

what will the child eat?

ŋín-ṭa   **akka**   **úkúl**   **ɔ́ɽə́kɔ̂**
what-QW   that   child   eat:DEPINCOMPL

what will the child eat?

The verb in a clause introduced by the complementizer **akka** +H or the locative relative **ná** is either a Dependent Incompletive, a Completive, the Present of 'be', or a complex verb of which the (first) auxiliary verb is a Dependent Incompletive, a Completive, or the Present of 'be'. By contrast, the focus marker **akk-** precedes a non-dependent verb. An example of the latter:

ɔ́ṭ-ṭa   **akk-a.ɽəkɔ̂**
PERS.3-QW   FOC-eat:INCOMPL

who will eat it?

Modifying question words come after the noun or noun phrase they modify. C-**ɔ̌nṭa** 'why' modifies subjects, which it directly follows, and precedes a clause introduced by **akka** +H (see 20.1.7).

Several modifying question words can modify personal pronouns: C-**ɔ́ṭṭa,** C-**ɔ́ṭṭân** 'whose', C-**ɔkkwên**, C-**ɔkkwéŋɔ̂n** 'whose', C-**árəṭa** 'where', C-**árɛn** 'where', C-**arátṭa** 'how', C-**arât** 'how', C-**ɔ̌nṭa** 'why', C-**ɔrənɔ́ṭṭa** 'how many', C-**ɔrənɔ̂k** 'how many' (examples are given in this chapter).

Examples illustrating the meaning and use of question words as well as constructions in which they occur are provided in sections 20.1.1 to 20.1.9. The question words are grouped together mainly on the basis of shared lexical formatives. This gives the following clusters:

- **ɔ́ṭṭa, ɔ́ṭṭân** 'who', **ɔkkwên, ɔkkwéŋɔ̂n** 'who', C-**ɔ́ṭṭa, C-ɔ́ṭṭân** 'whose', C-**ɔkkwên**, C-**ɔkkwéŋɔ̂n** 'whose';
- **ŋínṭa** 'what, why', **akaínṭa/akkaínṭa** 'why', **akaîn/akkaîn** 'why', **ŋɪmpên** 'what', C-**ɔ́ínṭa** 'what kind of', C-**ɔ̂n** 'what kind of', C-**ɔɪmpên** 'what';
- **karəṭâ /karəṭa, kərɛn,** C-**árəṭa** 'where', C-**ârɛn** 'where'; **acínṭa** 'when', **acîn** 'when';
- **tátṭa/kátṭa** 'how', **tát/kát** 'how', C-**arátṭa** 'how', C-**árat** 'how';

- **akkáraṭṭa** 'what time of the day', **akkárat** 'what time of the day';
- C-**ɔṭénṭa** 'for what purpose, why', C-**ɔṭên** 'for what purpose, why', C-**ɔnṭa** 'why';
- C-**ɔrənɔ́ṭṭa** 'how many', C-**ɔrənɔk** 'how many';
- C-**ɪaṭâ** 'which', C-**ɪa** 'which'

20.1.1. 'who' and 'whose'

ɔ́ṭṭa/ɔ́ṭṭân 'who', **ɔkkwên/ɔkkwéŋɔ̂n** 'who', C-**ɔ́ṭṭa**, C-**ɔ́ṭṭân** 'whose' and C-**ɔkkwên**/C-**ɔkkwéŋɔ̂n** 'whose' share a formative (based on) **ɔɔ̂k** 's/he' (including the persona prefix). Though in these forms the sequence **ɔɔ̂** has been shortened to **ɔ̂**, I will gloss the formative as PERS.3

ɔ́ṭṭa/ɔ́ṭṭân 'who'

ɔ́ṭṭa is made up of a formative based on **ɔɔ̂k** 's/he', including the persona prefix (**ɔ́-**), and the question word marker -**ṭa.** It has a plural which is formed through attachment of the plural suffix -**ŋɔ̂n** of nouns with the persona prefix: **ɔ́ṭṭa** + -**ŋɔ̂n** > **ɔ́ṭṭân.**

ɔ́ṭṭa/ɔ́ṭṭân is used in different syntactic functions: subject, object, as part of a prepositional phrase. The syntactic function determines which construction(s) is/are possible. In the examples below, it functions as the subject of a verbless clause:

ɔ́ṭ-ṭa   p-ɛn
PERS.3-QW   C-DEM

who is it? (i.e. whom are you talking about?)

ɔ́ṭ.ṭá-n   én-ṭ-í
who-PL   DEM-C-NEARSP

who are they? (lit.: who are these? For example about people who are present, or while pointing at people in a picture)

When **ɔ́ṭṭa/ɔ́ṭṭân** replaces the subject of a verbal or adjectival clause, a focus construction with **akk-**is required, or alternatively, with **app-** for the singular and **aṭṭ-** for the plural (see 19.1):

ɔ́ṭ-ṭa　　　**a-p-p-ərîk**
PERS.3-QW　　FOC-C-C-big

who is the biggest?

ɔ́ṭ-ṭá-n　　　**á-ṭ-ṭ-aá.t**
PERS.3-QW-PL　　FOC-C-C-come:COMPL

who (PL) came?

ɔ́ṭ-ṭa　　　**akk-a.kkɔ́t**　　　**ŋərɛ**
PERS.3-QW　　FOC-do:INCOMPL　　work

who will do the work?

As an object, **ɔṭṭa/ɔ́ṭṭân** can be used in situ (first and second example below) or fronted in a construction with the complementizer **akka** +H (third example below):

ɔ-kín　　　**ṭ-ɪɔṭ.έ**　　　**ɔ́ṭ.ṭá-n**　　　**nɔ.ppan**
PERS-3A　　C-find:COMPL　　who:QW-PL　　inside

who(PL) did they find inside?

ŋ-kw-a.ɪk　　　**p-a.llínέ**　　　**ɔ́ṭ-ṭa**
2-C-be:PR　　　C-run_for:INCOMPL　　PERS.3-QW

whom are you running from?

ɔ́ṭ-ṭa　　　**akka**　　　**ŋ-kw-a.ɪk**　　　**p-a.llínɛ**
PERS.3-QW　　that　　　2-C-be:PR　　　C-run:INCOMPL

whom are you running from?

After a preposition, the initial vowel **ɔ** of **ɔ́ṭṭa/ɔ́ṭṭân** changes into **a**, in the same way as the persona prefix **ɔ́-** in pronouns, personal names and kinship and relational terms (see 4.10.1). The question word can be used in situ, but can also be fronted followed by **akka** +H. In the latter case, preposition and question word are separated: the preposition remains in place adopting its absolute form (second example below).

ɔ-kín   **ṭ-ɔ̰ttɛ́.t**   **n-áṭ.ṭa-n**
PERS-3A   C-leave:COMPL   on-who-PL

who (PL) did they leave behind?

ɔ́ṭ-ṭa-n   **akka**   **ɔ-kín**   **ṭ-ɔ̰ttɛ́.t**   **nán**
PERS.3-QW-PL   that   PERS-3A   C-leave:COMPL   on:ABS

who (PL) did they leave behind?

A special use of **ɔ́tta** is found in a question about names. This requires a construction with the complementizer **ɪttǐ**:

ŋ-kw-ɔccɔ́.t   **kəɾan**   **ɪttɪ**   **ɔ́ṭ-ṭa**
2-C-receive:COMPL   name   that   PERS.3-QW

what is your name? (lit.: you have received the name that who?)

ɔ́tta/ɔ́ttân can, apparently, be used in complement questions, at least in some cases. The following sentence was not rejected:

m-p-ɔmma   **ɪttɪ**   **ɔ́ṭ-ṭa**   **akk-aa.t**   **cɪt.tɔ́.kị́t**
1-C-not_know:INCOMPL   that   PERS.3-QW   FOC-come:COMPL   firstly

I do not know who came first

Commonly, however, **ɔkkwên/ ɔkkwéŋɔ̂n** 'who' is applied in complement clauses (unless the complement clause represents direct speech).

ɔkkwên/ɔkkwéŋɔ̂n 'who'

ɔkkwên 'who' contains a formative based on **ɔɔ̂k** 's/he', including the persona prefix **ɔ́-**, and the concord **p-** (agreeing with **ɔɔ̂k**) + demonstrative pronominal base **ɛn** (see 8.1). As elsewhere, the realization of the sequence of pronominal **k** and concord **p** deviates from general phonological rules, being realized as [kʷ] instead of as [p]. The plural of **ɔkkwên** is formed with **-ŋɔ̂n**: **ɔkkwéŋɔ̂n**.

Though **ɔkkwên/ɔkkwéŋɔ̂n** already contains **p-ɛn** as a formative, in a verbless construction it can still be predicated by **pɛn** (or plural **ṭɛn**):

ɔk.kw.ɛ́n   **p-ɛn**
who   C-DEM

who is this about? (i.e. whom are you talking about?)

ɔkkwên implies a speech context; unlike **ɔ́ṭṭa**, it is not used in thetic questions. The following examples contrast **ɔ́ṭṭa** and **ɔkkwên**. **ɔ́ṭṭa** can be used in context as well as "out-of-the-blue"; the use of **ɔkkwên** in the second example below conveys the speaker's assumption or awareness that the people were already talking about the person who died when s/he joined the conversation:

ɔ́ṭ-ṭa   **a-p-p-ɪɔ́.t**
PERS.3-QW   FOC-C-C-die:COMPL

who died?

ɔk.kw.ɛ́n   **a-p-p-ɪɔ́.t**
who:DEM   FOC-C-C-die:COMPL

who died? (for example upon joining a group of people at a funeral who are talking about the deceased)

Furthermore, **ɔkkwên/ɔkkwéŋɔ̂n** is typically used in complement clauses. Two examples follow here, the first with 'who' as subject of the complement clause, the second with 'who' as object.

m-p-ɔmma   **ɪttɪ**   **ɔk.kw.ɛ́n**   **akk-ɔkkɔṭ.ê**
1-C-not_know:INCOMPL   that   who:DEM   FOC-do:COMPL

I do not know who did it

ɔ-kín **ṭ-ɛrɛ́ṭ-ɛ**   **ɪttɪ** **ɔk.kw.ɛ́ŋ-ɔ́n**   **akka** **ɔ-kín** **akkarɔ**
PERS-3A C-speak_about:COMPL that who:DEM-PL   that   PERS-3A call:DEPINCOMPL

they talked about who (PL) they would invite

Note that the example above 'I do not know who did it' is different from a construction with **ɔ́kkwí í-** (see 6.1.5):

m-p-ɔmma   **ɔ́k.kw.í**   **í-p-ɔ́kkɔ́ṭ.ê**
1-C-not_know:INCOMPL   the_one   RES-C-do:COMPL

I do not know the one who did it

C-**ɔ́ṭ̱ṭa**/C-**ɔ́ṭ̱ân** 'whose' and C-**ɔkkwên**/C-**ɔkkwéŋ̂n**

The nominal modifiers C-**ɔ́ṭ̱ṭa**/C-**ɔ́ṭ̱ân** 'whose' and C-**ɔkkwên**/C-**ɔkkwéŋ̂n** have the connexive C-**ɔ** 'of' as a formative. The difference in meaning between the two is similar to that of the pronominal forms. The first question below can, for example, be asked when two people are passing by a grave. The one puts the question to the other, who may or may not know the answer. The second question can be used when walking into a group of people who are gathered around a grave: it is assumed that these people have been talking or are talking about the dead person and know who he or she is.

tʊpʊ   **t-ɔ́ṭ̱-ṭá**   **ɛ́n-t-í**
hole_in_ground   C-of.PERS.3-QW   DEM-C-NEARSP

whose grave is this?

tʊpʊ   **t-ɔk-kw-ɛ́n**   **ɛ́n-t-í**
hole_in_ground   C-of.PERS.3-C-DEM   DEM-C-NEARSP

whose grave is this?

In a context where something was missed C-**ɔkkwên** is used upon asking for clarification. However, C-**ɔkkwên** is sometimes also used without such a conversational context, as an alternative to C-**ɔ́ṭ̱ṭa**.

ɔ-cɛccé   **c-ɔ́k-kw-ên**
PERS-Cɛccɛ   C-of.PERS.3-C-DEM

whose Cɛccɛ are you? / whose Cɛccɛ are you? (or: in a comparable way as in the previous example: whose Cɛccɛ is this about?)

ɔ-cɛccé   **c-ɔ́ṭ̱-ṭa**
PERS-Cɛccɛ   C-of.PERS.3-QW

whose Cɛccɛ are you?

A pronominal proclitic can be attached to the connexive construction:

ŋ-kw-ɔ́k-kw-ên
2-C-of.PERS.3-C-DEM

whose (son/daughter) are you? / whose (son/daughter) are you?

ŋ-kw-ɔ́t̪-t̪a
2-C-of.PERS.3-QW

whose (son/daughter) are you? / whose (son/daughter) are you?

20.1.2. 'what', 'why' and 'what kind of'

The question words **ŋínt̪a** 'what', **akaínt̪a/akkaínt̪a** 'why', **akaîn/akkaîn** 'why', C-**ɔ́ínt̪a** 'what kind of', C-**ɔ̂in** 'what kind of' and **ŋɩmpên** 'what' all share the formative based on **ŋín** 'what'. Most question words are compatible with **ŋín** having a falling tone, except **ŋɩmpên**, the latter suggests a high or rising tone. I represent it with a high tone, since in the one example I have where it is not preceded by an element with high tone, it is realized as high.

ana   ŋ-kw-a.t̪-ɔkkɔt   ŋín
and   2-C-IT:INCOMPL-do:DEPINCOMPL   what

and what will you do about it?! (lit. go and do)

ŋínt̪a 'what'

ŋínt̪a, containing **ŋín** 'what' and -**t̪a** as formatives, can be used in a verbless clause. The concord **p-** in the first example, which is a fixed expression, is implicitly understood to agree with **papʊ** 'thing'.

ŋín-t̪a   p-ɛn
what-QW   C-DEM

what is it? (what is this that you are talking about?)

ŋínt̪a can be used in a verbless clause with complementizer **ɩtt̆ɩ** 'that':

ŋín-t̪a   ɩtt̪ɩ   t̪-ɔmɛk̆ɔ̆
what-QW   that   NOM-scarify

what is scarification?

As the subject of a verb, **ŋínt̪a** is followed by the focus marker **akk-**, or alternatively by **app-** (not **aŋŋ-**). **app-** is used in Tɔt̪əmat̪ɔ̂n and, for my consultant, implicitly agrees with **papʊ** 'thing'.

ŋín-ṭa   akk-a.îk
what-QW   FOC-be:PR

what is happening? (what is (it)?)

ŋín-ṭa   a-p-p-ɔkkwɔṭ.ɛ̂
what-QW   FOC-C-C-kill:COMPL

what has destroyed it? (lit.: killed)

ŋín-ṭa   akk-ɔnʊ́   ɪttɪ   páɪ
what-QW   FOC-have   that   paɪ

what does *paɪ* mean?

ŋínṭa as object can be in situ or left-dislocated followed by **akka** + H:

ʊkʊl   w-a.ɽəkɔ   ŋín-ṭa
child   C-eat:INCOMPL   what-QW

what will the child eat?

ŋín-ṭa   akka   ʊ́kʊ́l   ɔ́ɽə́kɔ̂
what-QW   that   child   eat:DEPINCOMPL

what will the child eat?

ŋínṭa can be in situ preceded by a preposition. Alternatively, it can be left-dislocated, with an absolute preposition remaining in place:

ŋ-kw-aa.t   ŋ-ŋín-ṭa
2-C-come:COMPL   with-what-QW

by what did you come here? (i.e. by what means of transport)

ŋín-ṭa   akka   ŋ-kw-aa.t   ŋ́.ŋɪn
what-QW   that   C-come:COMPL   with:ABS

by what did you come here? (i.e. by what means of transport)

ŋín 'what'

ŋín, without the question morpheme -ṭa, does not function as a neutral question word. In the earlier cited example, repeated here, it already implies the speaker's negative view: you can do nothing.

ana   ŋ-kw-a.ṭ-ɔkkɔt   ŋín
and   2-C-IT:INCOMPL-do:DEPINCOMPL   what

and what will you do about it?! (lit. go and do) (implied: nothing!)

In combination with a Benefactive verb **ŋínṭa** is interpreted as 'why' ('for what'). Compare:

ŋ-kw-a.ɹk   p-a.llɔt   tɔ-ín-ṭa
2-C-be:PR   C-run_to:INCOMPL   up_on-what-QW

what are you running to?

ŋ-kw-a.ɹk   p-a.llíne   ŋín-ṭa
2-C-be:PR   C-run_for:INCOMPL   what-QW

why are you running? (lit.: you are running for what?)

In case of two objects, **ŋínṭa** in situ as the first (benefactive) object of a Benefactive verb, gives the reading 'why':

ana   m-p-a.ɹə́kɪne   ŋín.ṭá   ŋúɾú   ŋ-ŋəɾɪ
and   1-C-eat_for:INCOMPL   what:QW   asida   with-water

and why would I eat asida with water? (lit.: and I will eat for what asida with water?)

Alternatively, the reason object is left-dislocated in a construction with **akka** + H:

ana   ŋín-ṭa   akka   a-n-ɔɾə́kɪne   ŋuɾú   ŋ-ŋəɾɪ
and   what-QW   that   CONJ-1-eat_for:DEPINCOMPL   asida   with-water

and why would I eat asida with water? (lit.: and I will eat for what asida with water?)

As a second (patient) object, **ŋínṭa** in situ gives the reading 'what':

m-p-a.nékɪne   ɔ-kakká   ŋín-ṭa
1-C-take_for:INCOMPL   PERS-Kakka   what-QW

what can I take to Kakka?

In such a case, that is with a verb that takes both a beneficiary and a patient object, a construction with **ŋínṭa akka** +H is ambiguous:

ŋín-ṭa   **akka**   **a-n-ɔnékɪnɛ**   **ɔ-kakkâ**
what-QW   that   CONJ-1-take_for:DEPINCOMPL   PERS-Kakka

what can I take to Kakka? / why do I bring it to Kakka?

akkaínṭa / akaínṭa 'why'

The use of the combination **akkaínṭa** or **akaínṭa** 'why' (< **akka** + **ŋínṭa**), which comes after the verb phrase, avoids such ambiguity. Whereas a clause with (fronted) **ŋínṭa akka** +H as 'why', or with **ŋínṭa** in situ as 'why', requires a verb in benefactive derivation, the equivalent clause with **akkaínṭa/akaínṭa** has a non-benefactive verb:

ŋ-kw-a.ɪk   **p-a.llɔ́**   **aka.ín-ṭa**
2-C-be:PR   C-run:INCOMPL   why-QW

why are you running?

m-p-a.nékɪnɛ   **ɔ-kakká**   **aka.ín-ṭa**
1-C-take_for:INCOMPL   PERS-Kakka   why-QW

why will I take it to Kakka?

akkaîn / akaîn 'why'

akkaîn and its variant **akaîn**, which lack the question morpheme -**ṭa**, are typically used as quick remarks, interrupting the speaker. Rather than like real questions, they function like exclamations, expressing that something is considered unusual:

ɲʊkʊl   **ɲ-ɛllâ**
children   C-be_absent:INCOMPL

akka.în
why

I have no children (lit.: children are lacking). why?!

C-ɔínṭa 'what kind of', C-ɔîn 'what kind of'

C-**ɔínṭa** 'what kind of' and C-**ɔîn** 'what kind of' contain the connexive C-**ɔ** and **ŋínṭa** or **ŋîn.** They function as modifiers of a noun phrase:

ɔ-parɪ	**p-aŋ**	**p-a.kkə́ttɛt**	**ŋúcúl**	**ŋ-ɔ́-ín-ṭa**
PERS-wife	C-POSS2	C-do.PLUR:INCOMPL	sauce	C-of-what-QW

what kind of sauce does your wife always make? (App. IV, 12)

k-kw-ɔ́kwɔnɔ́.t	**úkúl**	**w-ɔ́-ín-ṭa**
3-C-produce:COMPL	child	C-of-what-QW

what child did she give birth to? (a girl or a boy?)

The next example has C-**ɔîn**, without -**ṭa**. It is not really a question, but conveys that the people don't want to hear the **tɪt tɪt** of the boy:

ana	**tɪt**	**tɪt**	**t-əɽɛk**	**t-ɔ́-ín**
and	tɪt	tɪt	C-some	C-of-what

and what kind of "*tɪt tɪt*" (is this now)?! ("*tɪt tɪt*" is a sound made out of fear. Context: a small boy went into a cave to find a porcupine, but now he is afraid and wants to get out. The people outside want the boy to stay inside and get the porcupine). (fr. written story)

ŋɪmpên 'what, why'

ŋɪmpên contains the formative **ŋîn** 'what' and the demonstrative base **ɛn** 'that'. The concord is again **p**. Like **ɔkkwên**, **ŋɪmpên** is not used thetically, but needs a (speech) context; it refers to a matter that is (assumed to be) already being discussed. The question below stands in a context of people knowing that they should do something, but they don't know what. **ŋɪmpên** can be used in situ or in a fronted construction with **akka** + H:

ana	**ɔ-nį̇n**	**ṭ-a.kkɔt**	**ŋɪm-p-ên**
and	PERS-1A	C-do:INCOMPL	what-C-DEM

but what can we do?

ana	**ŋɪm-p-én**	**akka**	**ɔ-nį̇n**	**ɔkkɔ̂t**
and	what-C-DEM	that	PERS-1A	do:DEPINCOMPL

but what can we do?

Like **ɔkkwên**, **ŋɪmpên** is also used in complement clauses, whether in situ (first example below), or fronted within the complement clause preceding **akka** + H (second example). In the second example, **ŋínṭa** was considered acceptable as well; in the first this was less clear.

ɔ-kín	**ṭ-ɛrɛttárənɛ.t**		**ɪttɪ**	**ɔ-kín**	**ṭ-á.kkɔ́t**		**ŋím-p-ên**
PERS-3A	C-talk_to_each_other:COMPL		that	PERS-3A	C-do:INCOMPL		what-C-DEM

they discussed amongst each other what they would do

ɪɽɪk.ɪ		**n-tán**		**á-n-ánt-ɔkə́ṭa**
pass_entrance:IMP		with-up_on:ABS		SUBJ-1-can:DEPINCOMPL-look_at:DEPINCOMPL

ŋɪm-p-ɛ́n	**akka**		**ɔ-ppɛ́nná**	**ɔ́kkínṭ-úŋ**
what-C-DEM	that		PERS-Pɛnna	do_for:DEPINCOMPL-O2

come inside to me, so that I can see what Pɛnna is doing to you

ŋɪmpɛ́n akka has the reading 'why' when it functions as first object of a Benefactive verb. Note that in the previous example **-úŋ** 'you' is understood as the first object of **ɔkkínṭɛt** 'do for', so that **ŋɪmpên** is understood as the second (patient) object. In the example below the natural interpretation is the other way round: **ŋɪmpên** is understood as the first object of Benefactive **ɔmmakɪnṭɛt** 'follow for' (< **ɔmmakɔt** 'follow'), giving a 'why' reading. Enclitic **-ɔk** 'him, her' functions as second (patient) object:

ɔ-kín	**ṭ-ɛrɛ́ṭ.ɛ**		**ɪttɪ**		**ŋɪm-p-ɛ́n**	**akka**
PERS-3A	C-speak_about:COMPL		that		what-C-DEM	that

k-kw-á.ík		**p-á.mmakɪnṭ-ɔ̂k**
3-C-be:PR		C-follow_for.PLUR:INCOMPL-O3

they spoke about why she is always following him

ŋɪmpên is also used in questions to which no answer is expected:

ana	**ŋ-kw-ápp-ɔ̂ɽʊnc.aṭ-ɪn**		**ŋɪm-p-ên**
and	2-C-again:INCOMPL-throw_at.PLUR:DEPPRFV-1:O		what-C-DEM

and what will you throw at me again?! (implication: there is nothing left to throw at me) (App. IV, 116)

ŋɔrɛ	ı-a	k-kw-ɔ́nʊ́	ŋ-á.mɛ́t	ŋím-p-ɛ̂n
laziness	RES-(C-)COP	3-C-have	C-tell:INCOMPL	what-C-DEM

the laziness that he has tells (us) what?! (i.e. it is beyond words!) (App. I, 22)

20.1.3. 'where'

karəṭâ / karəṭa, **kərɛn**, C-**árəṭa** and C-**ârɛn** 'where' share a formative that vacillates between (**k**)**ər** and (**k**)**ar**. **karəṭâ** and **karəṭa** are sometimes pronounced with a first vowel **ə** rather than **a**. The initial vowel **a** of C-**árəṭa** and C-**ârɛn** comes from the copula (C-**á** 'be') rather than being part of the formative. Whether or not there is a relationship with the noun **kaɽən** 'place' is unclear.

karəṭâ/karəṭa 'where'

karəṭâ or **karəṭa** 'where' can be used in situ. In this position, the two tonal alternatives are equivalent, as shown in the following. The first realization is based on **karəṭâ**, the second on **karəṭa**.

lıccít	l-á.ík	kárə́-ṭâ /	lıccít	l-á.ík	karə-ṭa
threshing_floor	C-be:PR	where-QW	threshing_floor	C-be:PR	where-QW

where is the threshing floor?

karəṭâ / karəṭa can precede an adjunct of time (or manner):

ŋ-kw-ɛɔ́.t	kárə́-ṭá	mɛccín
2-C-go:COMPL	where-qw	yesterday

where did you go yesterday?

Alternatively, 'where' can be fronted. In this construction only the tonal variant **karəṭâ** is used. Fronted **karəṭâ** is not followed by **akka** + H, but by locative relative **ná** (discussed in 11.3):

karə-ṭá	na	lıccít	l-á.îk
where-QW	where:REL	threshing_floor	C-be:PR

where is the threshing floor?

In complement clauses **karəṭa/karəṭâ** and **kərɛn** are not used, only the locative relative **ná**:

m-p-ɔmma   **na**   **k-kw-ɔ́nʊ**   **kəmə́n**
1-C-not_know:INCOMPL   where:REL   3-C-have   house

I don't know where s/he has his/her house he lives (I don't know where s/he lives)

Like other locative constituents **karəṭa/karəṭâ** can be preceded by **ń-** 'with, by, (away) from', but not by any of the other proclitic prepositions:

lịcɔk   **l-aa.t**   **ŋ-kárə́-ṭâ /**   **ŋ-kárə-ṭa**
goats   C-come:COMPL   with-where-QW   with-where-QW

where have the goats come from?

kərɛn 'where'

kərɛn probably contains the demonstrative pronominal base **ɛn** as a formative (see 8.1), but there seems to be no trace of a concord. Like **ŋɪmpên** and **ɔkkwên**, **kərɛn** is used in questions which are not really questions, but imply a negative statement. For example, the speaker is telling somebody that some of his goats escaped and says 'and where were you?!', implying: I needed you then to search with me, but you didn't show up:

a-ŋ-kw-ɔká.t   **kərɛn**
CONJ-2-C-be:COMPL   where

and where were you?! (you didn't show up!)

In the example below, somebody has just said that s/he has a threshing floor, but as far as the hearer knows this is not the case:

lɪccít   **l-á.ík**   **kərɛn**
threshing_floor   C-be:PR   where

where is (this) threshing floor?!

kərɛn with proclitic **ń-** 'with, by, (away) from' is a standard expression in answer to the greeting **tátṭa** 'how is it?'. It is an evasive answer, communicating an unwillingness to give further details:

tát̪-ṭa
how-QW

ŋ-kə́rɛn
with-where

how are you? fine (but don't ask further questions!)

*C-**árəṭa** 'where' and C-**ârɛn***

The related nominal modifiers are C-**árəṭa** 'where' and C-**ârɛn** 'where'. C-**árəṭa** is used in order to obtain information about the whereabouts of somebody or something:

ɔɽɪn   p-árə.ṭa
PERS.ŋɔɽɪn   C-where

where is ŋɔɽɪn?

appɛn̪t̪íná   w-árə.ṭa
groundnuts   C-where

where are the goundnuts?

a-ŋ-kw-árə.ṭa
CONJ-2-C-where

and where are you?

By contrast, C-**ârɛn** in the next example is not a neutral inquiry after somebody's whereabouts. It implies that the person was expected to be present, but is not:

k-kw-íɽɛ́.t   ɪttɪ   k-kw-á.kkappərtakɔ   ána   k-kw-ârɛn
3-C-say:COMPL   that   3-C-return:INCOMPL   and   3-C-where

s/he said that s/he would come back, but where is s/he?!

In the example below, the chicken saw the cat coming, but now does not see it anymore, which is worrying. The chicken asks the jackal:

ana   pə́llá   p-ârɛn
and   cat   C-where

and where is the cat now?! ('The story of the jackal')

The following example is not a neutral question after the whereabouts of the addressee's children (ɲʊkʊl), but departs from the knowledge that the addressee does not have children and conveys that this is not really how it should be:

ana   á-ɲ-áŋ   ɲ-ârɛn
and   PROBS-C-POSS2   C-where

and where are yours?! (you should get serious and have a child!)

20.1.4. 'how'

tát̪ta, **tát̪tárát̪ta**, **tăt** and C-**arát̪ta** all share the formative **tăt** 'how' (as do **akkárat̪ta** and **akkárat** 'what time', see 20.1.5). **kát̪ta** and **kăt** share the variant of **tăt**, **kăt**.

tat̪ta/kat̪ta 'how'

tát̪ta 'how' and **kát̪ta** 'how' are generally preceded by the complementizer **ɪttĭ** 'that'. The combination **ɪttɪ kát̪ta / ɪttɪ tát̪ta** is used in situ:

ŋ-kw-a.kkɔ́t   ŋə́rɛ́   éŋ-ŋ-í   íttí   kát̪-t̪a /tát̪-t̪a
2-C-do:INCOMPL   work   DEM-C-NEARSP   that   how-QW / how-QW

how will you do the work?

In the next example **tát̪ta/kát̪ta** is not preceded by **ɪttĭ**, but the defective verb -**ɔ́pərɪ** contains the same formative -**tɪ** as **ɪttĭ**:

k-kw-ɔ́pərɪ   tát̪-t̪a / kát̪-t̪a
3-C-say   how-QW / how-QW

what did s/he say?

In the next case **ɪttĭ** is absent. The expression is a fixed formula, a greeting upon seeing somebody who has just got up:

ŋ-kw-i̯cáṭ.ɛ́   táṭ-ṭa / káṭ-ṭa
2-C-lie_down:COMPL   (that-)how-QW / (that-)how-QW

how did you sleep? (greeting in the morning)

táṭṭa and **káṭṭa** 'how' are very common greetings:

táṭ-ṭa / káṭ-ṭa
how-QW / how-QW

m-p-ɔpərɔ̂t
1-C-good

how are you? I am fine

ɪttɪ káṭṭa (or **ɪttɪ táṭṭa**) is also used in complement clauses:

m-p-ɔŋɔṭ.ɛ́   ɪttɪ ɔ-nɔn ṭ-ánt-ɔkə́nɛ-n   ɪttɪ
1-C-like:COMPL   that PERS-2A C-can:INCOMPL-show:DEPINCOMPL-O1   that

ɔ-nɔn ṭ-a.ra   ṭún   ɪttɪ káṭ-ṭa   cəné
PERS-2A C-cultivate:INCOMPL   onion   that   how-QW   here

could you show me how you (PL) grow onions here? (lit.: I want that you
(PL) can show me …) (fr. written text)

táṭṭa/káṭṭa cannot be left-dislocated.

táṭṭa can be reduplicated to **táṭṭárátṭa**. The reduplication has an
intensifying effect. A how-question with **táṭṭárátṭa** is not a neutral
question for information, but expresses that something is thought to
be (have been) very difficult. Which part is the reduplicated part is
not clear. In the example I have glossed the second part as the
reduplicated part:

ŋ-kw-aa.t   táṭṭá~rátṭa
2-C-come:COMPL   how~INTS

how did you manage to come? (for example when there were no buses)

tăt/kăt 'how'

The short forms **tăt/kăt** 'how' are used in expressions that function as exclamations rather than as real questions. The example below has the implicit connotation of 'you probably have nothing to say':

ana   **ɔ-nɔn**   **ṭ-érɛ**   **tăt**
and   PERS-2A   C-speak:INCOMPL   how

and what do you (PL) have to say?! (lit.: and how will you speak?!)

Comparable to **ɔkkwên** and **ŋɪmpên**, and like **ɪttɪ káṭṭa/ɪttɪ táṭṭa**, the short forms **tăt/kăt** are furthermore used in complement clauses. The following example functions as complement of 'they talked about':

… ana   **ɔ-llé**   **p-ɔkịccé.r-ɔk**   **n-tʋan**   **kăt**
    and   PERS-husband   C-chase:COMPL-O3   with-home   how

…and how her husband had chased her from the house (from wr. story)

Unlike **ɪttɪ káṭṭa / ɪttɪ táṭṭa** the short forms require some context; they are not easily used 'out of the blue'. The first sentence below can, for example, be used in a conversation between two people who are walking through an onion field, and one of which is known or assumed to have knowledge about the cultivation of onions:

m-p-ɔŋɔṭ.έ   **ɪttɪ**   **ɔ-nɔn**   **ṭ-ánt-ɔkə́nɛ-n**   **ɪttɪ**
1-C-like:COMPL   that   PERS-2A   C-can:INCOMPL-show:DEPINCOMPL-O1   that

ɔ-nɔn   **ṭ-a.ra**   **ṭún**   **tat**   **cəné**
PERS-2A   C-cultivate:INCOMPL   onion   how   here

could you show me how you grow onions here? (lit.: I want that …)

In a complement clause **tăt/kăt** can be left-dislocated followed by **akka** + H:

m-p-ɔŋɔṭ.έ   **ɪttɪ**   **ɔ-nɔn**   **ṭ-ánt-ɔkə́nɛ-n**   **tat**   **akka**
1-C-like:COMPL   that   PERS-2A   C-can:INCOMPL-show:DEPINCOMPL-O1   that   that

ɔ-nɔn   **ṭ-a.ra**   **ṭún**   **cəné**
PERS-2A   C-cultivate:INCOMPL   onion   here

could you show me how you grow onions here? (lit.: I want that …)

*C-**arátta** 'how', C-**arât** 'how'*

The modifying word C-**arátta** 'how' contains the copula C-**á** and **tátta** (**tăt** 'how' + the question word marker -**ta**) as formatives. Some examples:

nɛnní   ŋ-kw-a.rát̪-t̪a
Nɛnnɪ   2-C-how-QW

Nɛnnɪ, how are you?

ɔ-nɛnní   p-a.rát̪-t̪a
PERS-Nɛnnɪ   C-how-QW

how is Nɛnnɪ?

lɔn   l-a.rát̪-t̪a
words   C-how-QW

what is going on?

In the example below C-**arátta** modifies an object pronoun:

ɔ-nɔn   t̪-ɪmma.kát̪-ɔ́k   p-á.rát̪-t̪a
PERS-2A   C-see:PST-O3   C-how-QW

how was s/he when you (PL) saw him/her? (lit.: you saw him/her being how?)

The short form is C-**arât** is used in quick questions for further details:

pəlla   p-ɛllâ | ana   p-p-ɛ́llá   p-árât
cat   C-be_absent:INCOMPL   and   PRO-C-be_absent:INCOMPL   C-how

the cat is not here. and how come it is not here?

20.1.5. 'what time'

akkáratta contains **akka** +H 'that' and **tatta** 'how' as formatives, but has developed a tone pattern of its own. **akkáratta** is used in order to inquire after the time of the day that something happened or is expected to happen.

ŋ-kw-ɛɔ́.t	tʊan	akkárat̪-t̪a	|	m-p-ɛɔ́.t	cɪpín
2-C-go:COMPL	home	what_time-QW		1-C-go:COMPL	evening

at what time did you go home? I went in the evening

akkárat̪t̪a can be left-dislocated, followed by **akka** +H:

akkárat̪-t̪a	akka	ŋ-kw-ɛɔ́.t	tʊan
what_time-QW	that	2-C-go:COMPL	home

at what time did you go home?

The short form can be used as a quick way of asking more precise information:

ɔ-ɪáɪa	p-a.ɪk	p-ân̪t̪án	|	akkárat
PERS-mother	C-be:PR	C-come:INCOMPL		what_time

my mother is coming. what time? (the assumption is that the mother will come today)

akkárat̪t̪a is not used for asking after the (clock) time of the present moment. The expression for this is:

ci̪ŋki̪	c-ɪa-t̪â
sun	C-which-QW

what's the time? (lit. the sun is which?)

20.1.6. 'when'

While **akkárat̪t̪a** 'what time' inquires after the time of the day that something happened or is expected to happen, **acín̪t̪a** 'when' is used in case of a larger time frame. A question with **acín̪t̪a** conveys no knowledge (or assumption) on the part of the speaker about the day of the event.

ŋ-kw-aa.t	kárət̪t̪ʊ́m	ácín-t̪a
2-C-come:COMPL	Khartoum	when-QW

when did you arrive in Khartoum?

The short form **acîn** needs a (speech) context and typically has an expressive value. The example below, is not a neutral question inquiring after the time or day that the speaker and addressee will fight, but conveys an eagerness to fight and perhaps the suggestion that the addressee may want to escape from it. The addressee replies that they will fight now.

ana	**ɔ-rɪt**	**ṭ-a.ṭáttɔ**	**acîn**	**ɔ-rɪt**	**ṭ-a.ṭáttɔ**	**ácca**
ana	PERS-12	C-fight:INCOMPL	when	PERS-12	C-fight:INCOMPL	now

and when will we fight?! we will fight now!

In the next example **acîn** is used as a quick interruption to ask when something is going to take place:

ɔ-ɪáɪa	**p-a.ɪk**	**p-ânṭán**	**acîn**
PERS-mother	C-be:PR	C-come:INCOMPL	when

my mother is coming. when? (no knowledge/assumption about the time frame is conveyed)

The example below with **acîn** is not a real question. It is asked after the eggs of the bird got broken and the implied answer is 'never':

ana	**pʊɽʊpé**	**p-ápp-ɔkwɔ́nɔ**	**acîn**
and	bird	C-again:INCOMPL -produce:INCOMPL	when

akka	**p-p-ʊ́kkwá.t**	**pəɽɪn**
that	PRO-C-become_old:COMPL	finally

and when will the bird produce (eggs) again? because it will be old (implied answer: never)

The form **acîn** is further used in a complement clause. **acínṭa** is possible as well. Both are used only in final position:

m-p-ɔmma	**ɪttɪ**	**ɔ-kín**	**ṭ-ânṭan**	**acîn / acín-ṭa**
1-C-not_know:INCOMPL	that	PERS-3A	C-come:INCOMPL	when / when-QW

I do not know when they will come (lit.: I do not know that they will come when)

20.1.7. 'for what purpose' and 'why'

C-**ɔ̰ʈénʈa** *'for what purpose, why' and* C-**ɔ̰ʈên** *'for what purpose, why'*

C-**ɔ̰ʈénʈa** modifies a noun and expresses 'for what purpose' or 'why'. The long form is used in neutral questions. In the example below it functions as predicate:

pɔ̰ʈən   p-ɔ̰ʈén-ʈa
basket(k.o.)   C-for_what_purpose-QW

for what is the basket?

In the next example C-**ɔ̰ʈénʈa** modifies an object noun. The object noun phrase remains in situ:

n-ʈ-a.ppɔ́rɛ   kamʊr   k-ɔ̰ʈén-ʈa
2A-C-put_at.PLUR:INCOMPL   sand   C-for_what_purpose-QW

why are you collecting sand?

The noun phrase can be fronted in a cleft construction with the copula:

təɾɛ́   t-ɔ́ʈén-ʈá   t-á   ŋ-kw-ɔ́nɔ̂
fear   C-for_what_purpose-QW   C-COP   2-C-have

why are you afraid? (lit.: fear for what purpose it is you have?)

ʈakʊɾít   ʈ-ɔ́ʈén-ʈá   ʈ-á-kkɔ̂t (< **ʈ-a** + **ŋ́-** + **ɔkkɔ̂t**)
style_of_young_man C-for_what_purpose-QW   C-COP-(2-)do:DEPINCOMPL

why do you dress up like a young man? (lit.: style for what purpose it is you make?)

C-**ɔ̰ʈénʈa** and C-**ɔ̰ʈên** can be used in a complement clause. In this environment there seems to be no difference between the long and the short form:

m-p-ɔmma   ɪttɪ   pɔ̰ʈən   p-ɔ̰ʈén-ʈa   / p-ɔ̰ʈên
1-C-not_know:INCOMPL that   basket(k.o.) C-because_of_what-QW   C-because_of_what

I do not know what the basket is for

In a main clause, the short form conveys a negative judgement:

pɔʈən   p-ɔʈên
basket(k.o.)   c-because_of_what

for what is the basket?! (we don't need it, you should not have brought it)

c-ɔ̌nʈa 'why'

C-**ɔ̌nʈa** 'why' modifies a subject (pro)noun. It is used in a construction with **akka** + H, often in combination with **ɪttɪnâ** 'so, like this'. Questions with c-**ɔ̌nʈa** are not neutral inquiries, but convey that it would be better if the situation were different, they express some worry, disappointment or disapproval.

ʊkʊl   w-ɔ̌n.ʈa   akka   w-íkkɔ   cɪk
child   c-why   that   PRO-sit:DEPINCOMPL   VREF

cínáŋ   ákkʊ́mân
there_where_you_are   since

why is the child still sitting here?

ɔ-rɔn   ʈ-ɔ̌nʈa   akka   ɔ-rɔn   ɔkwɔ́nta   ɪttɪnâ
PERS-12A   c-why   that   PERS-12A   be_born:DEPINCOMPL   so

why were we born like this?

In the following example pronominal **t** refers to a pig (**tuʈʈəruk**):

t-t-ɔ̂nʈa   akka   t-t-á.ík   t-ɔ́ɔ[28]   ɪttɪnâ
PRO-C-why   that   PRO-C-be:PR   C-cry:INCOMPL   so

why is it (the pig) crying like this?

The following is an example of **c-ɔ̌nʈa** without the connecting **akka**. **pənan**, which is related to **ɔnnân** 'mother', is an abusive term.

k-kw-ɔ̂nʈa   ant-áɪne   pə́nan
3-C-why   can:DEPINCOMPL-come_to:DEPINCOMPL   mother

why, on his/her mother, let him/her come back (in anger, as a threat)

---

[28] Irregular Incompletive (< **ɔɔ̂** 'cry').

20.1.8. 'how many'

C-**ɔrənɔ́ṭṭa** expresses 'how many'. First some examples of predicative use:

ɔ-nɔn **ṭ-ɔ́rənɔ́ṭ-ṭa**
PERS-2A   C-how_many-QW

how many are you?

kəmən **k-ɔ́rənɔ́ṭ-ṭá** **í-k-únta** **cəné**
rooms   C-how_many-QW   RES-C-be_built:INCOMPL   here

how many rooms will be built here? (lit.: the rooms (are) how many which will be built here?)

When C-**ɔrənɔ́ṭṭa** modifies the object, the object noun phrase can remain in situ, but also be fronted. When fronted, it is followed by a relative construction with **ɪ-C-a** (second example below).

ŋ-kw-ɔnʊ́ **mɛ́n** **m-ɔrənɔ́ṭ-ṭa**
2-C-have   palm_fruits   C-how_many-QW

how many palm fruits do you have?

mɛ́n **m-ɔrənɔ́ṭ-ṭá** **í-m-á** **ŋ́-kw-ɔ́nɔ̂**
palm_fruits   C-how_many-QW   RES-C-COP   2-C-have

how many palm fruits do you have?

Like the other forms without -**ṭa**, C-**ɔrənɔk** is used as a quick (perhaps interruptive) question:

ɔ-kín **ṭ-á.ík** **ṭ-ânṭan** **ɪnɛ́nní**
PERS-3A   C-be:PR   C-come:INCOMPL   today

ṭ-ɔrənɔk
C-how_many

they are coming today / how many (are they)?

20.1.9. 'which'

The nominal modifier C-**ɪaṭâ** expresses 'which'. An object noun phrase with C-**ɪaṭâ** can be used in situ, but can also be fronted. When fronted, it is followed by a relative construction with **ɪ**-C-**a**:

ŋ-kw-akkɔ́.t	ṭákʊ́ɽít	ṭ-íá-ṭâ
2-C-do:INCOMPL	style_of_young_man	C-which-QW

in which young man's style will you dress?

ṭakʊɽít	ṭ-íá-ṭá	í-ṭ-ákkɔ̂t
style_of_young_man	C-which-QW	RES-C-COP.(2-)do:DEPINCOMPL

in which young man's style will you dress? (lit.: the young man's style is which that you will do?)

Modifying question words, like other modifiers, can be used independently. In the next example, pronominal **p**- has implicit reference to **papʊ** (thing).

ɪáɪa	ana	p-ɪa-ṭá	í-p-á	ŋ́-kw-ɔ́kkɔ́ṭ.ɛ́
my_mother	and	C-which-QW	RES-C-COP	2-C-do:COMPL

mother, and what is it that you have made? (can refer to food)

The short form (C-**ɪa**) is commonly used in complement clauses, but in the examples below C-**ɪaṭâ** was considered acceptable as well.

cɪk	c-írrʊ́k	ṭáɽʊ	aŋŋəna
place	C-cold	Ṭaɽʊ	very

ŋ-kw-ɔmma	ɪttɪ	pəɽu	p-íá
2-C-not_know:INCOMPL	that	dry_season	C-which

ana	cʊ́kkʊ	c-ɪa
and	rainy_season	C-which

Ṭaɽʊ is a very cool place. You will not know which is the dry season and which is the rainy season (i.e. in both periods it is cool) (fr. written story)

ŋáaí   **lɔɽǝk**   **l-a.ɪk**   **l-ɔppɔt**
I_don't_know ropes   C-be:PR   C-many

ána **m-p-ɔmma**   **ɪttɪ**   **ṭ-ɔ́ṭṭɛ́**   **ṭ-ía**   **n.tít**
and   1-C-not_know:INCOMPL that C-of.your_father C-which from:ABS

I don't know, there are many ropes and I do not know which one among them is your father's (lit.: I do not know that your father's (is) which among (them)) (fr. written dialogue)

The short form is also used to shortly ask 'which one'?

ɛṭ-ɪn   **aṭám**
give:IMP-O1   book

w-ɪa
C-which

give me the book! which one?

20.2. Question particles

20.2.1. The question particle **-ɪ**

Attachment of the enclitic question particle **-ɪ** turns a statement into a (neutral) polar question. Such a question solicits a response that starts with **ii̯** 'yes', or **á̃ ã / ə́̃ ə̃ / m̃ m** 'no'. Questions marked by **-ɪ** can be used thetically, they require no specific context.

The tonal realization of questions evolves from the tonal properties of the element to which the question particle is attached; questions do not seem to have a specific intonation pattern. The particle functions largely as a regular low-toned item, except after an element with a rising (LH) tone. After a rising tone, application of the Tone Shift Rule (see 3.3.1) would be expected, resulting in a falling tone on the question particle. Instead, the particle can be tonally realized in two ways: as rising or as low. The paradigm follows here:

after L   **ŋkwɔnʊ́ pǝlla-ɪ**   (**pǝlla** + **-ɪ**)   'do you have a cat?'
after H **ŋkwɔnʊ́ ṭakǝɽʊk-î** (**ṭakǝɽʊ́k** + **-ɪ**) 'do you have a chicken?'
after LH **ŋkwɔnʊ́ ṭʊk-ǐ**   (**ṭʊ̆k** + **-ɪ**)   'do you have a dog?'

after LH **ŋkwɔnʊ́ ʈʊk-ɪ**   (**ʈʊ̆k** + **-ɪ**)   'do you have a dog?'
after HL **ŋkwɔnʊ́ pʊɽʊpɛ́-ɪ** (**pʊɽʊpɛ̂** + **-ɪ**) 'do you have a bird?'

When the particle is attached after a final vowel with a H tone, the LHL tone that would result on the long vowel is simplified to HL, and realized over the long vowel or diphthong. Though the same effect is found upon attachment of the prepositional pro-clitics **ɪ-**, **nɔ-**, **tɔ-** and **ʈɔ-** to low-toned nouns with long vowels, and in one case of a diphthong (apart from **ɪ-maît** 'in the beans', there is also **ɪ-máɪt**, see 3.1.2), this does not seem to be a general tone rule of the language. LHL tones are attested on long vowels and diphthongs, though not very often. Examples are: **tʊ̂ʊn** 'shovel', **ɛɛ̂** 'stab, blow', **ɔɔ̂k** 's/he', **naâk** 'on him/her', **ʊê** 'instrument(k.o.)', **kʊâ** 'digging tool', **cʊâl** 'sack', **cʊân** 'rat (sp.)', **ɛɛ̂** 'go', **kaʊ̂n** 'bee', **naʊ̂n** 'on me', **naʊ̂ŋ** 'on you'. Two examples with tone simplification follow here:

ŋkwɔnʊ́ məʈɛ́-ɪ (< məʈɛ-î < **məʈɛ́** + **-ɪ**) 'are you sleepy?' (lit.: do you have sleep?

ŋkwɔnʊ́ parɪ́-ɪ (< parɪ-î < **parɪ́** + **-ɪ**) 'do you have a wife?'

Some examples of polar questions with answers follow here.

ŋ-kw-ɪna   **ɔ́kʊrrɔ**   **kárrʊ́-ɪ**
2-C-know:INCOMPL   engrave:DEPINCOMPL   mother_tongue-Q

ịị   **m-p-ɪná**
yes   1-C-know:INCOMPL

can you write Lumun? yes, I can

ɔ-ʈʈɛ   **p-a.ɪ́k-ɪ**
PERS-your_father   C-be:PR-Q

a-a   **ɔ-ŋappá**   **p-ɪɔ́.t**
no-REDUP   PERS-my_father   C-die:COMPL

is your father still alive? no, my father died

In answer to a negative question, **ịị** 'yes' is applied for confirmation of the negative situation:

ŋ-kw-ănn-ɪtta-ɪ
2-C-NEG-get_married:DEPCOMPL-Q

ịị   m-p-ănn-ɪtta
yes   1-C-NEG-get_married:DEPCOMPL

are you not married? / no, I am not (lit.: yes, I am not married)

In speech, a single question sometimes has more than one question particle. The example below has a question particle, with tone as in prepausal position, after the possessor pronoun. **ntít** is therefore like an afterthought. It does, however, belong to the question, so that it must take the question particle as well. When elicited, this sentence would only have the question particle at the end, after **ntít**.

ŋ-kw-ɔmma   **lɔɽək**   **l-ɔn-î**   **n.tɪr-î**
2-C-not_know:INCOMPL   ropes   C-POSS2A-Q   from:ABS-Q

do you not recognize your ropes among them? (fr. written dialogue)

Another example is the following. The question particle is obligatory after the first clause, but not after the second, which is not really part of the question. Still, it is possible to use it there:

ŋ-kw-íccá p-á.ík-ɪ akka m-p-ɔká-t p-ɛllâ-t   / p-ɛllá-r-ɪ
2-C-still   C-be:PR-Q   that   1-C-be:COMPL   C-be_absent:COMPL   C-be_absent:COMPL-Q

are you still there? because I was not there …

Combinations of a question word lacking **-ṭa** (see 20.1) and the question particle **-ɪ** are possible. An example follows here. **ŋɔɪn** 'for what' retains its rethorical flavour suggesting here that there is no good reason for collecting urine, while at the same time **-ɪ** questions that supposition:

a-parɪ-ɔ́n   **ɔ́mɛ́kat**   **ɪttɪ**   **nṭɛɛ**   **ŋaɛ**   **ŋ-ɔ́-ín-í**
CONJ-wife-PL   say:DEPPRFV   that   nonsense   urine   C-of-what-Q

his wife and children said, nonsense, urine for what?! (i.e. urine is good for nothing, or is it??) (App. IV, 52)

20.2.2. The tag question word **páɪ** 'is it?'

The tag question word **páɪ** 'is it' consists of the (non-person) pronoun clitic **p-** (implicitly referring to **papʊ** 'thing'), the concord + copula **p-á**, and the question particle **-ɪ**. The tag question word can be used after a positive but also after a negative statement. It solicits confirmation (**ịị** 'yes') by the addressee.

ɔ-rɪt	**ṭ-a.ɪk**	**ṭ-a.rɛ́kɔ**	**ɪnɛ́nní**	**p-á-ɪ**
PERS-12	C-be:PR	C-work:INCOMPL	today	PRO.C-COP-Q

you and I are going to do some work today, aren't we?

cɪk	**c-íppá**	**p-á-ɪ**
place	C-hot	PRO.C-COP-Q

it is hot, isn't it

It can also be used after a negative statement:

ɔkə́rə́nn-ɔ́ká	**íttínâ**	**p-á-ɪ**
NEG:DEP-be:DEPCOMPL	so	PRO.C-COP-Q

it is not so, is it?

20.2.3. The particle for information recovery **-a**

Tonally, the particle **-a** behaves in the same way as **-ɪ**. It does not coalesce with a preceding vowel. The particle **-a** is used for recovery of information or for confirmation that (the implication of) what has just been said has been correctly understood. It is employed, for example, when part of the conversation was missed. The particle can be used on a content question (first example below) or on a statement (second example below). In the latter case it solicits a yes/no answer.

ɔ́ṭ-ṭa	**akk-aa.r-â**
PERS.3-QW	FOC-come:COMPL-RECOV

who did you say has come?

k-kw-áar-â | **i̧i̧**
3-C-come:COMPL-RECOV   yes

do I understand correctly that s/he has come? (are you saying that s/he has come?) yes

20.2.4. The particle for informal information recovery -**ɛ**

The question particle -**ɛ** behaves tonally in the same way as -**ɪ** and -**a**, and like those particles, does not coalesce with a preceding vowel. Like -**a**, -**ɛ** is used in a conversational context for recovery of information or for confirmation that (the implication of) what has just been said has been correctly understood. It can be used on a statement or a content question. -**ɛ** differs from -**a** in that it is typically used in informal situations, for example by somebody who is not really following the conversation between friends or family, but picks up a detail about which s/he wants to make sure (first example below) or collect some missed information (second and third examples):

k-kw-áar-ê | **i̧i̧**
3-C-come:COMPL-RECOVINF   yes

did you say s/he has come? yes

ɔkkwén   **akk-ɪɔ.r-ê**
who   FOC-die:COMPL-RECOVINF

who died?/who is it that died? (conveying no particular interest in the rest of the conversation)

ŋ-kw-ɪɾ́ét   **kar-ĕ**
2-C-say:COMPL   how-RECOVINF

what did you say? (conveying no particular interest in the rest of the conversation)

-**ɛ** is also used on informal greeting questions between friends. For example, somebody has asked his/her friend how s/he is and then has greeted the other people. Then s/he returns to the friend and resumes the earlier question:

kar-ĕ
how-RECOVINF

and how is it?

20.2.5. Absence of question marking

Question marking is entirely absent in verbless questions. Such questions follow on a statement and ask whether the same is true for someone or something else. The question just consists of **ana** +H 'and' and a personal pronoun (whether a participant or a third person) or a noun (phrase). Its predication is understood to be the same as that of the preceding statement, which may have been uttered by the speaker but also by the addressee. These questions do not invite a response starting with 'yes' or 'no', merely a confirming or denying statement.

m-p-ɔpərɔ̂t	**ana**	**ɔ-ʊ́ŋ**
1-C-good	and	PERS-2

m-p-ɔpərɔ̂t
1-C-good

I am fine, and you? I am fine

m-p-a.ɪk	**p-a.ɛɔ̂**	**ana**	**ɔ-ʊ́ŋ**
1-C-be:PR	C-go:INCOMPL	and	PERS-2

m-p-ănn-ɛɔ̂
1-C-NEG-go:DEPINCOMPL

I am going, and you? I am not going

ɔ-kʊkkʊ́	**p-ɔŋɔ́**
PERS-Kʊkkʊ	C-ill

ana	**ɔ-lalʊ̂**
and	PERS-Lalʊ

ɔ-lalʊ́	**p-ɔpəɽɔ̂t**
PERS-Lalʊ	C-good

Kʊkkʊ is ill. And Lalʊ? Lalʊ is fine

Appendices

The appendices present four transcribed, glossed and translated texts, as well as a word list of ca. 250 words.

Texts

Appendix I-IV contain four texts, by three different speakers. The first text, by Okabi Waleed Ibrahim Osman, is a story about a lazy person; the second and third, by Nafisa Abdullai, are instructional texts about how to make a 'singing whip' and to decorate a calabash; the fourth, by Kubakku Kamthan Ngappingka, is an animal story which contains dialogue. The stories (appendix I and IV) were performed before a small audience, the instructional texts in the presence of only the researcher. All texts were performed by heart. In the case of the instructional texts, the recordings were preceded by a moment of thinking on the part of the speaker about what to tell. All four texts were initially transcribed and translated with the help of Nafisa Abdullai (NaA). Tone marking and general checking was later done with the help of John Shakir (JS).

Parentheses () signify:

- in the Lumun text: recorded, but mistaken and/or not-understandable (only marked in case of a longer stretch);
- in the glosses: translation of mistaken or doubled text; morpheme that is underlyingly present, but not at the surface; semantic specification: species (sp.) or kind of (k.o.);
- in the translation: clarification, for example through (more) literal translation or through addition of information not present in the Lumun text.

Square parentheses [] signify:

- in the Lumun text: not recorded but added by JS, for example, replacing a not-understandable part;

- in the translation: translation of passage between square parentheses in the Lumun text.

Appendix I

The story of Aməntacɪ

(Male) speaker: Okabi Waleed Ibrahim Osman from Tɔmmʊ (Ṭaɽʊ), born in 1985. Recorded in Ṭɔp-arəṱêŋ (Ṭaɽʊ), April 2008. Recorded time: 1 minute and 31 seconds.

1. **kɛrʊŋ   k-aməntácɪ**[29]
   story   C-of.PERS.Aməntacɪ

   The story of Aməntacɪ.

2. **áməntácí   p-á.ík   p-ínakɔ   ŋ-ŋɔ́rɛ**
   PERS.Aməntacɪ   C-be:PR   C-be_known:INCOMPL   with-laziness

   Aməntacɪ is known for his laziness.

3. **áməntácɪ   p-ɔká.t   p-ɔ́nʊ́   kapɪk**
   PERS.Aməntacɪ   C-be:COMPL   C-have   rain

   Aməntacɪ was holding the rain. (i.e. Aməntacɪ was somebody who holds the rain)

4. **k-kw-ânn-ə́nɛkkɛ   mə́na   ɪttɪ   k-kw-á.kwɛ   cɪk**
   3-C-NEG-try:DEPINCOMPL   even   that   3-C-dig:INCOMPL   VREF

   He does not does not even try to do digging (in order to prepare a ground for building)

5. **məna   ɔccə́ṱa   kwɔ́ɽén   k-ɔ́-kə́rɛ́**[30]
   even   polish:DEPINCOMPL   piece_of_firewood   C-of-agricultural_tool(k.o.)

   nor does he even polish a piece of wood for a *kərɛ* (k.o. agricultural tool)

---

[29] The initial high tone of **áməntácɪ** is unexpectedly dropped.

[30] **kərɛ́** is a long pointed stick used, a.o, for removing old sorghum stocks.

6. **ɪttɪ   k-kw-á.kwɛ   cɪk   nɔ́-cərúk**
   that   3-C-dig:INCOMPL   VREF   on-opening

   in order to dig in the ground in the compound. (in order to clean it from
   weeds and make it flat and smooth)

7. **k-kw-íkkɔ   cɪk   ŋ-kər̥ɪ̥ttaŋ   k-ulluk   t̥ɔ-kəríkɪ**
   3-C-sit:INCOMPL   VREF   with-knife   C-only   at-elbow

   He just sits with a knife on his elbow.

8. **ŋɔrɛ   pər̥ɪn   áɲɲərɪŋ   məna**
   laziness   finally   totally   even

   The laziness is really enormous!

9. **k-kw-ânn-ír̥ɛ   mɘ́na   ɪttɪ   k-kw-á.kkɔt   man**
   3-C-NEG-say:INCOMPL   even   that   3-C-do:INCOMPL   house

   He does not even say that he will make a house,

10. **k-k-ʊ́nɔ   man**
    3-C-build:INCOMPL   house

    build a house, (i.e. the intention is not even there)

11. **ana   nɔ-ərɛ́   ŋ-ʊ́ŋ   k-kw-ɔ́pərət̥t̥ərɛ́**
    and   on-work   C-3POSS   3-C-very_good

    and compared to his work, he is very good. (i.e. the work is not good,
    but he looks very handsome)

12. **k-kw-íkkɔ   cɪk   ŋ-kər̥ɪ̥ttaŋ   t̥ɔ-kəríkɪ**
    3-C-sit:INCOMPL   VREF   with-knife   at-elbow

    He sits with a knife at his elbow,

13. **k-kw-íɲɲəra   k-kw-íɲɲəra   pər̥ɪn**
    3-C-very_smooth   3-C-very_smooth   finally

    he looks very smooth, just very smooth!

14. **t̥-ʊnɔ   t̥-ɔmmá**
    NOM-build   C-lack:INCOMPL

    Building is not there.

15. **ámmá**   **k-kw-ɔ́pərɪ**   **k-k-únɔ**   **k-k-únɔ**   **man**
    if   3-C-say   3-C-build:INCOMPL   3-C-build:INCOMPL   house

    When he decides he will build, build a house,

16. **karraŋ**   **k-əɽɛk**   **k-ɔtté**   **cɪk**   **nút̪ʊk**
    wall   C-some   C-small   VREF   for_nothing

    (he will build) just some useless small wall

17. **á-kw-akəɽ.at**   **n-tɔ́mpə́râ**
    SUBJ-3-cut_short:DEPPRFV   with-higher_place

    so that he cuts it short from where the ground is high.

18. **ámmá**   **á-kápɪk**   **apɔ**   **a-kw-íkkɔ**   **cɪk**
    if   CONJ-rain   fall:DEPINCOMPL   CONJ-3-sit:DEPINCOMPL   VREF

    a-kw-íkkɔ   **cɪk**   **ɪ-kəɽúk**   **k-ɛn**
    CONJ-3-sit:DEPINCOMPL   VREF   in-sheltered_spot   C-of:ABS

    And when the rain falls he sits, he sits in its shelter (i.e. he stays close to
    the wall for shelter from the rain, but there is no roof!)

19. **akka**   **mə́ná**   **ámmá**   **k-k-únɔ́.t**
    that   even   if   3-C-build:COMPL

    because even if he has built it (the wall)

20. **məná**   **á-kw-ɔ́ná.kat**   **ʊccɛ**   **ŋ-kə́rɛn**   **mə́na**
    even   CONJ-3-bring:DEPPRFV   grass   with-where   even

    where will he even bring the grass from?

21. **lɔn**   **ɛl-l-ərɪk**   **mə́na**[31]   **l-ɔt̪ên**
    words   DEM-C-NEARSP   even   C-of_what

    What are those things even good for?! (implied answer: for nothing!)

22. **ŋɔrɛ**   **ɪ-a**   **k-kw-ɔ́nʊ́**   **ŋ-á.mét**   **ŋímpên**
    laziness   RES-(C-)be   3-C-have   C-tell:INCOMPL   what

    The laziness that he has tells (us) what?! (i.e. it is beyond words!)

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[31] **məna** is realized here as **ŋəna**. **k** is not deleted before **m** (as is the general
rule), but **m** has assimilated for place of articulation to **k**.

23. **ana   ámmá   k-kw-íamá.t   k-kw-á.ccɔkɔt   kápɪk**
    and   if   3-C-become_hungry:COMPL   3-C-catch:INCOMPL   rain

    And when he is hungry, he will stop the rain (lit.: he will catch the rain)

24. **akka   á-ʋl   acəntɪnṭ-ɔ́k   məna   mḭ̂l**
    that   SUBJ-people   collect_for:DEPINCOMPL-O3   even   sorghum

    so that the people will even collect sorghum for him

25. **a-ɔ́l   acəntɪnṭ-ɔ́k   mḭ̂l   ana   mɔ́kál   ana   áppɛnṭína**
    CONJ-people   collect_for:DEPINCOMPL-O3   sorghum   and   sesame   and   groundnuts

    and the people will collect sorghum and sesame and groundnuts for him

26. **ana   ɪttɪná   k-kw-á.kkɔ   cɪk**
    and   so   3-C-live:INCOMPL   VREF

    and like this he lives.

27. **ana   ámmá   ń-ṭ-íɾéṭ-ʋ́ŋ   íṭṭíɾí[32]   ŋ́-kw-ɔ́nʋ́   ŋɔrɛ**
    and   if   2A-C-tell:COMPL-O2   that   2-C-have   laziness

    And if they tell you (lit.: will have told you) that you have laziness

28. **ámm.akka   ŋ-ámətácí**
    like   C-of.PERS.Amətacɪ

    like the one of Amətacɪ

29. **á-kə́ṭa   lɔ́n   l-ɔ́kíṭeṭṭak**
    SUBJ-(2-)look_at:DEPINCOMPL   words   C-very_bad

    you must see this as something very bad.

30. **a-kw-ɔ́ṭəkka.kat   ménɪk   púccók**
    CONJ-3-become:DEPPRFV   like_this   continuously

    He became like this continuing for some time (i.e. Amətacɪ continued to be like this for some time)

31. **mɔ́nɔ́   a-kw-ɔ́ṭəkka.kat   p-ɪnakɔ́.t   ŋ-ŋɔ́rɛ   pəɾɪn**
    CONJ-3-become:DEPPRFV   C-be_known:COMPL   with-laziness   finally

    until he finally became known for his laziness

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[32] **ɪṭṭɪɾĭ** is a variant of the complementizer **ɪttĭ** 'that'.

32. **a-kín**   **ıkk.at**   **cık**   **a-kín**   **ʊɽəllɛ³³**   **kérʊŋ** **k-ɛn**

    CONJ.PERS-3A sit:DEPPRFV VREF   CONJ.PERS-3A graze.PLUR:DEPINCOMPL story   C-of:ABS

    and they (the people) started telling that story.

33. **ɔ-ʊn**   **ɔ-manṭéla**   **m-ɔ-lɔ́ttı**   **l-âlmɛ́lʊa³⁴**

    PERS-1   PERS-Manṭela   C-of.PERS-Lɔttı   C-of.PERS.Almɛlʊa

    I am Manṭela of Lɔttı of Almɛlʊa.

34. **m-p-ɔká.t**   **cık**   **a-n-ʊ́ɽɛt³⁵**   **kə́rʊŋ**   **ṭáɽʊ**

    1-C-be:COMPL   VREF   CONJ-1-graze_at:DEPINCOMPL story   Ṭaɽʊ

    ı-cʊɽé   **c-ɔ-pıra**   **c-ɔ-pəɽɔt**

    in-buttock   C-of-tree   C-of-baobab

    I was telling the story in Ṭaɽʊ under the tree, under the baobab.

Appendix II

The singing whip

(Female) speaker: Nafisa Abdullai from Icapú (Tɔɽəmaṭ̂ɔn), at the time ca. 19 years old. Recorded in Icapú (Tɔɽəmaṭ̂ɔn), on 5 February 2009. Recorded time: 1 minute and 56 seconds.

1. **kammıâ**

    singing_whip

    The singing whip.³⁶

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³³ The Pluractional verb **ʊɽəllɛ** is based on **ʊɽɛ**, which refers to 'letting the cows graze'. It can also be used for 'talking, telling'.

³⁴ Nickname of the storyteller. Almɛlʊa is from Sud. Arab. *malwa* 'unit of weight equal to 3.145 kg'. In the Lumun area it refers to a (tin) cup that is used for measuring comestibles such as sorghum, sesame, groundnuts and dates in the market.

³⁵ The verb **ʊɽɛ** 'graze' is also used in the context of storytelling.

³⁶ **kammıâ** is the piece of bamboo, prepared in the right way, to which a rope is attached. Together they make the singing whip.

2. **m-p-a.ɪk**   **p-a.ṭ-érɛ**   **nɔ́-kammɪâ**
   1-C-be:PR   C-IT:INCOMPL-speak   on-singing_whip

   I am going to talk about the singing whip

3. **ámmá**   **ŋ́-kw-ɔ́ŋɔ́ṭ.έ**   **ɪttɪ**   **ŋ-kw-a.kkɔ́t**   **kammɪá**
   if   2-C-like:COMPL   that   2-C-do:INCOMPL   singing_whip

   If you want to make a singing whip

4. **ana**   **ŋ-kw-úmmɔ**[37]   **kupu**   **a.ccə́ṭa**   **kɪccé**
   and   2-C-take:INCOMPL   piece_of_bamboo   CONJ-(2-)polish:DEPINCOMPL   carefully

   then you take a piece of bamboo and you polish it carefully.

5. **ámmá**   **ŋ́-kw-ɔ́ccə́ṭá.t**   **ŋ-kəṛittaŋ**   **pápénnáŋ**
   if   2-C-polish:COMPL   with-knife   very_well

   When you have polished it properly with a knife

6. **á-ʊmmɔ**   **kaṛá**[38]   **á.lúpɔ**   **ŋ.ŋɪn**
   SUBJ-(2-)take:DEPINCOMPL   stone(k.o.)   SUBJ-(2-)wriggle:DEPINCOMP   with:ABS

   you take a *kaṛa*-stone and you wriggle with it.

7. **ámmá**   **ŋ́-kw-ɔ́lúpɔ́.t**   **mə́ná**   **á.kkɔ́t**   **cə́rúk**   **tít**
   if   2-C-wriggle:COMPL   until   CONJ-(2-)make:DEPINCOMPL   opening   in:ABS

   When you have wriggled (with it) until you make a hole in it (in the piece of bamboo)

8. **á-ṭémɛṛɔ**   **ṭɔṛək**   **ṭ-ɔpə́ṭṭərɛ**   **ṭ-ɔttə́kárrân**
   SUBJ-(2-)roll_on_thigh:DEPINCOMPL   rope   C-very_nice   C-thin

   you must roll on your thigh a rope (making it) very nice and thin,

9. **á-ɪṛɪkɛ**   **tít**   **á.ṛə́kkɛt**   **cɔɲɪk**   **cík**   **n-ṭɔṛəṭán**
   SUBJ-(2-)make_enter:DEPINCOMPL   in:ABS   CONJ-(2-)tie:DEPINCOMPL   knot   VREF   with-behind

   you pass it through it (through the hole in the piece of bamboo) and you tie a knot at the back,

10. **á-ṛə́kkɛt**   **ṭɔṛək**   **cík**   **ŋ-kámmɪá**   **tít**
    SUBJ-(2-)tie:DEPINCOMPL   rope   VREF   with-singing_whip   in:ABS

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[37] NaA pronounces labialized **k** before **ʊ** [kʷʊ].

[38] **kaṛâ** is a black stone with sharp edges (possibly slate).

(then) you put the rope with the singing bamboo down

11. **á-ṭ-úmmɔ**   **kʊpɪr**   **k-ûkwít**
SUBJ-(2-)IT:DEPINCOMPL-take:DEPINCOMPL   sorghum_stock   C-long

and you go and pick a long sorghum stock

12. **k-ênnaŋ**   **k-ɔttə́kárrán**
C-properly_sized   C-thin

not too big, not too small, and thin

13. **á-ɪllɔ**   **tít**   **â.rəpɛ**
SUBJ-(2-)split:DEPINCOMPL   in:ABS   SUBJ-(2-)make_come_down:DEPINCOMPL

and you split it, and you insert

14. **ṭɔɽək**   **én-ṭ-ərɪk**   **ṭan**   **ṭ-ɔ́-kammɪâ**
rope   DEM-C-NEARADDR   there   C-of-singing_whip

that rope with (lit. 'of') the singing bamboo there (into the split)

15. **â-pɛt**   **nan**   **kɪccé**
SUBJ-(2-)wind_at:DEPINCOMPL   on:ABS   properly

and you tie it onto it properly

16. **á-ɛ̃**   **nɔɽɔ́**   **cattak**
SUBJ-(2-)go:DEPINCOMPL   on_top-of   stone(k.o)

and you go on a stone

17. **á-ɛɛ**   **kámmɪâ**
SUBJ-(2-)swing:DEPINCOMPL   singing_whip

and you swing the singing whip.

18. **ana-rrók**   **ámmá**   **ŋ́-kw-ɔ́nʊ́**   **kammɪá**   **cɪ-nɔ́-cərúk**
and-nevertheless   if   2-C-have   singing_whip   LOC-on-opening

But if you have a singing whip in the compound

19. **ana**   **ámmá**   **ŋ́-kw-ɔ́ɽə́kkéṭ.ɛ**   **ŋɪcʊl**   **nɔ-ṭík**
and   if   2-C-put:COMPL   sauce   on-fire

and if you have put sauce on the fire

20. **məna   ána   ŋuɽú**
    even   and   asida

    and even asida

21. **ŋ-kw-aṭ-úrɛ   nán akka kámmɪá k-ɔpərɔ́t ṭɪaṭ-ṭɪak**
    2-C-IT:INCOMPL-forget:DEPINCOMPL on:ABS that singing_whip C-good   very-REDUP

    you will go and forget about it because the singing whip is very good.

22. **ana   ŋ-kw-aṭ-íkkɔ   cɪk   nɔ́ɽɔ́   cattak**
    and   2-C-IT:INCOMPL-sit:DEPINCOMPL VREF on_top-of stone(k.o.)

    And you go and sit on top of a stone

23. **á-ʊrɛ.kat   nan   ɪttɪ**
    SUBJ-(2-)forget:DEPPERFTV on:ABS that

    so that (the next thing is that) you forget about it that

24. **m-p-ɔnʊ́ ŋɪcul   nɔ-ṭɪk   ána   ŋuɽû**
    1-C-have sauce   on-fire   and   asida

    I (you) have sauce on the fire and asida.

25. **ana   k-k-ɔ́pərɔ́t   ṭɪaṭ-ṭɪak**
    and   PRO-C-good   very-REDUP

    And it is very nice

26. **a-ɲʊ́kʊ́l   í-ɲ-ârɪ   ɲ-ɔŋɔṭ.ɛ̂**
    CONJ-children   RES-C-female   C-like:COMPL

    and the girls love it.

27. **ámmá   ɲ-ɔ́ccįkɔ́ṭ.ɛ́   á-páŋɔ́n   ɛɛ**
    if   PRO.C-hear:COMPL   CONJ-sibling.PL   swing:DEPINCOMPL

    As soon as they hear (lit: have heard) their sisters swing

28. **ana   ɲ-ɛ́rakɔt**
    and   PRO.C-come_one_by_one:INCOMPL

    then they come one by one

29. **a-kín**   **ɛnnəkkɛ**   **a-kín**   **ɛɛ**
    CONJ-3A   try:DEPINCOMPL   CONJ-3A   swing:DEPINCOMPL

    and they try to swing (the singing whip).

30. **ana**   **m-p-ɔŋɔṭ.ɛ́**   **ɪttɪ**   **m-p-érɛ**   **nɔ́-kammɪá**   **ɪttɪnâ**
    and   1-C-like:COMPL   that   1-C-talk_about:INCOMPL   on-singing_whip   so

    And I like to talk about the singing whip like this

31. **akka**   **k-k-ɔ́pərɔ́t**   **ṭɪaṭ-ṭɪak**
    that   PRO-C-good   very-REDUP

    because it is very nice.

32. **k-k-á.kərənnɔ**   **ɲúkʊl**   **ɪ-ɲ-ârɪ**   **a-ɲ-íkkɔ**   **cɪk**   **ṭɔ́ṭʊn**
    C-PRO-let:INCOMPL   children   RES-C-female   CONJ-PRO-sit:DEPINCOMPL   VREF   together

    It allows the girls to sit together

33. **ana**   **ɲ-ɛ́ɛ**   **ámmɪâ**
    and   PRO.C-swing:INCOMPL   singing_whips

    and they swing the singing whips.

Appendix III

Decorating calabashes

The (female) speaker is Nafisa Abdullai from Icapú (Tɔɽəmaṭɔ̂n), at the time ca. 19 years old. The recording was made in Icapú (Tɔɽəmaṭɔ̂n), on 5 February 2009. Recorded time: 1 minute and 30 seconds.

1. **ṭ-ɔkʊrrɔ**   **makkɔ̂ŋ**
    NOM-engrave   calabashes(k.o.)

    Decorating calabashes.

2. **m-p-a.ɪk**   **p-aṭ-érɛ**   **nɔ́-cákkɔ̂ŋ**
    1-C-be:PR   C-IT:INCOMPL-speak:DEPINCOMPL   on-calabash(k.o.)

    I am going to talk about the calabash,

3. **ámm.akka ól ɔkʊrrɔ makkɔ̂ŋ**
   how   people   engrave:DEPINCOMPL   calabashes(k.o.)

   how the people decorate calabashes.

4. **cɪt.tɔ́.kɪ́t pʊl p-úmmɔ kʊrǐn**
   firstly   person   C-take:INCOMPL   awl

   Firstly, the person takes an awl

5. **á-kw-ɔkʊrrɔ ɲ-cakkɔ́ŋ lɔ́n l-ɔ́pɔ́ṭṭəré**
   SUBJ-3-engrave:DEPINCOMPL   with-calabash(k.o.)   words   C-very_good

   to engrave the calabash with it very nicely.

6. **ámmá k-kw-ɔ́kúrrɔ.t ɛppík**
   if   3-C-engrave:COMPL   all

   When she has engraved the whole (calabash)

7. **á-kw-ɔ́ṭ-úmmɔ mɔɲɪk á-kw-ɔ́kákɔ**
   SUBJ-3-IT:DEPINCOMPL-take:DEPINCOMPL   charcoal   SUBJ-3-grind:DEPINCOMPL

   she must go and take charcoal and grind it.

8. **ámmá k-kw-ɔ́kakɔ́.t mɔɲɪ́k**
   if   3-C-grind:COMPL   charcoal

   When she has ground the charcoal

9. **á-kw-ɔ́ṭ-úmmɔ ŋaak**
   SUBJ-3-IT:DEPINCOMPL-take:DEPINCOMPL   oil

   she must go and take the oil

10. **á-kw-ɔ́ṭɔ́t í-úrrét ên-n-ərɪk**
    SUBJ-3-rub_at:DEPINCOMPL   in-lines   DEM-C-NEARADDR

    to rub it into those grooves

11. **ɪ-a k-kw-ɔ́kʊrrɔ.t ŋ-kʊrǐn**
    RES-(C-)COP   3-C-engrave:COMPL   with-awl

    that she has engraved with the awl

12. **á-kw-ɔ́ṭɔ́t cákkɔ́ŋ**
    SUBJ-3-rub_at:DEPINCOMPL   calabash(k.o)

    and she rubs the calabash

13. **á-c-ant-íkkɔ**   **cɪk**   **lɔ́n**   **l-ɔ́pɔ́t̪t̪ərɛ**
    SUBJ-PRO-can:DEPINCOMPL-sit:DEPINCOMPL   VREF   words   C-very_good

    and it is going to be very nice

14. **n-nέpílá   nán**
    with-lines   on:ABS

    with the drawings on it.

15. **ana   ámmá   ŋ́-kw-ɔ́ŋɔ́t̪.έ   ɪttɪ   ŋ-kw-a.ɽɔ́kkɛt   muccú   nán**
    and   if   2-C-like:COMPL   that   2-C-put_down:INCOMPL   beads   on:ABS

    And if you want to put beads on it

16. **â-cɔ**   **muccú**   **m-ɔt̪úkkwakɔ.t**   **cakərúk**
    SUBJ-(2-)string:DEPINCOMPL   beads   C-be_coloured:COMPL   also

    you also string beads of different colours

17. **á-ɪpɔt**   **nɔ́-cákkɔ́ŋ**   **kɪccé**
    SUBJ-(2-)put_down   on-calabash(k.o.)   properly

    and you put them on the calabash properly.

18. **ámmá   á-úl   ɔ́kə́t̪accɛ**   **cakkɔ́ŋ**
    if   CONJ-people   look_at.PLUR:DEPINCOMPL   calabash(k.o.)

    When people look at the calabash

19. **a-c-c-ɔ́pət̪t̪ərɛ**   **pə́ɽɪn**
    CONJ-PRO-C-very_good   finally

    it is just really very nice.

20. **ámmá   á-íkkɔ**   **ŋə́pak**   **n.tít**[39]
    if   CONJ-(2-)drink:DEPINCOMPL   beer   from:ABS

    When you drink beer from it,

21. **ámmá   á-íkkɔ**   **ŋəʈɪ**   **n.tít**[40]
    if   CONJ-(2-)drink:DEPINCOMPL   water   from:ABS

    when you drink water from it

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[39] In the spoken text **ntán** 'from there' was used. **ntít** 'from (it), out of (it)' was preferred by JS.

[40] In the spoken text **ntán** 'from there' was used. **ntít** 'from (it), out of (it)' was preferred by JS.

22. **ŋ-kw-ɔŋɔ̯t.ɛ́** **ɪttɪ** **ŋ-kw-a.kə́ṯaccɛ** **nɛpɪlá** **n-ɛn**
2-C-like:COMPL   that   2-C-look_at.PLUR:INCOMPL   drawings   C-of:ABS

you like to look at its drawings.

23. **ana** **k-kw-á.ṯ-ɪɽɪkɛ** **ṯɔɽək** **ṯ-əɽɛk** **ṯ-a.ɪk**[41] **tít**
and   3-C-IT:INCOMPL-make_enter:DEPINCOMPL   rope   C-some   C-be:PR   in:ABS

And she is going to enter some rope being there into it

24. **á-kw-ant-ɔṯ-ɔpɛ́**
SUBJ-3-can:DEPINCOMPL-IT:DEPINCOMPL-wind:DEPINCOMPL

and she can make a winding (i.e. wind a coloured thread around the rope)

25. **a-ṯ-íkk.at** **cɪk** **a-ṯ-ɔ́kəṯaccətta** **ṯ-ɔpə́ṯṯərɛ** **pə́ɽɪn**
CONJ-PRO-sit:DEPPRFV   VREF   CONJ-PRO-be_looked_at.PLUR:DEPINCOMPL   C-very_good   finally

and it starts to look just very nice.

Appendix IV

The story of the tortoise

(Male) speaker: Kupakku Kamthan Ngappingka (Moussa Hamdaan) from Ṯɔkɪcɪŋkícín (Ṯaɽʋ), at the time in his late twenties. Recorded at Ṯɔparəṯɛ̂ŋ (Ṯaɽʋ), April 2008. Recorded time: 5 minutes and 2 seconds.

1. **kɛrʋŋ** **(k-ɔ-)k-ɔ-kəɽɔ̂l** **kəɽɔ́l** **ana** **ŋáṯṯəṯṯápɛ**
story   C-of-C-of-tortoise   tortoise   and   bird(sp.)

The story of the tortoise, the tortoise and the *ŋaṯṯəṯṯápɛ*-bird.

2. **ŋaṯṯəṯṯápɛ** **ŋ-ɪkkɔ́.t** **cɪk** **a-íttɪttɛ** **aôn**
bird(sp.)   C-sit:COMPL   VREF   CONJ-(PRO-)collect.PLUR:DEPINCOMPL   bees

The *ŋaṯṯəṯṯápɛ*-bird was always collecting honey,

---

[41] **ṯaɪk** can also be left out.

3. **ana kəɽɔ́l k-ıkkɔ́.t cık tʊan nótʊk**
and   tortoise   C-sit:COMPL   VREF   at_home   for_nothing

and the tortoise was staying at home, doing nothing.

4. **a-kw-ɔ́mɛ.kaṯ-ɔ́k ıttı ṯɔ́ma tát̪-ta**
CONJ-3-tell:DEPPRFV-O3   that   friend   how-QW

And he (the tortoise) said to him: "Friend, how are you?

5. **m-p-át̪t̪-ɔ́ccɔ́ ṯık ana attı ṯık ṯ-a.îk**
1-C-ITVEN:COMP-receive:DEPINCOMPL   fire   and   I_hope_that   fire   C-be:PR

I have come to get fire and I hope there is fire?"

6. **a-kw-ɔ́mɛ.kaṯ-ɔ́k ıttı ṯık ṯ-a.îk ana ŋ-kw-a.cɔ́ɽɔ kəppák**
CONJ-3-tell:DEPPRFV-O3   that   fire   C-be:PR   and   2-C-wait:INCOMPL   short_time

And he (the bird) said to him: "There is fire, but you wait a little,

7. **a-parı p-ın íṯa ír-ɔɽəkɔ ŋuɽû**
CONJ.PERS-wife   C-1POSS   cook:DEPINCOMPL   (SUBJ-)12-eat:DEPINCOMPL   asida

my wife is cooking so that we can eat asida".

8. **(…) [a-kw-ɔ́mɛ.kaṯ-ɔ́k ıttı] lá la la⁴² kırənnı lɔ́n l-ɔ́-úɽû**
?   CONJ-3-tell:DEPPRFV-O3   that   no no no   let:IMP   words   C-of-asida

[He (the tortoise) said to him], "No no no, leave the asida!"

9. **a-kw-ɔ́mɛ.kaṯ-ɔ́k ıttı ıkkı cík ír-ɔɽəkɔ ŋuɽû**
CONJ-3-tell:DEPPRFV-O3   that   sit:IMP   VREF   (SUBJ-)12-eat:DEPINCOMPL   asida

But he (the bird) told him, "Sit down so that we eat asida".

10. **a-kw-ɔ́mɛ.kaṯ-ɔ́k ıttı ıṯ-ṯ-a.ɽəkɔ ŋuɽû**
CONJ-3-tell:DEPPRFV-O3   that   12-C-eat:INCOMPL   asida

Then he (the tortoise) said to him: "We will eat asida.

11. **ŋ-kw-əɽá.ṯ-ín ŋúɽú póccʊp-póccʊk ıttı ıṯ-ṯ-a.ɽəkɔ́**
2-C-refuse:COMPL-O1   asida   for_some_time-REDUP   that   12-C-eat:INCOMPL

You continue to ignore me regarding the asida, so we will eat.

---

⁴² Sudanese Arabic interjection: *la* 'no'.

12. **ɔ-parɪ**   **p-aŋ**   **p-a.kkə́ttɛt**   **ŋúcól**   **ŋ-ɔ́-ín-ṭa**
PERS-wife   C-2POSS   C-do.PLUR:INCOMPL   sauce   C-of-what-QW

What does your wife always make the sauce of?"

13. **a-kw-ɔ́mɛ.kaṭ-ɔ́k**   **ɪttɪ**
CONJ-3-tell:DEPPRFV-O3   that

But he (the bird) said to him,

14. **ant-íkkɔ**   **cɪk**   **tulluk**   **á-ɽəkɔ**   **ŋuɽû**
can:DEPINCOMPL-sit:DEPINCOMPL   VREF   only   SUBJ-(2-)eat:DEPINCOMPL   asida

"Please just sit down to eat asida".

15. **a-kw-ɔ́na.kat**   **ŋuɽú**   **ana**   **ŋəɽɪ**   **ŋ-ŋúcʊl**   **ŋ-áôn**[43]
CONJ-3-bring:DEPPRFV   asida   and   water   with-sauce   of-bees

And he brought the asida and water with honey sauce (i.e. a watery honey sauce).

16. **a-kw-ɔ́mɛ.kaṭ-ɔ́k**   **ɪttɪ**   **tír-ɔ́ɽə́kɔ́**   **ŋúɽû**
CONJ-3-tell:DEPPRFV-O3   that   HRT12-eat:DEPINCOMPL   asida

And he (the bird) said to him, "Let us eat the asida".

17. **a-kw-ɔ́mɛ.kaṭ-ɔ́k**   **ɪttɪ**
CONJ-3-tell:DEPPRFV-O3   that

And he (tortoise) said to him:

18. **á-a**   **ŋ-kw-a.ɽəkɔ**   **ŋuɽú**   **ŋ-ŋəɽɪ**   **tɪt**   **éŋ-ŋ-í**   **íttíná-ɪ**
no-REDUP   2-C-eat:INCOMPL   asida   with-water   in:ABS   DEM-C-NEARSP   so-Q

"No, you eat asida with this water to it like this?

19. **ŋ-ŋəɽɪ**   **éŋ-ŋ-í**   **á-n-ɔ́ɽə́kɔ́**   **ŋúɽú**   **akka-în**
with-water   DEM-C-NEARSP   CONJ-1-eat:DEPINCOMPL   asida   that-what

with this water, why would I eat the asida?!

---

[43] **ŋáôn** instead of expected **ŋaôn**.

20. **akka   ɔ-parɪ   p-ɪn   p-a.kkɔ́t**
    that   PERS-wife C-1POSS C-do:INCOMPL

    ŋúcúl   ŋ-ɔ́nʈɔ́mát   ámma   pa-p-ərɛk
    sauce   C-strong   like   thing-C-some

    because my wife makes the sauce strong like anything (i.e. very strong)

21. **ana m-p-a.ɽəkɪnɛ   ŋín-ʈá   ŋúɽú   ŋ-ŋəɽĭ**
    and 1-C-eat_for:INCOMPL what-QW asida   with-water

    so why would I eat asida with water?"

22. **a-kw-ɔ́mɛ.kaʈ-ɔ́k   ɪttɪ   ant-ɔ́nɔt**
    CONJ-3-tell:DEPPRFV-O3 that   can:DEPINCOMPL-taste:DEPINCOMPL

    But he (the bird) told him: "Please taste it,

23. **ant-ɔmmɛ⁴⁴   ŋuɽú   á-nɔt**
    can:DEPINCOMPL-move:DEPINCOMPL asida   SUBJ-(2-)taste:DEPINCOMPL

    move the asida so that you taste it". (i.e. bring a piece to your mouth)

24. **khalas⁴⁵   akka   k-kw-ɔ́ɽəkɔ.t   ŋuɽú**
    that's_it that   3-C-eat:COMPL   asida

    Okay, when he (the tortoise) had been eating the asida,

25. **akka ɔ-kín   ʈ-ɔɽəkɔ.t   ŋuɽú   púccók**
    that PERS-3A C-eat:COMPL asida   for_some_time

    when they had been eating the asida for some time,

26. **a-kw-ɔ́mɛ.kaʈ-ɔ́k   ɪttɪ   ant-ɔ́nɔt**
    CONJ-3-tell:DEPPRFV-O3 that   can:DEPINCOMPL-taste:DEPINCOMPL

    he (the bird) said to him, "Please taste it (the sauce)".

---

⁴⁴ **ɔmmê** 'move' collocates with asida. It can refer to moving the asida from the cooking pot onto a plate, to dipping a piece of asida in the sauce, or to bringing asida to the mouth.

⁴⁵ Sudanese Arabic interjection *khalaaṣ* 'that's it, so much for that, enough'.

27. **a-kw-ɔ́mmɛ.kat**   **a-kw-ɔ́mɛ.kat**   **ıttı**   **ɔ́kwɔ̌**
CONJ-3-move:DEPPRFV   CONJ-3-say:DEPPRFV   that   goodness

And he (the tortoise) moved it (i.e. he dipped the asida in the sauce and brought it to his mouth) and said: "Goodness,

28. **ṭɔ́ma**   **ŋʊcʊl**   **ŋ-ɔ-ín-ṭa-ppʊ**   **έŋ-ŋ-í**   **ŋ-írrók**   **íttínâ**
friend   sauce   C-of-what-QW-really   DEM-C-NEARSP   C-cold   so

friend, what, really, is this sauce that is so sweet made of?"

29. **a-kw-ɔ́cca.kat**   **ŋuṛú**   **ı-carək**   **púccók**
CONJ-3-scoop:DEPPRFV   asida   in-belly   for_some_time

And he scooped the asida into his stomach for some time

30. **a-kw-ɔ́ṭəka.kat**   **a-kw-ɔ́mɛ.kat**   **ıttı**   **ṭɔ́ma**
CONJ-3-become_satisfied:DEPPRFV   CONJ-3-say:DEPPRFV   that   friend

and he got satisfied and he said: "Friend,

31. **ɔ-parı** **p-áŋ** **p-á.kkə́ttɛt** **ŋúcól** **ŋ-ɔ́-ín-ṭá** **έŋ-ŋ-í** **íttínâ**
PERS-wife C-2POSS C-do.PLUR:INCOMPL sauce C-of-what-QW DEM-C-NEARSP so

what does your wife always make this sauce of like this? (i.e. what is the secret ingredient making it so sweet?)

32. **ant-ɔkə́né-n**   **á-n-ɔkkɔ́t**
can:DEPINCOMPL-show:DEPINCOMPL-O1 SUBJ-1-do:DEPINCOMPL

Please show it to me,

33. **ŋúcól**   **έŋ-ŋ-í**   **í-ɔ́ṭíɔ́t**   **cákərúk**
sauce   DEM-C-NEARSP   RES-(C-)sweet   also

so that I can make this sweet sauce too".

34. **(a-kəṛɔ́l)**   **ăṭṭəṭṭápέ**   **ɔ́mέ.kaṭ-ɔ́k**   **ıttı**
CONJ-tortoise   CONJ.bird   tell:DEPPRFV-O3   that

(And the tortoise) And the *ŋaṭṭəṭṭápɛ*-bird said to him:

35. **ŋkɔ**   **áṭ-ɔmɛt**   **ɔ-parı**   **p-áŋ**
go:IMP   CONJ.(2.)IT:DEPINCOMPL-tell:DEPINCOMPL   PERS-wife   C-2POSS

"Go and tell your wife

36. **á-kw-ann-ɔŋáɛɔt**　　　　　　　**nɔ́-capʊ**　**ɔ-kín**　**ɔ-pɛɪ-ɔ́n**　**tárra**[46]
SUBJ-3-NEG:DEP-urinate_at:DEPINCOMPL　on-ground　PERS-3A　PERS-child-PL　all

that she and all her children must not urinate on the ground,

37. **á-kɪn**　　　**ann-ɔŋáɛɔt**　　　　　**nɔ́-capʊ**
SUBJ.PERS-3A　NEG:DEP-urinate_at:DEPINCOMPL　on-ground

they must not urinate on the ground

38. **a-kín**　　　**ɔ́ŋállɛt**　　　　　　**ɪ-lɔntərɔ̂**
CONJ.PERS-3A　urinate_at.PLUR:DEPINCOMPL　in-calabashes(k.o.)

but they must urinate in calabashes.

39. **ícɪ**[47]　**pʊl**　**á-p-ɔ́ppét**　　　　**ṭ̱ɔ́ntərɔ́**　**ṭ̱-úŋ**
any　person　SUBJ-PRO-fill:DEPINCOMPL　calabash(k.o.)　C-3POSS

Each person must fill his calabash

40. **ana**　**ṣabááḥ**[48]　**á-ɪṭa**[49]
and　morning　SUBJ-(2-)cook:DEPINCOMPL

and in the morning you must cook (asida),

41. **áṭ̱-ákkarɔ́-n**　　　　　　　　**ír-ɔṭ̱-ɔɾəkɔ**　　　　　　　**ŋuɾû**
CONJ.(2.)VEN-call:DEPINCOMPL-1O　(SUBJ-)12-IT:DEPINCOMPL-eat:DEPINCOMPL　asida

then you must come and call me, so that we go and eat asida".

42. **ana**　**a-kw-ɔ́mɛ.kat**　　**ɔ-parɪ**　**ɪttɪ**
and　CONJ-3-tell:DEPPRFV　PERS-wife　that

And he (the tortoise) said to his wife:

43. **ɲ-cɪc-cənɛ**　**ɪnénní**　**pʊl**　**p-ɛllá**　　**p-á.ŋɛ́ɔt**　　**nɔ́-capú**
with-LOC-here　today　person　C-lack:INCOMPL　C-urinate_at:INCOMPL　on-ground

"From here and now on, no one will urinate on the ground

---

[46] Not a Lumun word, according to JS probably a Tira word.

[47] From Sudanese Arabic *ayyi* 'any'.

[48] Sudanese Arabic word *ṣabaaḥ* 'morning'.

[49] Implied object of **ɪṭa** is **ŋuɾû** 'asida'.

44. **ana kʋa éŋ-k-í   ɔ́k.kw.í   í-p-ɔ́ŋáɛ́ɔ̃t̪.ɛ   nɔ-capʊ́**
    and sticks   DEM-C-NEARSP the_one   RES-C-urinate_at:COMPL   on-ground

    and these sticks, who will have urinated on the ground,

45. **m-p-a.kkwɛ-kɔ̂k**
    1-C-beat:INCOMPL-O3

    I will beat him!"

46. **ɪttɪná   a-kw-ɔ́ŋa.kat**
    so   CONJ-3-tear_off:DEPPRFV

    Then he tore off,

47. **a-kəɽɔ́l   ɔ́ŋá.kant̪et   ɔ-parɪ-ɔ́n   kʋa   k-ɔppɔ́t**
    CONJ-tortoise tear_off_for:DEPPRFV PERS-wife-PL   sticks   C-many

    the tortoise tore off many branches for his wife and children

48. **a-kw-ɔ́mɛ.kat   ɪttɪ pʋa ém-p-í   p-ɔ-pat̪t̪ɪ   ém-p-í**
    CONJ-3-tell:DEPPRFV   that stick DEM-C-NEARSP   C-of.PERS-person   DEM-C-NEARSP

    and he said: "This stick is for this person

49. **ana   ém-p-í   p-ɔ́-pat̪t̪ɪ[50]   ém-p-í**
    and   DEM-C-NEARSP   C-of.PERS-person   DEM-C-NEARSP

    and this one is for this person.

50. **ana ámmá   ɔ́k.kw.í   í-p-ɔ́ŋáɛ́ɔ̂t̪.ɛ   nɔ-capʊ́**
    and if   the_one   RES-C-urinate:COMPL   on-ground

    And if there is anyone who will have urinated on the ground

51. **ana   m-p-a.pɔ́t̪t̪ɔt̪-ɔ̂k**
    and   1-C-beat:INCOMPL-O3

    then I will beat him".

52. **a-parɪ-ɔ́n   ɔ́mɛ́.kat   ɪttɪ   nt̪ɛɛ   ŋaɛ   ŋ-ɔ́-ín-í**
    CONJ-wife-PL   say:DEPPRFV that   nonsense urine   C-of-what-Q

    His wife and children said: "Nonsense, urine for what??

---

[50] The word is realized tonally different from the same word in the same environment in line 48. In line 48 'this' modifying the stick is realized as before a pause, in line 49 there is high tone shift onto the next word, followed by tone bridge. In both cases, both realizations are possible.

53. **ámmá**   **ŋ́-kw-íɽɛ́.t**   **mɛník**
    if   2-say:COMPL   like_this

    (but) If you say so (lit.: if you have said so),

54. **ɔ-nḭn**   **ṭ-a.ŋállenṭ-ʊŋ**   **ɪ-lɔntərɔ̂**
    PERS-1A   C-urinate_for_at.PLUR:INCOMPL-O2   in-calabashes(k.o)

    we will urinate for you in calabashes,

55. **ant-ɔkə́ṭa**   **lɔ́n**   **í-l-á-kkɔ́t[51]**   **nán**
    can:DEPINCOMPL-look:DEPINCOMPL   words   RES-C-COP-(2-)do:DEPINCOMPL   on:ABS

    just see what you do with it!

56. **ana ŋ-kw-ɪɽɛ́.t   ɪttɪ ɔ-nḭn   ṭ-a.ŋállenṭ-ʊŋ**   **ɪ-lɔntərɔ̂**
    and   2-say:COMPL   that PERS-1A   C-urinate_for_at.PLUR:INCOMPL-O2   in-calabashes(k.o)

    And you said that we must urinate for you in calabashes,

57. **ana**   **áppín-áppín**   **a-ŋ-kw-ănn-ɪɽɛ**   **ɪttɪ**
    and   always-REDUP   CONJ-2-C-NEG-say:DEPCOMPL   that

    but all the time you were not saying that

58. **ɔ-nḭn**   **ṭ-a.ŋállɛt**   **ɪ-lɔntərɔ̂**
    PERS-1A   C-urinate_at.PLUR:INCOMPL   in-calabashes(k.o)

    we must urinate in calabashes!" (i.e. you never said this before!)

59. **a-kín**   **ɔ́ŋállɛ.kat**   **ɪ-lɔntərɔ̂**
    CONJ.PERS-3A   urinate_at.plur:DEPPRFV   in-calabashes(k.o)

    And they urinated in the calabashes.

60. **ana şabááḥ[52] a-kw-ɔ́llɔ**   **kɪṭṭík a-kw-ɔ́mɛ.kat   ɪttɪ**
    and   morning   CONJ-3-run:DEPINCOMPL   strongly   CONJ-3-say:DEPPRFV   that

    And in the morning he (the tortoise) ran fast and said:

---

[51] **í-l-á-kkɔ́t** < **í-l-á ŋ-ɔ́kkɔ́t**.

[52] Sudanese Arabic word *şabaaḥ* 'morning'.

61. **ʈɔ́ma aɽɪk ír-ɛɔ́**
    friend   come:IMP   (SUBJ-)12-go:DEPINCOMPL

    ɔ́r-ɔʈ-ɔɽəkɔ[53] ŋuɽû
    (SUBJ-)12-IT:DEPINCOMPL-eat:DEPINCOMPL   asida

    "Friend, come so that we go, so that we go eat asida".

62. **a-kw-ɔ́mɛ.kaʈ-ɔ́k ɪttɪ ɔ-parɪ p-aŋ p-ɔcɔʈɔ́ʈ.ɛ ŋucʊl pəɽɪn-ɪ**
    CONJ-3-tell:DEPPRFV-O3   that   PERS-wife   C-2POSS   C-finish:COMPL   sauce   completely-Q

    He (the bird) said to him: "Has your wife completely finished the sauce?"

63. **a-kw-ɔ́mɛ.kaʈ-ɔ́k ɪttɪ ịị ŋucʊl ŋ-ɔppəppáʈ.ɛ lɔntərɔ̂**
    CONJ-3-tell:DEPPRFV-O3   that   yes   sauce   C-become_full.PLUR:COMPL   calabashes

    He said to him: "Yes, the sauce is full (in) the calabashes (i.e. the calabashes are full with sauce),

64. **məna ɔ-rʊn ʈ-a.ɽəkɔ ŋuɽú ɔ́r-úntɛ.kat[54] cɪk**
    even   PERS-12A   C-eat:INCOMPL   asida   (CONJ-)12A-pour.PLUR:DEPPRFV   VREF

    we will eat asida and even pour it away".

65. **akka k-kw-ákkarɔ́.t ŋaʈʈəʈʈápɛ ŋaʈʈəʈʈápɛ**
    that   3-C-call:COMPL   bird(sp.)   bird(sp.)

    When he called, "ŋaʈʈəʈʈápɛ-bird, ŋaʈʈəʈʈápɛ-bird",

66. **a-kw-ɔ́mɛ.kaʈ-ɔ́k ɪttɪ ant-ɔna ʈʊɽít ʈ-aŋ**
    CONJ-3-tell:DEPPRFV-O3   that   can:DEPINCOMPL-bring:DEPINCOMPL   food   C-2POSS

    ír-ɔɽəkɔ́-na
    (SUBJ-)12-eat:DEPINCOMPL-ALLOW

    he (the bird) said to him: "Please bring your food so that we eat it".

67. **a-kw-ɔ́mɛ.kaʈ-ɔ́k ɪttɪ**
    CONJ-3-tell:DEPPRFV-O3   that

    And he (the bird) said to him:

---

[53] **ɔ́r-** is a variant of **ɔ́n** (short for **ɔrún** 'we(INCL)') that can be used in this environment. The subjunctive particle **â-** is dropped here.

[54] **ɔ́r-** is a variant of **ɔ́n** (short for **ɔrún** 'we(INCL)') that can be used in this environment. The conjunctive particle **á-** is dropped here.

68. **yálla⁵⁵   ʈʊɽít   ʈ-éí   ʈ-áá.t   ʈ-á.kkɔ́   í-kúɽâ**
    come_on food   C-be_here C-come:COMPL   C-reach:INCOMPL   in-open_space

    "Come on, the food has arrived here, reaching in our middle

69. **ana   ʊn-ʈ-a.ɽəkɔ̂**
    and   12A-C-eat:INCOMPL

    and we will eat it.

70. **apɛllɛ   ŋʊcʊl-ɛ́   kɪrənnɪ   únɔt   nán**
    pour_top:IMP   sauce-PROP let:IMP   pour_at:DEPINCOMPL on:ABS

    Pour some sauce, but don't pour it on it (i.e. on the asida),

71. **ampɛllɛʈ.ɛ   nɔ-cáʈʈak   p-əllɛ́k**
    pour_at.PLUR:IMP on-plate   C-alone

    pour it in bits on a plate of its own".

72. **a-kw-ámpɛllɛ.kat   nɔ-cáʈʈak**
    CONJ-3-pour_at.PLUR:DEPPRFV   on-plate

    And he (the tortoise) poured it in bits on a plate.

73. **a-kw-ɔ́mɛ.kaʈ-ɔ́k   ɪttɪ   ant-ɔʈápɛ-mɛ**
    CONJ-3-tell:DEPPRFV-O3   that   can:DEPINCOMPL-dip:DEPINCOMPL-PROP

    And he (the bird) said to him, "Please dip it", (i.e. dip the asida in the sauce)

74. **a-kw-ɔ́mɛ.kat   ɪttɪ   maʈʈa⁵⁶   ʊmmɪ   káppəʈɪ   k-áŋ-ɛ**
    CONJ-3-say:DEPPRFV that   please   take:IMP   spoon   C-2POSS-PROP

    and he (the bird) said, "Please, do pick up your spoon!"

75. **a-kw-ɔ́ʈapɛ.kat   a-kw-ɔ́ʈɪ.at   ŋúcʊl   [ŋ-ɔpʊn]**
    CONJ-3-dip:DEPPRFV CONJ-3-find:DEPPRFV sauce   C-bitter

    And he (the tortoise) dipped (the asida in the sauce) and he found the sauce [bitter]

---

⁵⁵ Sudanese Arabic interjection.

⁵⁶ **maʈʈă** is probably a loan, but of unclear origin. Used before Imperatives.

76. **a-kw-ɔ́mɛ.kat**   **ɪttɪ**   **ṭɔ́ma**
    CONJ-3-say:DEPPRFV   that   friend

    and he said: "Friend,

77. **ákk-a.kə́nn-ɔ́ká**   **ŋʋcʋl**   **ŋ-ɔ-mɛccɪn**   **ɪ-írrʋk**
    FOC-NEG-be:DEPCOMPL   sauce   C-of-yesterday   RES-(C-)cold

    this is not the sweet sauce of yesterday!"

78. **a-kw-ɔ́mɛ.kaṭ-ɔ́k**   **ɪttɪ**   **lá la la la**[57]
    CONJ-3-tell:DEPPRFV-O3   that   no no no no

    And he (the bird) said to him: "No, no, no, no,

79. **akka**   **ŋ-kw-í̦cat**   **cɪk**   **ɪ-racɔk**   **t-ɔ́-parɪ**   **p-áŋ**
    that   2-C-lie:INCOMPL   VREF   in-legs   C-of.PERS-wife   C-2POSS

    ɛppɪn   **ɛppɪn**   **nʋ̦ṭʋk**
    always   always   for_nothing

    because you are always lying between the legs of your wife doing
    nothing,

80. **a-ŋ-kw-ɔmma**[58]   **ɪttɪ**
    CONJ-2-C-know_not:INCOMPL   that

    don't you know that

81. **ɔ́l**   **w-á.ɽə́kɔ́**   **ŋʋcʋl**   **n.tɪ**   **ɪ-pɪrá-ɪ**
    people   C-eat:INCOMPL   sauce   from   in-tree-Q

    people eat sauce from the forest?"

82. **a-kw-ɔ́ɪŋkat**   **a-kw-íp.aṭ-ɔ́k**   **a-kín**   **éŋkat**[59]   **ɪ-aôn**
    CONJ-3-go:DEPPRFV   CONJ-3-lead:DEPPRFV-O3   CONJ.PERS-3A   go:DEPPRFV   in-bees

    And he went and he led him and they went to the honeycombs.

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[57] Sudanese Arabic word *la* 'no'.

[58] Here, conjunctive **á**- precedes the Incompletive verb C-**ɔmmá**, suggesting that C-**ɔmmá** functions rather like an adjective ('ignorant (of)') than like a verb.

[59] = **ɔíŋkat**.

83. **ana** **ɔ-kín** **ṭ-áṭ-ṭ-á.mɔ́ttɔ** **aʊ́n**
and PERS-3A C-be:PR-C-break_off:INCOMPL bees

And they are breaking off the honeycombs

84. **a-púl** **p-ɔ́-nɔ́ppə́t** **ɔ́ccík.at** **a-p-ákkakat**
CONJ-person C-of-Nɔppət hear:DEPPRFV CONJ-PRO-come:DEPPRFV

and the person of Nɔppət heard it and he came.

85. **ṭɔ́ma** **n-ṭ-a.ɪk** **ṭ-a.mɔ́ttɔ** **ŋín-ṭa**
friend 2A-C-be:PR C-break_off:INCOMPL what-QW

"Friend, what are you(PL) breaking off?"

86. **ịn-ṭ-a.ɪk** **ṭ-a.mɔ́ttɔ** **aɔ̂n**
1A-C-be:PR C-break_off:INCOMPL bees

"We are breaking off honeycombs".

87. **n-ánt-ɔrrɛn-ɪn** **n-tan** **k-ulukkû**
2A-can:DEPINCOMPL-throw_for:DEPINCOMPL-O1 with-up_on:ABS C-one

"Please throw one for me in my direction!"

88. **a-kw-ɔ́mɛ.kaṭ-ɔ́k** **ɪttɪ** **ɱ́m** **ṭɔ́ma**
CONJ-3-tell:DEPPRFV-O3 that hmm friend

(but) He (the tortoise) said to him (the bird): "Hmm, friend,

89. **ŋ-kw-a.rrénɛ** **p-ém-p-ə́ɽɛ́** **aʊ́n** **w-ɔ́-în** **w-ɔ-ɪm-p-ên**
2-C-throw_for:INCOMPL C-DEM-C-DIST bees C-of-what C-of-what-C-DEM

for what, for what will you throw (down) honeycombs for that (person)?

90. **ɛṭ-ɪn** **aʊ́n** **cəné** **á-n-ɔṭɔ́** **ŋərɛ** **n.tít**
give:IMP-O1 bees here SUBJ-1-pull:DEPINCOMPL honey from:ABS

Give me the honeycombs here, so that I suck the honey out of them

91. **á-n-ɔrrén-ɔ́k** **təŋə́k**
SUBJ-1-throw_for-O3 fibre

so that I throw (down) for him the empty comb".

92. **a-kw-ɔ́mɛ.kaṭ-ɔ́k** **ɪttɪ** **ɛɛ́** **kəɽɔ́l**
CONJ-3-tell:DEPPRFV-O3 that hey tortoise

And he (the person of Nɔppət) said to him: "Hey tortoise,

93. **ŋ-kw-a.rrέn-ɪn**   **nə́ŋək**   **akka.ín-ṭa**
    2-C-throw_for:INCOMPL-O1   fibres   why-QW

    why do you throw (down) for me the empty combs?

94. **ant-ɛṭ-ɪn**   **kaʊ́n**   **í-k-ɔ́nʊ**   **ŋərɛ**
    can:DEPINCOMPL-give:DEPINCOMPL-O1   bee   RES-C-have   honey

    Please, give me a honeycomb which has honey!

95. **ŋaṭṭəṭṭápɛ**   **ant-ɛṭ-ɪn**   **kaʊ́n**   **í-k-ɔ́nʊ**   **ŋərɛ**
    bird(sp)   can:DEPINCOMPL-give:DEPINCOMPL-O1   bee   RES-C-have   honey

    ŋaṭṭəṭṭápɛ-bird, please give me a honeycomb which has honey!"

96. **ăṭṭəṭṭápέ**   **ɔ́rrέ.kanṭ-ɔ́k**   **káʊ́n**   **í-k-ɔ́nʊ**   **ŋərɛ**
    CONJ.bird(sp)   throw_for:DEPPRFV-O3   bee   RES-C-have   honey

    And the *ŋaṭṭəṭṭápɛ*-bird threw (down) for him a honeycomb which had honey,

97. **a-kw-ín.at**   **a-kw-ɔ́mɛ.kat**   **ɪttɪ**   **kəɽɔ̂l**
    CONJ-3-taste:DEPPRFV   CONJ-3-say:DEPPRFV   that   tortoise

    and he (the person of Nɔppət) tasted it and he said: "Tortoise,

98. **ɪnénní ná**   **á-kkə́ttɛnɛ**   **kɛné**
    today   wheré:REL   CONJ-(2-)pass_for.PLUR:DEPINCOMPL   your_mother

    now, on your mother, where will you pass! (i.e. you will not escape!)

99. **ŋ-kw-íkkɔ**   **p-ínanɛ**   **kənɛ**   **ɪnénní**   **túllúk**
    2-C-may   C-know_for:INCOMPL   your_mother   today   only

    On your mother, you may know something just today!" (i.e. it seems you will experience something just today!)

100. **a-kw-ɔ́mɛ.kaṭ-ɔ́k**   **ɪttɪ**   **m̋-m**
     CONJ-3-tell:DEPPRFV-O3   that   no-REDUP

     But he (the tortoise) said to him: "No,

101. **ɔppə́ttɛ**   **ṭ-ɔppəttɛ**   **ṭ-ɔɲaɽɔ**   **ṭ-ɔ́-ɪn-ɪ**
     pass.PLUR:DEPINCOMPL   NOM-pass.PLUR   NOM-walk   C-of-what-Q

     pass, passing, walking for what??

102. **akka.în   a-ţţómá   p-á.ík   p-á.nέkɔ́-n**
     why   CONJ-PERS-friend   C-be:PR   C-take:INCOMPL-O1

     Why, my friend is carrying me,

103. **p-a.ɾə́kkɛţ-ɪn   ɪ-kɪ́ţţɪ-kíţţɪ**
     C-put:INCOMPL-O1   in-safe_spot_against_body-REDUP

     putting me in a safe place against his body

104. **á-i̧n-ɛ̂ɔ**
     SUBJ-1A-go:DEPINCOMPL

     so that he and I can go

105. **akka   aʊn   w-ɔməttáţ.ɛ**
     that   bees   C-finish:COMPL

     because the honey is finished".

106. **a-kw-ɔ́mɛ.kaţ-ɔ́k   ɪttɪ   ţɔ́ma   m-p-a.ɪk   p-a.ɛ̃ɔ́   pəɾɪn**
     CONJ-3-tell:DEPPRFV-O3   that   friend   1-C-be:PR   C-go:INCOMPL   completely

     And he said to him, "Friend, I am leaving now".

107. **a-kəɾɔ́l   ɔmɛ́.kat   ɪttɪ   k-k-á.kʊɾɔt**
     CONJ-toroise   say:DEPPRFV   that   PRO-C-move_up:INCOMPL

     And the tortoise said to him that he will climb (on him)

108. **a-kw-íţţ.at   cên   a-kw-ɔ́ɾ.at   kəɾɔ́l   ɪ-cʊɾɛ́   attáp**
     CONJ-3-pick:DEPPRFV   palm_fruit   CONJ-3-throw_at:DEPPRFV tortoise   in-buttock   attap

     and he (the person of Nɔppət) picked up a palm fruit and threw it at
     the tortoise *attap* against his buttocks

109. **a-k-áp.at   cɪ-nɔ́-capʊ́**
     CONJ-PRO-fall:DEPPRFV   LOC-on-ground

     and he (the tortoise) fell right on the ground.

110. **a-kw-ɔ́mɛ.kaţ-ɔ́k   ɪttɪ   ŋ-kw-á.ɾʊncɔ-n   nʊ́ţʊk   cɔɾí[60]**
     CONJ-3-tell:DEPPRFV-O3   that   2-C-throw_at.PLUR:INCOMPL-O1   for_nothing   wait:IMP

     And he said to him: "You throw (palm fruits) at me in vain, stop it!"

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[60] = **ɔcɔɾí** 'wait!'

111. **a-kw-ápp-ɔpákk.at**   **tan**   **ɲ-cʊɽ̂ɛ**
   CONJ-3-again:DEPINCOMPL-return:DEPPRFV   up_on:ABS   with-buttock

   And he (the tortoise) went back up again with his bottom (i.e. with his bottom first)

112. **a-k-úɽʊnc.at**[61]   **púccók**
   CONJ-3-throw_at.PLUR:DEPPRFV   for_some_time

   and he (the person of Nɔppət) threw (at the tortoise) for some time

113. **a-mɛ́n**   **ɔ́mɘ́tta.kar-a**
   CONJ-palm_fruits   become_finished:DEPPRFV-ATT

   and the palm fruits got finished.

114. **a-kw-ɔ́mɛ.kaṭ-ɔ́k**   **ɪttɪ**
   CONJ-3-tell:DEPPRFV-O3   that

   And he (the tortoise) said to him:

115. **ana**   **mɛ́n**   **m-êrɪk**   **m-ɔmɘttáṭ.ɛ**
   and   palmfruits   C-be_NEARADDR   C-become_finished:COMPL

   "And the palm fruits there with you are finished,

116. **ana**   **ŋ-kw-ápp-ɔ̂ɽʊɲc.aṭ-ɪn**   **ŋɪm-p-ên**
   and   2-C-again:INCOMPL-throw_at.PLUR:DEPPRFV-O1   what-C-DEM

   and what will you throw at me again?"

117. **a-kw-ɔ́mɛ.kaṭ-ɔ́k**   **ɪttɪ**   **app-ɔkúɽɔt**   **n-tán**
   CONJ-3-tell:DEPPRFV-O3   that   again:DEPINCOMPL-move_up:DEPINCOMPL   with-up_on:ABS

   And he (the person of Nɔppət) said to him (the tortoise), "You climb up again!" (if you can!)

118. **akka**   **k-kw-ɔ́kʊɽɔṭ.ɛ́**   **n-tán**[62]
   that   3-C-move_up:COMPL   with-up_on:ABS

   When he had climbed up

---

[61] = **akwɔ́ɽʊncat**.

[62] **ntán** was explained as 'towards the storyteller', as if the storyteller (as deictic centre) has located himself up in the tree.

119. **a-kəɾɔ́l**   **ɔ́t̪í.at**   **mén**   **m-ɛllâ**
CONJ-tortoise   find:DEPPRFV   palm_fruits   C-be_absent:INCOMPL

the tortoise found there were no palm fruits (left)

120. **a-kw-ɔ́mɛ.kat**   **ɪttɪ**   **t̪ɔ́ma**   **ɔnɛk-ɔ́n**
CONJ-3-say:DEPPRFV   that   friend   take:IMP-O1

and he said, "Friend, take me!"

121. **akka k-kw-ɔ́nɛkɔ́.r-ɔk**   **ɪttɪná**   **a-kín**   **ɔ́ŋkat**
that   3-C-carry:COMPL-O3   so   CONJ.PERS-3A   go:DEPPRFV

When he (the bird) had taken him like that, they went.

122. **akka ɔ-kín ɔ́kkɔ́**   **í-rʊ́ɛ́**   **a-kw-ɔ́mɛ.kat̪-ɔ́k**   **ɪttɪ**   **t̪ɔ́ma**
that   PERS-3A pass:DEPINCOMPL   in-river   CONJ-3-tell:DEPPRFV-O3   that   friend

When they reached the river, he (the bird) said to him: "Friend,

123. **m-p-ɔkɪɲá.t**   **ʊkʊn**   **én-n-í**
1-C-become_tired:COMPL   hand   DEM-C-NEARSP

I am tired in this arm (wing)

124. **ana**   **m-p-a.ɪk**   **p-a.nə́kkɛt̪-ʊŋ**   **kárə́-t̪â**
and   1-C-be:PR   C-put_down:INCOMPL-2O   where-QW

but where am I putting you down?"

125. **a-kw-ɔ́mɛ.kat̪-ɔ́k**   **ɪttɪ**   **ɔpərəttɔt̪-ɪn**   **t̪-ɔ́kkʊ́n**   **én-n-ə́ɾê**
CONJ-3-tell:DEPPRFV-O3   that   turn_at:IMP-O1   at-hand   DEM-C-DIST

And he told him, "Change me to that hand!" (i.e. take me under your other wing)

126. **akka**   **k-kw-ɔ́pə́rə́ttɔ́.r-ɔ́k**[63]
that   3-C-turn:COMPL-O3

When he (the bird) changed him

127. **ăccɪ̯k.at**   **a-k-kw-ɔ́llʊkkwɔ́.t**   **(akka)**[64]
CONJ.(2.)hear:DEPPRFV   CONJ-3-C-slip:COMPL   that

you could hear he (the tortoise) had slipped (away) (because)

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[63] The boundary tone on the third person object pronoun clitic causes tone bridge over the verb. The verb would otherwise be **kkwɔ́pə́rə́ttɔrɔk.**

[64] According to JS, **akka** is not good here.

128. **kəʈʊntŏk   kəʈʊntŏk[65]   a-kw-ɔ́mɛ.kat   ɪttɪ**
    kəʈʊntʊk   kəʈʊntʊk   CONJ-3-say:DEPPRFV   that

    kəʈʊntʊk, kəʈʊntʊk, and he (the tortoise) said:

129. **ṭɔ́ma   ṭɔ́ma   ɔccɔkɔṭ-ɪm-mê   ṭɔ́ma   ɔccɔkɔṭ-ín**
    friend   friend   catch:IMP-O1-URG   friend   catch:IMP-O1

    "Friend, friend, catch me!! Friend, catch me,

130. **á-kʊcʊk   ɪ-rʊɛ́**
    SUBJ-plop   in-river

    or *plop* into the river!"

131. **a-kw-ɔ́ll.át   á-kw-íʈɪk.at   ɪ-rʊɛ́**
    CONJ-3-run:DEPPRFV   CONJ-3-enter:DEPPRFV   in-river

    He (the tortoise) ran and he entered into the river. (i.e. the tortoise fell on the ground first and then quickly ran and jumped into the river)

132. **a-kw-ɔ́mɛ.kaṭ-ɔ́k   ɪttɪ   na-ppɔ́ttɛnɛ   kɛnɛ́**
    CONJ-3-tell:DEPPRFV-O3   that   where:REL-(2-)pass_for.PLUR:DEPINCOMPL   your_mother

    He (the person of Nɔppət) said to him: "On your mother, where will you pass,

133. **ɪnénní   ḿ-p-ínan-ʊŋ   kənɛ́**
    today   1-C-know_for-O2   your_mother

    on your mother, now I know you!" (i.e. I know where you are)

134. **a-kw-ɔ́ʈɪk.at   ɪ-rɔk-â**
    CONJ-3-wait:DEPPRFV   in-river-ATT

    But he (the tortoise) waited in the river

135. **a-paṭṭɪ   ɛ́ŋkat[66]   a-kw-ɔ́cca.kat**
    CONJ.PERS-person   go:DEPPRFV   CONJ-3-scoop:DEPPRFV

    and that person (the person of Nɔppət) went and he scooped some water out

---

[65] NaA and JS were not sure how this word sounded and the transcription is only tentative.

[66] = **ɔíŋkat**.

136. **a-kw-ɔ́ŋkat a-kw-ɔ́kkʊtt.at áɾəpʊ n-tan   w-ɔ́-nɔ-rʊɛ tárra**
CONJ-3-go:DEPPRFV CONJ-3-collect:DEPPRFV things   with-up_on:ABS C-of-on-river all

and he went and he collected towards him all the animals at the river

137. **a-kw-ɔ́na.kat   a-kw-ɔ́mɛ.kat   ıttı**
CONJ-3-bring:DEPPRFV   CONJ-3-say:DEPPRFV   that

and he brought (them) and he said:

138. **n-ánt-áṭ-i̧kki̧n-ın   ŋəɾı**
2A-can:DEPINCOMPL-VEN:DEPINCOMPL-drink_for:DEPINCOMPL-O1   water

"Please come and drink the water for me,

139. **ákka   ŋ.əɾɔl   ŋ-əɾɛk   ŋ-apɔṭ.έ   cəné**
that   little_tortoise   C-some   C-fall_at:COMPL   here

because some nasty little tortoise has fallen here".

140. **khalas⁶⁷   ıttıná   k-kw-ɔ́mɛ.káṭ-ɔk   ıttı**
that's_it   so   3-C-tell:DEPPRFV-O3   that

Okay, so he told him that (unclear who is meant here by 'him')

141. **ŋ.əɾɔl   ɛŋ-ŋ-ı   ŋ-apɔṭ.έ   cəné**
little_tortoise   DEM-C-NEARSP   C-fall:COMPL   here

this little tortoise has fallen here.

142. **a-kw-ɔ́mɛ.kat   ıttı   ant-ɔcɔ́ɾɔ**
CONJ-3-say:DEPPRFV   that   can:DEPINCOMPL-wait:DEPINCOMPL

And he said (to the tortoise), "You wait,

143. **ŋ-kw-á.ppəttɛ   kə́rɛn**
2-C-pass.PLUR:INCOMPL   where

where will you pass?!",

144. **ámmá   á-k-ʊ́ɔ́**
if   CONJ-3-descend:DEPINCOMPL

while he (the tortoise) goes down

---

⁶⁷ Sudanese Arabic interjection *khalaaṣ* 'that's it, so much for that, enough'.

145. **á-kw-ɔ́ppɔ́t**   **nɔ́-kúʈɔ́t k-ɔ́-rɔ́k**   **á-kw-arrɔt**   **cɪk**
      CONJ-3-pass_at:DEPINCOMPL   on-lip   C-of-river   SUBJ-3-cross:DEPINCOMPL   VREF

      and moves along the side of the river in order to cross it

146. **á-kw-ɔ́pákkɔt**   **ɲ-cəné**   **nɔ́-kúʈʊt**   **k-ɔ́-rɔ́k**
      CONJ-3-return:DEPINCOMPL   with-here   on-lip   C-of-river

      and returns from here on the side of the river (i.e. the other side)

147. **á-kw-arrɔt**   **cɪk**
      SUBJ-3-cross:DEPINCOMPL   VREF

      in order to cross it (i.e. to cross it again).

148. **a-kw-ɔ́mɛ.kaʈ-ɔ́k**   **ɪttɪ**   **ŋ-kw-a.kkɔ́t**   **lɔn**   **ɛl-l-ərík**
      CONJ-3-tell:DEPPRFV-O3   that   2-C-do:INCOMPL   words   DEM-C-NEARADDR

      And he (the person of Nɔppət) said to him: "You do those things,

149. **ŋ-kw-íkkɔ**   **p-ínanɛ**   **kənɛ**   **ɪnénní túllúk**
      2-C-may   C-know_for:INCOMPL   your_mother   today   only

      on your mother, you may know something just today, (i.e. it seems you are going to experience something just today)

150. **ámmá**   **ḿ-p-ánn-ɔ́kíɲcɔʈ-ʊŋ**   **ca**   **cîk**
      if   1-C-NEG-crush_by_throwing_stones_at.PLUR:DEPCOMPL-O2   head   VREF

      if I will not have crushed your head by throwing stones".

151. **khalas[68]**   **akka**   **áɽəpʊ**   **w-ịkkɔ́.t**   **ŋəɽí**
      that's_it   that   things   C-drink:COMPL   water

      So then, when the animals had drunk the water,

152. **a-kəɽɔ́l**   **ɔ́ʈə́kkar.at**   **ɪ-ar**   **éŋ-ŋ-ərɪk**   **ŋ-ɔʈʈé**   **cɪk**
      CONJ-tortoise   move_aside:DEPPRFV   in-mud   DEM-C-NEARADDR   C-small   VREF

      the tortoise moved aside into that small mud.

153. **akka**   **ɔpa**   **w-aa.r-â**
      that   piece_of_meat   C-come:COMPL-ATT

      When the wild animal came,

---

[68] Sudanese Arabic interjection *khalaaṣ* 'that's it, so much for that, enough'.

154. **a-k-ʊ́.at**   **ɪ-kəɽál**   **ɛŋ-k-ərɪk**   **k-ɔttê**
     CONJ-PRO-descend:DEPPRFV   in-small_water_spot   DEM-C-NEARADDR   C-small

     he moved down into that small water spot.

155. **akka ɔpa**   **ɛ́n-n-ə́ɽɛ́**   **w-ɔ-rɪ-pɪrá**   **w-aa.t**   **ɪ-ə́rɪ̧k**   **ɪkê**
     that   piece_of_meat   DEM-C-DIST   C-of-in-tree   C-come:COMPL   RES-(C-)big   giraffe

     When that big wild animal of the forest, the giraffe, came,

156. **a-ɪ́kk.at**   **ŋəɽɪ**   **a-kw-ɔ́llʊkkw.at**   **ɪ-carək**   **c-ɔ́-ɪkɛ**
     CONJ-(PRO-)drink:DEPPRFV   water   CONJ-3-slip:DEPPRFV   in-belly   C-of-giraffe

     he drank water and he (the tortoise) slipped into the stomach of the
     giraffe

157. **a-kw-ɔ́t̪.át**   **kə́ɽɪ́ttáŋ**   **ń-t̪ɔ́-kə́ríkɪ**
     CONJ-3-pull:DEPPRFV   knife   with-up_on-elbow

     and he pulled his knife from his elbow

158. **a-kw-ɔ́kɪ.at**   **íkɛ**   **lʊŋkwɛ**   **appəɽɔt**
     CONJ-3-cut:DEPPRFV   giraffe   lungs   *appəɽɔt*

     and he cut the lungs of the giraffe *appəɽɔt*

159. **a-íkɛ**   **ap.at**   **n-nɔ́rr-a⁶⁹**
     CONJ-giraffe   fall:DEPPRFV   with-upright_position-ATT

     and the giraffe, from standing straight up, fell over

160. **a-ʊ́l**   **ɔ́pə́llɛ**   **a-áɽəpʊ**   **ɛn-n-ərík**
     CONJ-people fear:DEPINCOMPL   CONJ-things   DEM-C-DIST

     while the people were fleeing and those animals,

161. **a-kəpa**   **ɔpə́llɛ.kat**   **tárra**
     CONJ-forest_animal   fear:DEPPRFV   all

     all the forest animals fled

162. **mɔ́nɔ́**   **á-kw-ɔt̪ɪ.at**   **pʊ́l**   **p-ɔ́-nɔ́ppə́t**
     until   CONJ-3-find:DEPPRFV   person   C-of-Nɔppət

     till he (the tortoise?) found the person of Nɔppət

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⁶⁹ Before the attention particle -**a**, **r** of **nɔr** is pronounced with length.

163. **a-kw-ɔ́cʊkkwar.at   cɪk mɔ́nɔ́ á-púl   p-ɔ́-nɔ́ppə́t í.at**
CONJ-3-step_on.PLUR:DEPPRFV   VREF until   CONJ-person C-of-Nɔppət   die:DEPPRFV

and he stepped (on him) repeatedly until the person of Nɔppət died.

164. **a-kín   ɔ́cɔ́ṭ.at   kérúŋ éŋ-k-í   íttíná pəɽɪn**
CONJ.PERS-3A   finish:DEPPRFV   story   DEM-C-NEARSP so   finally

And like this they finally finished the story.

Lumun word list

The list below (Appendix V) contains the ca. 200 items used in Schadeberg's overviews of Heiban and Talodi (1981a, 1981b), as well as additional words from the Leipzig-Jakarta list (Haspelmath & Tadmor, 2009), in all ca. 250 items.

English	Lumun
all	**appɪk**
animal	**papʊ / aʈəpʊ** 'thing'
ant	**cɪpît / mɪpît**
arm	**cəmən / kəmən**
	ʊkún / ɲaʊ́n 'forearm, hand'
ash(es)	**mucúk**
back (*n.*)	**kucúl / ucúl**
bad	C-**ɔkíʈak**
bark (*n.*)	**təmmêk / nəmmêk**
belly	**carə́k / kərə́k**
big	C-**ɪttîk**
bird	**pʊʈʊpê / ʊʈʊpê**
bite (*v.*)	**ɔkəʈɔ̂** (also 'burn')
bitter	C-**ɔpún**
black	C-**ɔɲî**
blood	**ŋʊccôk (/ ɲʊccôk), ŋɪccôk (/ ɲɪccôk)**
blow (*v.*)	**ɔkwɔ̂**
blunt	C-**ɔrrô**
bone	**cʊmɪan / mʊmɪam**
branch	**kʊʈǐ / ʊʈǐ**
breast	**cɪ̣mmɪ̣k / kɪ̣mmɪ̣k**
breath	**cɔkwâ / mɔkwâ**
brother	**ɔpáŋ / ɔpaŋɔ̂n** 'sibling' (also: **ɔpaŋ ɪ-p-ɔ́cʊra** 'male sibling')
burn (tr.)	**ɔkəʈɔ̂** (also 'bite')
carry	**ɔnékɔ** (also 'take')
child	**ʊkʊl / ɲʊkʊl**
claw	**kaɪʈî / aɪʈî** (also 'nail, louse')

clean (*adj.*)   ᴄ-ɔʈɛ̌
clothing   kərét / ərét
cloud   tʊʈʈɛ / nʊʈʈɛ
cold   ᴄ-írrúk
(multi) coloured   ᴄ-ɔʈɛrɛ̌t 'spotted' (pattern)
come   aɔ
cook (*v.*)   ɪṱa
count   ɔŋantɛ
cow   waɪ̌ / kɪ̰é
crush   ɔkákkəʈɔt
cry   ɔɔ
cut (*v.*)   ɔkɪɔ
dance (*v.*)   ʊkkwɔ, also ʊkkɔ
day (counting unit)   caʈɪ̌ / maʈɪ̌
die   ɪɔ
dig   ɪpɔt
dirty   ɪ̰ŋkɔt (*v.*) 'become dirty'
do   ɔkkɔ̂t (also 'make')
dog   ṱʊ̌k / lʊ̌k
drink   ɪ̰kkɔ
dry   ᴄ-ɔnṱɔmât
dust (blown by wind) kʊʈʊpâŋ, also tʊʈʊpâŋ (unpaired nouns)
ear   kunú / unú
earth   capú
eat   ɔʈəkɔ̂
egg   cîn / mîn
empty   ɲ-cərúk (lit. 'with opening')
eye   cɪ̰́t / kɪ̰́t
fall (*v.*)   apɔ
far   cɪ̰ʈʈán
fat (*n.*)   ŋaák
father   ɔʈʈân 'his, her father'
fear (*v.*)   ɔʈ̰ía
feather   kʊʈəccɔ̂ / ʊʈəccɔ̂ (also 'wing')
few   ᴄ-ɔʈʈɛ̂, ᴄ-ɔttɛ̂
fight (*v.*)   ɔʈ̰áttɔ
field   kəpɔn / əpɔn
finger   caʊ́n / maʊ́n

fire (*n.*)	t̪ĭk / lĭk
fish (*n.*)	papê / apê
float	aɽəkɔ
flow	ɔúrɔ
flower	pɔɽɛn (unpaired noun)
fly (*v.*)	i̧rrɔ
fog	pʊrʊcê
food	t̪ʊɽît (/ lʊɽît)
foot	wék / tacɔ́k
fruit	ʊkʊl wɔpɪra / ɲʊkʊl ɲɔpɪra (lit. 'child of tree')
full	ɔppât (*v.*) 'become full'
gazelle	wallĭr, allĭr / kallĭr
give	ɛt̪êt
go	ɛɔ̂
goat	i̧mít / li̧cɔ́k
good	C-ɔpərɔ̂t
blade of grass/grass	kwacɔ / tacɔ
green	C-íccí
guts	kút / út
hair	kwăn / wăn
hand	ʊkɔ́n / ɲaʊ́n
hard	C-ɔnt̪ɔ́mat
he, she	ɔɔ̂k
head	cá / má
hear	ɔccí̧kɔt
heart	ci̧kí̧t / məkí̧t
heavy	C-í̧mmi̧n
hide	ɔrʊ́kwɔ, also ɔrʊ́kɔ
hit	ɔkkwɔ̂
hoe	kɪrék / ɪrék
hole	cərúk / kərúk 'opening, hole',
	tʊpʊ́ / nʊpʊ́ 'hole in the ground, grave'
horn	t̪ɪpíl / lɪpíl (part of animal),
	t̪i̧pí̧l / li̧pí̧l (musical instrument)
house	măn / kəmə́n
hunt (*v.*)	ŋáppɔ (*n.*)
husband	pəɽɛ / əɽɛ
I	ɔʊ́n

in   ɪ- (+ tone-pattern on noun)
kill   ɔkkwôt
knee   kʊŋkʊ / ʊŋkʊ
knife   kət̪ittăŋ / ət̪ittăŋ
know   ɪna
lake   tɔ́k ɪ-r-apáŋka / nɔ́k ɪ-n-apáŋka
                       (lit: 'waterplace that waves')
laugh   ɔccịrɔ
leaf   tat̪a / nat̪a
left (side)   t̪ɔ-kkʊn w-ɔ́-kʊ́rê (lit. 'at hand of left side')
                       kʊrê 'left side'
leg   wɛ́k / tacɔ́k
lie (down)   ịcat cɪk
light (not heavy)   C-íppappat
live (at)   ɪkkɔ cɪk
live (be alive)   ɔkkɔ́ cɪk
liver   t̪ʊŋkwɛ / lʊŋkwɛ, also t̪ʊŋkɛ / lʊŋkɛ
long   C-ûkwịt
louse   kaɪt̪î / aɪt̪î (also 'claw, nail')
man   pʊl ɪ-p-ɔ́cʊra / ʊl ɪ-ɔ́mʊra 'person who is male'
many   C-ɔppɔ́t
meat   ɔpá / kəpá
moon / month   kwanɔ̂k / (w)anɔ̂k
mother   ɔnnân 'his, her mother'
mountain   cɔt̪ɔ̌ŋ / mɔt̪ɔ̌ŋ
mouth   t̪ɔn / lɔn (lɔn also 'words, matter(s)')
nail   kaɪt̪î / aɪt̪î (also 'claw, louse')
name   kət̪an / ət̪an
narrow   C-ɔkət̪íakɔt̪ɛ (lit. 'be squeezed')
navel   t̪ʊt̪t̪ê / lʊt̪t̪ê
near   ɪ-ccík k-ɔ- (lit. 'in place of')
                       napət̪t̪ôt, also nɔpət̪t̪ôt (adverb)
neck   cələk / kələk
new   C-ɪɛ́
night   ŋkɔt̪â
nose   kɪɲcɛ / ɪɲcɛ
not   ɔkɛ́rənnɔ (v.) 'let, allow, abstain from'
old (not new)   C-ịpɛ

old (not young)	**ʊkkwa**, also **ʊkka** (*v.*) 'become old'
person / people	**pʊl / ʊl**
play	**appʊṭa**
pull (*v.*)	**ɔṭɔ̂**
push	**ɔṭíɔ**
rain (*n.*)	**kapɪk**
red	C-**ɔɽɛ̆**
right (correct)	**i̧cát** 'true!, indeed!'
right (side)	**ṭɔ-kkʊn w-ɔ́-ṭarí** 'at hand of right side'
river	**tʊɛ́ / nʊɛ́**
road	**kaṭə́r / aṭə́r**
root	**ṭəka / ləka**
rope	**ṭɔrə́k / lɔrə́k**
rotten (*adj.*)	**ɔkʊ́tta** (*v.*) 'become rotten'
rough	C-**ɔrɛrɛ̂**
round	C-**əɽʊlʊkʊr**
rub	**ɔɽɔ́kɔ** (collocates with oil, apply oil to the skin)
run	**ɔllɔ̂**
salt	**ŋʊcʊlɔṭṭɔ̂ / ɲʊcʊlɔṭṭɔ̂, ŋɪcʊlɔṭṭɔ̂ / ɲɪcʊlɔṭṭɔ̂** (lit. 'sauce of Arabs')
sand	**kamʊ́r / ṭamʊ́r**
say	**ɪɽɛ**
scratch	**ɔllə́lla**
see	**ɪmma**
seed	**cɔrɛ / mɔrɛ**
sew	**ɛttɛt**
shade	**tərənɛ́k / nərənɛ́k**
sharp	C-**ɔrrɛ̂**
shoot (*v.*)	**ərrɔ**
short	C-**ʊṭṭ ɔ̂t**
sing	**ɔŋwɔ̂**
sibling	**ɔpáŋ / ɔpaŋɔ̂n**
sister	**ɔpáŋ / ɔpaŋɔ̂n** (also **ɔpaŋ ɪ-p-ɔ́parí** 'female sibling')
sit	**ɪkkɔ cɪk**
skin	**kuṭú / uṭú**
sky	**ṭ̩ɪɽɔ̂t**
sleep (*v.*)	**ɔka ɪnṭɛ́** (lit. 'be in sleep')

small   ᴄ-ɔtté, ᴄ-ɔṯṯé
smell (*v.*)   ɔkkʊnakɔt (intr.)
smoke   kucúk
smooth   ᴄ-ɔɲərâ (also 'soft, infertile (of a man)')
snake   pɪɲɪl / ɪɲɪl
soil   nunṯú 'fine-grained soil' (unpaired noun)
speak   ɛrɛ
spear   kaṯók / aṯók
spit (*v.*)   ɔṯókkwɔ ŋŏk (also ɔṯókkɔ ŋŏk) (lit. 'throw
                 saliva')
split   ɪllɔ
squeeze   ɔkə́ɽɪɔt
stab   ɛ̂
stand   ɔcóɽɔ
star   cəṯɔt / məṯɔt (also 'hail stone')
stick   kurrɔ̂ŋ / urrɔ̂ŋ
stone   pəṯɔk / məṯɔk
straight   accʊŋkŏr 'straight ahead'
suck   akɔ
sun   cɪ̧ŋkɪ̧ / mɪ̧ŋkɪ̧
sweet   ᴄ-ɔṯɪɔ́t
swell   ɔṯə́kat cɪk
swim   aɽəkɔ (of fish, also: 'float')
                 ɔṯṯʊɔṯṯa
tail   kuṯṯɪ́k / uṯṯɪ́k
take   ɔnékɔ (also 'carry')
thick   ᴄ-ɪttáṯɛ 'be thick'
thigh   cɪ̧̂n / mɪ̧̂n
thin   ᴄ-ɔttə́kárân or ᴄ-ɔttə́kálân
thing   papʊ / aɽəpʊ
think   ɔkwárəttɪkɔt cɪk
this   ɛn-ᴄ-í
thorn   tɪ̧́ / lɪ̧́
throw   ɔrrɛ̂
tie   i̧ɽi̧kɔ
tongue   ṯʊɽɛ / lʊɽɛ
tooth   ci̧ɲɪ́t / ki̧ɲɪ́t
tree   pɪra / kɪra

turn	**ɔpə́rəttakɔ** 'turn oneself'
vomit	**uttɛ**
walk	**ɔɲárɔ**
warm	**c-íppá**
wash	**ɔmɛ** (also 'rub')
water	**ŋəʈĭ / ɲəʈĭ**
wet	**c-ɪán**
what?	**ŋínʈa**
when?	**acínʈa**
where?	**karəʈâ** (also **karəʈa**)
white	**c-ɪpók**
who?	**ɔ́ʈʈa / ɔ́ʈʈân**
wide	**c-apɛ**
wife	**parí / arí**
wind	**kənáŋ**
wing	**kuʈəccô / ʊʈəccô** (also 'feather')
	ʊkón / ɲaón 'hand'
wipe	**ʊkkwɔ̂t** (also **ʊkkɔ̂t**)
	ɔllâ 'wipe something away'
woman	**pʊl ɪ-p-ɔ́parí / ʊl ɪ-á-arí** (lit. 'female person')
woods	**ɪ-pɪrâ** (lit. 'in the tree'), **ɪ-kɪrâ** (lit. 'between the trees')
word(s)	**lɔn**
work (*n.*)	**ŋərɛ** (?/ **ɲərɛ**)
work (*v.*)	**ɔrékɔ**
worm	**təŋək / nəŋək**
wrong	**c-ɔkíʈak** 'bad'
year	**ʈʊpʊt / lʊpʊt**
yellow	**c-ɔʈəlɔ̂**
yesterday	**mɛccín**
you (singular)	**ɔóŋ**
one	**c-ulukkû**
two	**c-ɛʈá**
three	**c-əʈapórʊk**
four	**c-ɔcɔʈɪn**
five	**c-ukulúk, c-úkúlúk, ukulúk**
six	**c-əʈâkkʊrʊk, c-əʈárəpʊrʊk**

seven	ᴄ-êʈɛ-ᴄ-əʈapʊ́rʊk, ᴄ-êʈɛʈapʊ́rʊk, ᴄ-ɔ́cɔʈa-ᴄ-əʈapʊ́rʊk
eight	ᴄ-amɔ́rəmɔr, mɔrəmɔr
nine	ᴄ-ʊkʊllácɔʈɪn, ᴄ-ʊ́kʊllácɔʈɪn, ʊkʊllácɔʈɪn
ten	ᴄ-attʊl, attʊl
twenty	arrɪâl
hundred	arrɪál ukulúk

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Nederlandse samenvatting

Dit proefschrift beschrijft de grammatica van het Lumun, een Kordofaanse taal van de Talodi-groep uit het zuidelijk deel van de Nuba Bergen in Soedan. Het Lumun heeft ca. 15.000 sprekers.

Hoofdstuk 1 geeft beknopte informatie over de sprekers en hun woongebied, en over de positie en classificatie van het Lumun. Het vermeldt eerdere publicaties over het Lumun en publicaties over andere talen van de Talodi-groep, en noemt ook een aantal recente studies over talen van de Heiban- en Katla-groepen in de Nuba Bergen. In de inleiding wordt ook ingegaan op de manier waarop het onderzoek is uitgevoerd en de verslaglegging daarvan in deze studie.

Hoofdstuk 2 behandelt het klanksysteem van het Lumun. Het Lumun heeft consonanten op de bilabiale, dentale, alveolaire, post-alveolaire, palatale, velaire en labio-velaire articulatieplaatsen. Voor de obstruenten geldt dat hoe zij precies gearticuleerd worden (als stemloze plosief, stemhebbende plosief of als stemhebbende fricatief/approximant) afhangt van hun positie in het woord en naastliggende klanken, ook over de woordgrens heen. Opvallend is dat stemloze fricatieven in de taal helemaal niet voorkomen. Het Lumun heeft acht klinkers, waaronder een schwa die verschillende gedaanten kan aannemen. Hij wordt veelal gecoarticuleerd met een klinker in een naastliggende lettergreep en is vaak zeer kort. Er zijn echter ook woorden waarin geen andere klinkers dan schwa's voorkomen en ook een zeer korte schwa kan de drager zijn van een hoge toon. In de hoge klinkers is er ATR contrast (–ATR ɪ en ʊ tegenover +ATR i en u). Behalve in (bijna) minimale paren is het echter vaak moeilijk uit te maken tot welke set een woord behoort, ook voor de sprekers zelf, en het lijkt erop dat deze oppositie aan het verdwijnen is.

Hoofdstuk 3 presenteert het toonsysteem van het Lumun. Er worden vier tonemen onderscheiden: hoog, laag, dalend en stijgend, met de mora als de toondragende eenheid. Anders dan de naamgeving wellicht suggereert wordt een geïsoleerd woord met stijgende toon niet stijgend uitgesproken maar op een vlak blijvende toonhoogte.

Deze toon wordt iets hoger ingezet dan een lage toon en anders dan in een geïsoleerd woord met lage toon ontbreekt aan het einde van het woord een toondaling. Het (onderliggend) stijgende karakter van deze toon wordt vooral duidelijk in context, onder meer wanneer er een woord volgt dat zelf geheel laag is. Dit lage woord ontvangt nu een hoge toon van het woord met stijgende toon. Op zelfstandig naamwoorden worden vier grote toonpatronen onderscheiden die overeenkomen met de vier tonemen, die met elkaar contrasteren op de laatste mora van het zelfstandig naamwoord. Op werkwoorden en werkwoordsvormen is het beeld iets beperkter: daar wordt de stijgende toon niet gevonden. Toonveranderingen in context worden gedomineerd door twee processen. Het eerste betreft shift van een finale hoge toon (waaronder ook vallen het hoge deel van een finale stijgende toon en een zwevende hoge toon): een woord-finale hoge toon in niet-prepausale positie verandert in een lage toon, terwijl op de eerste mora van het volgende woord een dalende toon verschijnt, tenminste voor zover de toonstructuur van dat woord dat toelaat. Het tweede proces is vereenvoudiging van een contour toon (typisch een dalende toon) op een enkele mora in niet prepausale positie. De dalende toon wordt in dat geval gerealiseerd als hoog. Er is nog een derde proces dat van invloed is op de uiteindelijke tonale realisatie: toonbrug, d.w.z. dat alle lage tonen tussen twee hoge tonen (of tussen een hoge en een dalende toon) hoog worden. Toonbrug is soms verplicht en soms facultatief. Wanneer toonbrug precies toegepast moet of kan worden is nog grotendeels onduidelijk. Tenslotte zijn er grammaticale morfemen die specifieke tooneffecten hebben. Vier clitische voorzetsels zijn daarvan een voorbeeld, alsook bepaalde clitische onderwerpsvoornaamwoorden (de 3e persoon enkelvoud alsook onderwerpsclitica die verwijzen naar woorden uit de verschillende naamwoordklassen).

Hoofdstuk 4 gaat in op zelfstandig naamwoorden, die geordend zijn in een systeem van naamwoordklassen. Het hoofdstuk presenteert de toonpatronen van de zelfstandig naamwoorden en beschrijft hun morfologie. Elk (gewoon) zelfstandig naamwoord valt binnen een naamwoord klasse, die op het naamwoord gemarkeerd is door een naamwoordklasse prefix. Naamwoordklassen komen typisch voor in paren waarbinnen enkelvoudige vs. meervoudige referentie

uitgedrukt wordt. Enkelvoudige dan wel meervoudige referentie krijgt dus gestalte via het naamwoordklasse prefix, waarbij opvalt dat enkele prefixen enkelvoud aanduiden in het ene klassepaar en meervoud in het andere. Naamwoorden met bepaalde betekenisaspecten hebben (in meerdere of mindere mate) een neiging zich te groeperen in een specifiek klassepaar. Per klassepaar wordt een beeld gegeven van de semantische noties die in dat paar meer geconcentreerd voorkomen, maar aandacht wordt ook besteed aan naamwoorden met andere betekenissen. In het hoofdstuk komen verder afgeleide naamwoorden aan de orde, alsook samengestelde (complexe) naamwoorden, leenwoorden en verwantschapstermen en persoonsnamen. Verwantschapstermen en persoonsnamen vallen, in elk geval gedeeltelijk, buiten het naamwoordklasse systeem. Meervoudige referentie wordt uitgedrukt door een suffix op de enkelvoudige term. Verder hebben verwantschapstermen en persoonsnamen een specifiek prefix wanneer ze referentieel gebruikt worden; bij vocatief gebruik is dit prefix afwezig.

Bijvoeglijke naamwoorden en sommige telwoorden, bezittelijke voornaamwoorden en aanwijzende voornaamwoorden congrueren met de naamwoordklasse van het (gewone) zelfstandig naamwoord dat zij bepalen. Hoofdstuk 5 geeft een overzicht van de prefixen die deze congruentie markeren. Dezelfde prefixen worden ook gebruikt om de naamwoordklasse van het onderwerp te markeren op het (niet-afhankelijke) werkwoord. Op vergelijkbare wijze is er congruentie tussen verwantschapstermen en persoonsnamen enerzijds en modificeerders en (niet-afhankelijke) werkwoorden anderzijds. Daarbij wordt enkelvoudige en meervoudige referentie van het naamwoord onderscheiden. Congruentie is er ook tussen vrije en clitische voornaamwoorden (of die nu verwijzen naar verwantschapstermen en persoonsnamen of naar gewone zelfstandig naamwoorden) en modificeerders en (niet-afhankelijke) werkwoorden.

Hoofdstuk 6 geeft een overzicht van persoonlijke voornaamwoorden en van al dan niet clitische voornaamwoorden die gewone naamwoorden substitueren. Er zijn acht persoonlijke voornaamwoorden: ik; jij; hij/zij; ik + jij (2 personen); ik + één of

meer anderen (wij 'exclusief'); ik + jij + één of meer anderen (wij 'inclusief'); jullie; zij (meervoud). De persoonlijk voornaamwoorden hebben zowel een vrije (volledige) vorm als vormen waarin zij optreden als clitisch onderwerp, clitisch object, tweede (vrije) object en als complement van een clitisch voorzetsel. 'Ik + jij' en 'ik + jij + één of meer anderen' hebben bovendien vormen voor gebruik in hortatieve uitdrukkingen, en 'jullie' voor gebruik in gebiedende uitdrukkingen. Ingegaan wordt ook op het gebruik van de vrije persoonlijk voornaamwoorden in comitatieve constructies. Daarnaast is er een serie clitische onderwerpsvoornaamwoorden die verwijzen naar de naamwoorden uit de specifieke naamwoordklassen.

Hoofdstuk 7 presenteert de verbindingsmarkeerder in constructies die bezit uitdrukken (genitief constructies). Deze proclitische markeerder is vastgehecht aan de bezitter en congrueert met de naamwoordklasse van het voorafgaande naamwoord dat refereert aan wat bezeten wordt. Ook andere semantische relaties dan strikte bezitsrelaties worden met behulp van deze constructie uitgedrukt.

Hoofdstuk 8 behandelt de demonstratieven. In de demonstratieven wordt een drievoudig deictisch onderscheid gemaakt in de ruimte: bij de spreker, bij de geadresseerde en op afstand van zowel spreker als geadresseerde. Deze demonstratieven zijn opgebouwd uit een (enkele of verdubbelde) congruentiemarkeerder, een voornaamwoordelijk basiselement en een deictisch element. Bij afwezigheid van het deictische element verwijst het voornaamwoordelijke basiselement (met congruentiemarkeerder) naar een eerder genoemde persoon of zaak (anaforische verwijzing).

Hoofdstuk 9 introduceert de 'restrictor'. De restrictor is een proclitisch element dat vastgehecht is aan een bijvoeglijk naamwoord of een verbale zin. Aanhechting van de restrictor verandert het bijvoeglijk naamwoord of de verbale zin van predicatief in attributief met beperkende werking.

Hoofdstuk 10 gaat in op bijvoeglijke naamwoorden en telwoorden. In het Lumun vormen bijvoeglijke naamwoorden een zelfstandige woordklasse en het hoofdstuk behandelt overeenkomsten en

verschillen met zowel werkwoorden als naamwoorden. Van een aantal bijvoeglijk naamwoorden is duidelijk dat zij afkomstig zijn uit het werkwoordelijke dan wel het naamwoordelijke domein. Een aantal bijvoeglijke naamwoorden heeft een (gedeeltelijk) geredupliceerde vorm. Deze (gedeeltelijke) reduplicatie drukt in een aantal gevallen geïntensiveerde betekenis uit, in enkele andere gevallen echter congrueert de geredupliceerde vorm met meervoudige referentie van het hoofdwoord. Deze meervoudsmarkering, die beperkt is tot 'klein', 'groot' en 'lang', wordt ook in een aantal andere Kordofaanse talen aangetroffen. In het geval van 'groot' en vooral van 'klein' kan de niet-geredupliceerde vorm echter ook gecombineerd worden met naamwoorden met meervoudige of niet-telbare referentie. In dat geval verschuiven zij naar het kwantitatieve domein en drukken 'veel' dan wel 'weinig, een beetje' uit.

In hoofdstuk 11 komen relatief zinnen aan de orde. Daarbij wordt onderscheid gemaakt tussen onderwerpsrelatiefzinnen en niet-onderwerpsrelatief-zinnen. Bij onderwerpsrelatief-zinnen fungeert het hoofd (of antecedent) van de relatief zin uit de matrix-zin als het onderwerp van de relatief zin. In niet-onderwerpsrelatief-zinnen heeft het hoofd (of antecedent) van de relatief zin uit de matrix zin een andere functie dan onderwerp in de relatiefzin. Het kan daar fungeren als object, maar ook als complement van een voorzetsel. Bij beide typen relatief zinnen wordt onderscheid gemaakt tussen restrictieve relatief zinnen (ingeleid door de restrictor) en niet-restrictieve relatief zinnen (zonder de restrictor). De syntactische constructie die gebruikt wordt in een niet-restrictieve niet-onderwerpsrelatief-zin kan ook zelf als hoofdzin-predicaat functioneren. Deze constructie maakt gebruikt van een koppelwerkwoord en topicaliseert een andere constituent dan de agens. De constructie wordt typisch in het Engels vertaald met een passief werkwoord, maar anders dan in een passief constructie, wordt in deze constructie de agens niet naar de achtergrond geschoven.

Hoofdstuk 12 biedt een gedetailleerd overzicht van de complexe werkwoordsvervoeging van het Lumun. Werkwoorden in hun basisvorm vallen in drie toongroepen en eindigen ofwel in een

klinker ofwel in een **t**. Deze factoren zijn van invloed op de vervoeging, evenals de eerste en laatste klinker van het werkwoord (ongeacht of er nog wel of niet een **t** volgt). Werkwoorden kennen vijf basisvervoegingen voor wat betreft tijd/aspect, waarvan er vier in twee paren gegroepeerd kunnen worden met elk een variant die als onafhankelijk werkwoord wordt gebruikt en een variant die voorkomt in contexten waarin een afhankelijk werkwoord wordt geselecteerd. De zesde basisvervoeging is de gebiedende wijs. Met behulp van vormen van het werkwoord 'zijn' worden nadere tijd/aspect onderscheidingen uitgedrukt, terwijl een reeks van hulpwerkwoorden, al dan niet proclitisch op het hoofdwerkwoord, zorgt voor de uitdrukking van modaliteiten en verdere aspectuele noties. Deze hulpwerkwoorden hebben in veel gevallen een beperktere inflectie dan de hoofdwerkwoorden; in een aantal gevallen is een proces van grammaticalisatie goed waarneembaar. Dat geldt zeker voor de uitdrukking van ontkenning: een ontwikkeling van hulpwerkwoord naar grammaticaal morfeem tekent zich daar duidelijk af. Verder kunnen irrealis en richting ('komen' en 'gaan') op het werkwoord worden uitgedrukt.

Hoofdstuk 13 beschrijft diverse processen van formatie van pluractionele werkwoorden. Pluractionele werkwoorden geven uitdrukking aan verschillende soorten van meervoudigheid. Veel werkwoorden hebben een habituele interpretatie maar een pluractioneel werkwoord kan ook uitdrukking geven aan herhaling binnen een handeling of aan meervoudigheid door meervoudige deelnemers.

Hoofdstuk 14 behandelt werkwoordsderivatie. Het begint met een discussie over hoe een object gedefinieerd kan worden in het Lumun en beschrijft vervolgens de formatie van benefactieve, locatief-applicatieve, causatieve, passieve en wederkerige werkwoorden. Bij de causatieve werkwoorden wordt onderscheid gemaakt tussen directe en indirecte causatie. Passieve werkwoorden kunnen gevormd worden met behulp van drie verschillende achtervoegsels. Eén daarvan heeft zich naar alle waarschijnlijkheid ontwikkeld uit een mediale vorm. Voor de vorming van wederkerige werkwoorden zijn er twee verschillende achtervoegsels. Het hoofdstuk laat ook een

aantal voorbeelden zien van werkwoorden met combinaties van derivationele achtervoegsels.

Hoofdstuk 16 behandelt het naamwoord **cĭk** 'place(s)' en twee grammaticalisaties van dit naamwoord: het partikel **cɪk** dat 'vage referentie' aangeeft en het proclitische **cík**- dat gebruikt wordt voor een locatieve constituent. Het vage-referentie partikel kan gecombineerd worden met een werkwoord en met een bijvoeglijk naamwoord en heeft verschillende functies. Bij sommige transitieve werkwoorden markeert het de afwezigheid van een object, bij sommige werkwoorden die verplicht samengaan met een locatieve bepaling de afwezigheid van een locatieve bepaling. Het locatieve proclitische **cík**- is een pragmatische markeerder die een locatie nader preciseert of aangeeft dat iets juist op die bepaalde locatie plaats vindt. Gebruik van het locatieve proclitische **cík**- veronderstelt kennis van de locatie bij de hoorder.

Hoofdstuk 16 geeft een overzicht van prepositionele clitica. Vier daarvan hebben een locatieve betekenis ('in', 'aan/op' (contact makend), 'op' (element van hoogte) en 'bij'); de vijfde heeft een instrumentele, comitatieve of agentieve interpretatie ('met, door') en in combinatie met een locatieve constituent een ablatieve interpretatie ('uit'). Lumun plaatsnamen bevatten één van prepositionele clitica als vast element.

Hoofdstuk 17 gaat over bijwoorden. Het hoofdstuk gaat in op morfologische aspecten, waaronder partiële of gehele reduplicatie. Het hoofdstuk geeft verder een overzicht van bijwoorden van plaats, tijd en manier, waarbij aandacht wordt besteed aan deictische bijwoorden. Tussenwerpsels en enclitische communicatieve partikels die een zin of zinsdeel modificeren komen eveneens aan de orde.

Hoofdstuk 18 behandelt voegwoorden: 'en', 'indien/als', 'toen/wanneer/(om)dat', 'totdat' en 'zoals'. Ook gaat het hoofdstuk in op de complementeerder 'dat' en bespreekt het twee clitische voegwoorden: 'en, terwijl' en 'opdat'. In enkele van deze constructies kan een grenstoon worden toegepast aan het eind van het eerste zinsdeel. De voegwoorden gaan typisch samen met bepaalde

vervoegingen van werkwoorden; in bepaalde gevallen kan de lezing van het voegwoord daardoor worden bepaald.

Het onderwerp van hoofdstuk 19 is focusmarkering. Focus op het onderwerp komt eerst aan de orde, dan focus op andere zinsdelen dan het onderwerp. De markeerder van onderwerpsfocus heeft twee vormen, die in vrije variatie kunnen worden gebruikt. De ene vorm congrueert met het onderwerp dat in focus wordt gebracht, de andere vorm is een vaste vorm. Beide onderwerpsfocusmarkeerders zijn proclitisch en worden vastgehecht aan het (niet-afhankelijke) werkwoord of het bijvoeglijk naamwoord, waarbij zij de congruentiemarkeerder vervangen. Bij niet-onderwerpsfocus betrekt het in focus gebrachte zinsdeel de linkerpositie in de zin, d.w.z. de positie die gewoonlijk wordt ingenomen door het onderwerp (de zinsvolgorde van het Lumun is onderwerp – werkwoord – object). Dit links gepositioneerde zinsdeel wordt gevolgd door een complementeerder die de rest van de zin introduceert. Deze complementeerder is waarschijnlijk hetzelfde woord als het woord dat functioneert als het voegwoord 'toen/wanneer/(om)dat'.

Het laatste hoofdstuk (20) gaat in op vraagwoorden en vraagconstructies. Het behandelt de vraagwoorden 'wie', 'wat', 'waarom', 'waar', 'wanneer', 'hoe' en 'hoe laat'. Verscheidene van deze vraagwoorden hebben een langere en een kortere vorm. De langere wordt gebruikt in neutrale vragen om informatie; ook in thetische vragen wordt de lange vorm toegepast. De korte vorm wordt niet altijd ingezet als echte vraag. Gebruik van de korte vorm kan uitdrukking zijn van een negatieve verwachting of veronderstelling. Het hoofdstuk behandelt als laatste enkele enclitische vraagpartikels. Deze partikels veranderen een bepalende zin in een vragende zin. Daarbij zijn er twee speciale partikels voor het opnieuw vragen van reeds verstrekte informatie.

In de bijlagen, tenslotte, worden vier oorspronkelijke gesproken teksten aangeboden. De teksten zijn getranscribeerd, geglosst en voorzien van een Engelse vertaling. Als laatste is een woordenlijst van ca. 250 woorden bijgevoegd, waaronder de 100 woorden van de Leipzig-Jakarta lijst.

Curriculum vitae

Heleen Smits was born in Den Helder, The Netherlands, on 30 June 1963. She graduated with an MA equivalent in Dutch Language and Literature at Leiden University in 1989. After that she worked as a documentalist for the Dutch section of the International Commission of Jurists (NJCM) in Leiden, while attending evening classes in Library and Information Science at Amsterdam University of Applied Sciences. From 1993 to 2007 she was employed by the Immigration and Naturalization Service of the Ministry of Justice in The Hague and Rijswijk. From 1999 she studied at Leiden University again, obtaining an MA in African Linguistics in 2007. Subsequently, she held a PhD position at LUCL (Leiden University Centre for Linguistics) until 2012. Since 2013 she has been working as an information specialist at the library of the African Studies Centre Leiden.