A grammar of Lumun : a Kordofanian language of Sudan

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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.rɛ́k-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**	**aʊn**
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 (**pʊl ɪpɔ́ɲį** '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:

ʈʊɽít	**ɪ-ʈ-ên**	**akk-ɔnú**	**púl**	**í-p-ɔ́ɲį**	**cənɛ**	**nɔ́-capú**
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'.

***mį́l**	**ɪ-m-ên**	**akk-ará**	**ʊl**	**cəné**
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 **ɛn̪ɛ̂t** '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-ɛ́n̪ɛt ɔ-cɛccɛ̂__ 'I gave (to) Cɛccɛ'
*__m-p-ɛ́n̪ɛt an̪ám__ '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 **ɛ̰t̰ɛ̂t** '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 **arəttɪnt̰ɛt 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-ôl**
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-ôl**
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-ɛ́t̪ɛt	**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 **i̧ci̧ɛt** '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-t̪ʊt̪t̪ʊ́	**p-ɪ̯c-ɪ̯́-ɛt̪.ɛ**	**ɔ-cɛccɛ́**	**ɔ-kakká**	**cɪk**
PERS-T̪ʊt̪t̪ʊ́	C-lie_down-CAUS2-CAUS1:COMPL	PERS-Cɛccɛ	PERS-Kakka	VREF

T̪ʊt̪t̪ʊ́ 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-ɔɽək-ánt̪ɛ́t**	**ŋín-t̪á**	**ŋúɽú**	**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-n̪-akka	**ŋ-kw-ɔŋ-ínn̪-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-ɪnn̪ɛt	**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 **ɔkkínn̪ɛt** ‘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. **antɔkkínn̪ɛt 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-ínn̪ɛt**	**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 **ŋɪnn̪a** '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 **kəné** '(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-ɪnn̪ɛt	**pánan**	**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-ɪnn̪ɛt	**ɔ-kakká**	**kərɛt**	**pánan**	**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 **ị** or **u**) the suffix is realized as [ine] or [ne]. Examples:

aɔ 'come'	**a-ɪnɛ** 'come to'
unɔ 'pour'	**un-ịnɛ** [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'	**ɔʈák-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)nn̪ɛt**, not *(ɪ)nɛt. Benefactives derived from **t**-final verbs end in **(ɪ)nn̪ɛt**, irrespective of whether the **t** functions as a productive suffix or is part of a lexicalized verb. Examples:

ɔkkɔ̂t 'do, make'	**ɔkk-ínn̪ɛt** 'do for, make for'
aɣantɔt 'collect'	**aɣant-ɪnn̪ɛt** 'collect for'
ɔn̪ɨ́ɔt 'send'	**ɔn̪ɨ́-ənn̪ɛt** 'send to'
ɔkúccɛt 'prepare'	**ɔkúccɛ-nn̪ɛt** 'prepare for'
ɔŋat 'like, love'	**ɔŋa-nn̪ɛt** 'like for, love for'

Note in the examples above that in 'send to', after the vowel **ɨ́** the suffix is realized as **ənn̪ɛt**. After the Reciprocal suffix **arɔ**, too, the combined suffix **ɪnn̪ɛt** is realized as **ənn̪ɛt**:

ɔkkɔ̂t 'do, make'	**ɔkk-ár-ənn̪ɛt** 'do for e.o., make for e.o.'

The verb **ɛ̀ɔ̀** '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 **ɪn̪a** 'cook', has two arguments: a subject and an object. The second, with the Benefactive verb **ɪn̪anɛ** 'cook for', has three arguments. The Benefactive object is the primary object, occupying the immediate post-verbal position.

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

Kakka has cooked asida

ɔ-kakká	**p-ɪn̪á-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:

ɔráne 'cultivate for'

ŋ-kw-ânn̰an	**á-rɪt**	**ɔrá-nɛ**	**áləpaccôn̰**
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.nn̰ɛt**	**ʊkʊl**	**kən̰ət**
PERS-Kakka	C-open-BEN:PST	child	door

Kakka opened the door for the child

Sometimes the added argument has a maleficiary role:

ɔɣ́əkɪnɛ 'eat for'

liɟcɔk	**l-a.ɣ́ək-ɪnɛ**	**pʊ́l**	**p-əɣɛk**	**mîl**
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', **ɛ̂ɔ̂** 'go', **ɔn̰íɔt** 'send', **ɔnâ** 'bring' and **ɔnɛ́kɔ** 'take', are constructed with a Benefactive:

ɔ-cɛccɛ́	**p-á-ínɛ**	**ɔ-nnɛ́**
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-cɛccé	**p-á.é5́**	**tɔ-man**	**m-ɔ́-kapık**	**cıpın**	**éɲ-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-cɛccé	**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.mʊ́ɲɛ-nɛ	**ŋín-t̪a**
1-C-steal-BEN:INCOMPL	what-QW

why will I steal?

ŋín-t̪-akka	**kəmən**	**éŋ-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**	**ól**	**w-ɔŋá-nt̪ɛt**	**ıttı**	**w-íkkɔ**	**cık**	**t̪áɣʊ**
RES-C-DEM	that	people	C-like-BEN:COMPL	that	PRO.C-sit:INCOMPL	VREF	T̪aɣʊ

that is why people like to live in T̪aɣʊ

The verb **ɛrɛ** 'speak' takes a direct object such as **lɔn** 'words' or **karrô** '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-nį̣n**	**ṭ̱-a.ɪk**	**ṭ̱-ɔpərốt**
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-ínṭ̱ɛt**	**ɔ-paŋ**	**ŋuɽû**
child	C-like-BEN:COMPL	PERS-sibling	asida

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

ʊkʊl	**w-ɔŋɔṭ̱.é**	**ŋúɽú**	**ŋ-ɔ́-páŋ**
child	C-like:COMPL	asida	C-of.PERS-sibling

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

ṭ̱i̱	**ṭ̱-ɔccɔk-ínṭ̱ɛt**	**ʊkʊl**	**kərɛ́t**
thorn	C-catch-BEN:COMPL	child	cloth

a thorn has caught the shirt of the child

ṭ̱i̱	**ṭ̱-ɔccɔkɔ́ṭ̱.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:

lịcɔk	**l-a.ɽák-ɪnɛ**	**púl**	**p-əɽɛk**	**mîl**
goats	C-eat-BEN:INCOMPL	person	C-some	sorghum

the goats will eat somebody's sorghum

lịcɔk	**l-a.ɽəkɔ**	**míl**	**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 **ɔkánɛ** '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:

ɔkánɛ ‘show’	**ɔkánɛ-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 **ɔkánɛ** 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 **t̪**V. Loss of the final vowel of this suffix changed **t̪** into **t**, as in word-final position **t̪** is not allowed. The older form **t̪** 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 **t̪**.

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

I will ask her

m-p-ɪpɪttɔ́-t̪.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 **kapık** '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-ɪɔt̪.é	**kə́llân**
1-C-find:COMPL	old_woman

I found/met the old woman

m-p-ɪɔt̪.é	**kə́llán**	**nɔ-kat̪ə́r**
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	**t̪-ín-arɔ**	**acín-t̪a**
PERS-3A	C-know-REC1:INCOMPL	when-QW

when will they get to know each other?

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

where will they get to know each other?

ɔ-kín	**t̪-ín-arɔ-t**	**kárətt̪ôm / cənɛ́ / ɪ-man**			**m-ɔ́-kapık**
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 **ɔɣəkɔ̂** ‘eat’, **ɔɣə́kınɛ** ‘eat for’ is used in the ‘why’-construction. The Locative-applicative **t** is present, giving **ɔɣə́kınt̪ɛt**, because of **kapık** ‘upright, in upright position’.

ŋín-t̪-akka	**a-ɣə́k-ınt̪ɛt**	**ŋuɣú**	**kapık**
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 **ɔkéccɛ** ‘cut’). Compare:

ŋəʈɪ	**ŋ-a.ɪk**	**ŋ-a.llɔ́-t**	**nɔ-capó**
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.kéccɛ-t	**n̪ún**	**nɔ.ppăn**
1-C-cut.PLUR-LOCAPP:INCOMPL	onion	inside

I will cut the onions inside

m-p-a.kéccɛ-t	**n̪ún**	**nɔ-cáṯṯak**
1-C-cut.PLUR-LOCAPP:INCOMPL	onion	on-calabash

I will cut the onions into the bowl

m-p-a.kéccɛ	**n̪ún**	**ŋ-kəʈi̯ttaŋ**	**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):

ɔn̪ɔ-n̪.ɛ	**kʊrrɛt**	**cənɛ́**
pull-LOCAPP:IMP	line	here

draw a line (up to) here!

ɔn̪ɔ-n̪-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).

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

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

ɔ̱ɔ-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 **ɔ̱ɔ́** '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.ík**	**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-úŋ**
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 **ɛ̂ɛ̂** ‘stab, blow’, with derivation **ɛ̂ɛ̂t. 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-úŋ**	**kárə́-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-úŋ**	**kárə́-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 **ɔt̪ér ɔ** 'mend':

m-p-ɔttɛ.t	**n-a-ák**	**a-kw-ɔ́t̪ɛrɔ**	**áɽaŋkal**	**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', **ɛ̃̂** '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	**tɔ́rrô**
1-C-be:INCOMPL	Lumun_country

I will be in Lumun country

m-p-a.ɛ̃́	**tɔ́rrô**
1-C-go:INCOMPL	Lumun_country

I will go to Lumun country

ana	**ól**	**w-á.ná**	**ŋə́pák**	**kɛ́ccôk**[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

[3] **kɛccôk** '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-kʊkkʊ́	**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-kʊkkʊ́	**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	**ṯ-á.ík**	**ṯ-íkkɔ**	**cık**	**ı-ccík**	**k-ɔ-ṯĭ̆k**
PERS-3A	C-be:PR	C-sit:INCOMPL	VREF	in-place	C-of-fire

they are sitting near the fire

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

they are sitting near the fire (maybe guarding it)

ɔ-kín	**ṯ-á.ík**	**ṯ-íkkɔ-t**	**púl**	**cık**	**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-pıra** 'bottom of the tree' could not be used without prepositional proclitic.

a-kıt	**ɔcéɽɛ-kat**	**kaṯʊk**	**cʊɽé**	**c-ɔ-pıra**
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-n̪.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 **n̪ɔɽə́k**
1-C-cut.PLUR:INCOMPL rope

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

m-p-a.kɛ́ccɛ-t **n̪ɔɽə́k**
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**	**wǎn**
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 **ɔkéccɛnt̪ɛt**.

m-p-a.ɪk	**p-a.kéccɛ-nt̪ɛt**	**ɔ-kakká**	**wan**	**nɔ.ppǎn**
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 **ɪʈɛt** ‘tell sb.’ and **ɔmêt** ‘tell sb.’ have an additional object with the role of ‘recipient’ of the speech, as compared to **ɪʈɛ** ‘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 (**ɪpɪttɪnt̪ɛt** ‘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**	**ŋʊ́í**
1-C-ask-LOCAPP:INCOMPL	PERS-Kakka	milk

I will ask Kakka for milk

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

I will ask for milk for Kakka

m-p-ípɪtt-ɪnt̪ɛt	**ókʊl**	**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 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 **ń-** ‘with, by, (away) from’ in such cases (third example below).

ʊl	**w-ére**	**kárrû**
people	C-speak:INCOMPL	mother_tongue

the people speak Lumun

ʊl	**w-éɾɛ-t**	**kárrû**
people	C-speak-LOCAPP:INCOMPL	mother_tongue

the people speak about Lumun

ʊl	**w-éɾɛ-nɛ**	**ɔ-nnán**	**ŋ-karrû**
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 **karrû** ‘mother tongue’ functions as its complement. The first case translates as ‘speak Lumun’, the second as ‘speak about Lumun’.

ʊl	**w-éɾɛ.t**	**kárró**	**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 **ɔn̪ɪ̯ɔ** ‘push’ / **ɔn̪ɪ̯ɔt** ‘send’. A prototypical situation of **ɔn̪ɪ̯ɔt** 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 **ɔn̪ɪ̯ɔt** ‘send’, which can occur without a locative phrase.

ɔ-kakká	**p-ɔn̪ɪ̯ɔn̪.é**	**ʊkʊl**
PERS-Kakka	C-send:COMPL	child

Kakka has sent the child

The verb **ɔn̪ɪ̯ɔ** 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.n̪ɪ̯ɔ**	**cúɽɔl**
PERS-Cɛccɛ	C-be:PR	C-push:INCOMPL	stone

Cɛccɛ is pushing the stone

ɔ-cɛccɛ́	**p-ɔn̪ɪ̯ɔ-n̪.é**	**cʊɽɔl**	**nɔ-kʊn̪úʊt**	**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 **ɔn̪ɪ̯ɔ** ‘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-kʊkkʊ́	**p-ɔtɪ̯ɔ.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 **ɔn̪ɪ̯ɔ** / **ɔn̪ɪ́ɔt**.

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

ɪɽɪkɔ	enter	**ɪɽɪkɔt**	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', **ɛn̪ɛ̂t** 'give', **ɪttarɔt** 'help', **ɪttat** 'become fat' (**ɪtta** 'get married'), **i̧cat** 'lie down, sleep', **i̧cat cɪk** 'lie (down)', **ɪntat cɪk** 'disappear', **ɔcʊ́ŋkwɛt** 'splash (in the water)', **ɔkʊ́ccɛt** 'prepare', **ɔkwántɔt** 'search', **ɔnə́kkɛt** '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 **i̱ɛ** [ie]. Some examples:

akɔ 'wear; suck milk'	**akɪɛ** 'dress sb.; breast feed'
apɔ 'fall'	**apɪɛ** 'make fall, drop (tr.)'
arrɔt 'cross'	**arrɪɛt** 'make cross'
ɪkkɔ cɪk 'sit, stay'	**ɪkkɪɛ cɪk** 'make sit, make stay'
i̱kkɔ 'drink'	**i̱kki̱ɛ** [ikkie] 'make drink'
accakɔ 'soak (intr.)'	**accakɪɛ** 'make wet'
ɔpákkɔ 'wash (intr.)'	**ɔpákkɪɛ** 'help sb. wash'
ɔkwárɪkɔt 'remember'	**ɔkwárɪkɪɛt** 'make remember, remind'
ɔccɔ̂ 'take, receive'	**ɔccíɛ** 'make take, make receive'
ɔllɔ̂ 'run'	**ɔllíɛ** 'make run'
ɔkkɔ̂t 'make, do'	**ɔkkíɛt** 'make make, make do'
ɔpɔ́llɛ 'be afraid'	**ɔpɔ́llɪɛ** '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'	**ɛllıɛ** 'make disappear'
ɔcɔ́kka 'grow (up)'	**ɔcɔ́kkıɛ** 'make grow (up), raise'
ıɽımat 'get dark, get blinded'	**ıɽımıɛt** 'make dark, blind'
ɔpíra 'become good'	**ɔpírıɛ** 'make good'
ɔkín̪aka 'become bad'	**ɔkín̪akıɛ** 'make bad'
ɔnn̪ɔma 'become dry'	**ɔnn̪ɔmıɛ** '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:

ɔɽəkɔ̂ 'eat'	**ɔɽɔ́kıɛ** '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 **ɔcéɽɛ** (< **ɔcɔ́ɽɔ**), the second vowel has harmonized with the suffix.

ıɽıkɔ 'enter (intr.)'	**ıɽıkɛ** 'make enter'
ɔpákkɔt 'return (intr.)'	**ɔpákkɛt** 'make return, put back'
ɔcɔ́ɽɔ 'stand, wait'	**ɔcéɽɛ** 'make stand, make wait, stop (tr.)'
ɔpáɽɔ 'move at level height'	**ɔpáɽɛ** 'move at level height'
ɔrəpɔ̂ 'move down'	**ɔrəpɛ̂** 'make move down'
ɔkúɽɔt 'move up'	**ɔkúɽɛt** 'make move up'
ɔpáɽɔ cık 'move out of the way'	
	ɔpáɽɛ cık 'make move out of the way'
ɔn̪ákkarɔt 'move over'	**ɔn̪ákkarɛt** 'make move over'
ɔkəɽɔ̂ 'get burnt'	**ɔkəɽɛ̂** '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'	**ɔppêt** 'fill'
i̧cat cık 'lie (down)'	**i̧cɛt cık** 'lay (down), make lie (down)'
ɛrıma 'become deafened'	**ɛrımɛ** 'deafen'
ʊrat cık 'become lost'	**ʊrɛt cık** 'loose, forget'

ɔppêt '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: **ɔʧɪ-a** + **ɪɛ** > (**ɔʧɪ-ɪɛ** >) **ɔʧɪɛ**; **ɔʧɪ-a** + **ɛ** > **ɔʧɪɛ**.

ɔʧɪa 'become red, ripe'	**ɔʧɪɛ** 'make red, ripe'
ɛt̪ɪa 'become cool'	**ɛt̪ɪɛ** '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-i̱c-ɛ.ka̱t̪ɛ** **ʊkʊl** **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

ʊkʊl **w-i̱ca.ka̱t̪ɛ** **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.t̪.ɛ **mí̱l** **nɔ.ppă̱n**
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.t̪.ɛ **ô̱l**
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-ɔ́kʊʈ-é.t̪.ɛ **lį̣cɔk** **tɔpərâ**
3-C-move_up-CAUS1:COMPL goats Tɔpərâ

s/he made the goats move up to Tɔpərâ

lį̣cɔk **l-ɔkʊʈɔt̪.é** **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.

pɔʈé **p-ɛrɪm-é.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.

t̪ʊk **t̪-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-n̪a**
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:

cɻŋkɻ	**c-a.ɪk**	**c-á.nt̪ɔm-ɪɛ**	**ərét**
sun	C-be:PR	C-become_dry-CAUS2:INCOMPL	cloths

the sun is drying the clothes

ərɛt	**w-a.ɪk**	**w-á.nt̪ɔma**
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-ɪɛ	**pʊ́l**	**mɪ̌ɔ̌**
3-C-hit-CAUS2:INCOMPL	person	spell

s/he will make the person swear an oath

pʊl	**p-a.kkwɔ**	**mɪ̌ɔ̌**
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 **ɔʈəkɔ̂** '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.ík**	**p-á.ʈə́k.ɪɛ**	**ʊ́kʊl**	**ŋuʈû**
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**	**ɲʊ́kʊl**	**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: **ɪʈɪkɔ** '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-ppăn**
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	**ʊkʊl**	**n-tɔ-cʊʈô̂l**
come_down-CAUS1:IMP	child	with-up_on-stone(k.o.)

get the child down from the stone!

? ɔrəp-ɪɛ	**ʊkʊl**	**n-tɔ-cʊʈô̂l**
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.

ɟcat cɪk 'lie down'	**ɟcɛt cɪk**, **ɟcɟɛt cɪk** 'lay sb. down'
ʊrat cɪk 'become lost'	**ʊrɛt cɪk**, ?**ʊrɪɛt cɪk** 'loose, forget'
ɔcɔ́ʈɔ 'stand, wait'	**ɔcɛ́ʈɛ**, ?**ɔcɛ́ʈɪɛ**, ?**ɔcɔ́ʈɪɛ** 'stop (tr.), make wait'
ɔpáʈɔ 'go level'	**ɔpáʈɛ**, ?**ɔpáʈɪɛ** 'go level'
ɔpáʈɔ cɪk 'move out of the way'	**ɔpáʈɛ cɪk**, ?**ɔpáʈɪɛ cɪk** 'make move out of the way'
ɔkúʈɔt 'move up'	**ɔkúʈɛt**, ?**ɔkúʈɪɛt** 'make move up'
ɔpákkɔt 'return'	**ɔpákkɛt**, ?**ɔpákkɪɛt** 'make return, put back'

Double Causatives

The above-mentioned pairs with **ɛ** and with **ɪɛ** (**ɪʈɪkɛ/ɪʈɪkɪɛ** 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 **ɟcɟɛt cɪk** 'lay down, make lie (down)' (< **ɟcɛt cɪk** < **ɟcat cɪk** 'lie (down)'). On the one hand **ɟcɟɛt cɪk** is said to be an alternative form of **ɟcɛt 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 **ɟcɛt 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 **ɟcjɛt cɪk**.

ɔ-kakká	**p-ɟc-ɛ́t̪.ɛ / p-ɟc-ɟ́ɛt̪.ɛ**	**ʊkʊl**	**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-ɟc-ɟ́-ɛt̪.ɛ**	**ɔ-cɛccé**	**ʊkʊl**	**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 **ʊrɛt cɪk** 'loose, forget' (< **ʊrat cɪk** 'become lost') / **ʊrɪɛt cɪk** 'make sb. loose sth., make sb. forget', and **ɔppêt** 'fill' (< **ɔppât** 'become full') / **ɔppíɛt** 'make sb. fill'. Compare:

t̪ɔntərɔ	**t̪-ɔppát̪.ɛ**
calabash(k.o.)	C-become_full:COMPL

the *t̪ɔntərɔ*-calabash is full

ɲʊkʊl	**ɲ-ɔpp-é.t̪ɛ**	**t̪ɔntərɔ**	**t̪amʊ́r**
children	C-become_full-CAUS1:COMPL	calabash(k.o.)	sand

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

ɔ-kʊkkʊ́	**p-ɔpp.ɪ-é̱t̪.ɛ**	**ɔ-nɛnní**	**ŋəʈɪ**	**t̪ɔ́ntərɔ**
PERS-Kʊkkʊ	C- become_full-CAUS2-CAUS1:COMPL	PERS-Nɛnnɪ	water	calabash(k.o.)

Kʊkkʊ made Nɛnnɪ fill the *t̪ɔntərɔ*-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 **ɔnt̪ɔmɪɛ** 'dry' (< **ɔnt̪ɔma** '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-ɔnt̪ɔm-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-ɔnn̪ɔm-íɛ.t**	**ɔ-kʊmaŋ**	**ərɛ́t**
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., ***ɔkʊ́ɽɪɛt** 'make sb. make go up' (double Causative, < **ɔkʊ́ɽɛt** / ? **ɔkʊ́ɽɪɛt** (single Causative) < **ɔkʊ́ɽɔt** 'move up'):

***ɔ-kʊkkʊ́**	**p-ɔkuɽ-í-ɛn̪.ɛ**	**ɔ-lɔ́ccɔ**	**liccɔk**	**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**	**mɪ̌ɔ̌**
3-C-hit-CAUS2:INCOMPL	person	spell

s/he will make the person swear an oath

***k-kw-á.kkw-ɪɛ**	**ɔ-kʊkkʊ́**	**pʊl**	**mɪ̌ɔ̌**
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-kʊkkʊ́**	**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 **ɔcɛ́ɽɛ** 'stop (tr.)' (< **ɔcɔ́ɽɔ** 'stand, wait').

ɔ-kʊkkʊ́	**p-ɪrɛ́n̪.ɛ**	**ɔ-lɔ́ccɔ**	**ɪttɪ**	**k-kw-á.cɛɣ-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 **ɔnn̪ɔmɪɛ** '(make sb.) dry sth.', a verb that can express both single and double causation (second example below).

ɔ-kakká	**p-ɪrɛ́n̪.ɛ**	**ɔ-cɛccɛ́**	**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-ɪrɛ́n̪.ɛ**	**ɔ-nɛnní**	**ɪttɪ**	**k-kw-á.nn̪ɔm-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:

aɣɛ 'hang sth. (make sth. hang)'
ɔcə́kkɛ 'make smooth, filter'
ʊɛt 'beg (make sb. accept)'
ɔkúccɛt 'prepare (make ready)'
ɔnə́kkɛt / ɔllə́kkɛt / ɔɣə́kkɛt 'put down'
akkəɣɛt 'add (make sth. increase)'
ɔɣɛt 'save'

ɔʧíkiɛ '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 **aɽɛ** 'hang sth.' / **aɽɪɛ** '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-áɽé.t	**kərɛt**	**nɔ́-cáɽícáɽâ**
3-C-hang:COMPL	cloth	on-bush(sp.)

s/he has hung the cloth over the bush

k-kw-áɽ-ɪé.t	**ɔ-kakká**	**kərɛt**	**nɔ́-cáɽícáɽâ**
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’
ɔkwɛ́ntɔ ‘leave (tr.)’	**ɔkwɛ́nt-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’

ɛn̪ɪɛ, **ɪn̪ɪɛ** ‘make cool, bless’ **ɛn̪ɪɛ-kɔ**, **ɪn̪ɪɛ-kɔ** ‘be made cool, be blessed’
ɔkɛ̂ ‘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:

ɔʏəkɔ̂ ‘eat’ **ɔʏə́kk-akɔ** ‘be eaten’
ɪn̪a ‘cook (asida)’ **ɪn̪a-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:

ɛɛ̂ ‘stab, blow’ **ɛɛ́-tta** ‘be stabbed, be blown’
ɔkíccɛ ‘chase’ **ɔkíccɛ-tta** ‘be chased’
ɔkɛ̂ ‘shave’ **ɔké-tta** ‘be shaved’
ɛn̪ɪɛ, **ɪn̪ɪɛ** ‘make cool, bless’ **ɛn̪ɪɛ-tta**, **ɪn̪ɪɛ-tta** ‘be made cool, be blessed’
ɔkkwɛ̂ ‘beat’ **ɔkkwɛ́-tta** ‘be beaten’
ɛrɛt ‘talk about’ **ɛrɛ-tta-t** ‘be talked about’
ɔkúccɛt ‘prepare’ **ɔkúccɛ-tta-t** ‘be prepared’
ɛn̪ɛ̂t ‘give’ **ɛn̪ɛ́-tta-t** ‘be given’

ɪna ‘know’	**ɪna-tta** ‘be known’
ɔn̪ía ‘fear’	**ɔn̪ía-tta** ‘be feared’
akɔ ‘wear’	**ak-ətta** ‘be worn’
ɔnékɔ ‘take’	**ɔnék-ɪtta** ‘be taken’
ɛlɪkkɔ ‘release’	**ɛlɪkk-atta ‘**be released’
ɔɲô ‘fry’	**ɔɲ-ótta** / **ɔɲ-ətta** ‘be fried’
ɔkwô ‘blow’	**ɔk-ótta** ‘be blown’
ɔkkôt ‘do, make’	**ɔkk-áttat** ‘be done, be made’
ɔkkwôt ‘kill’	**ɔkk-óttat** ‘be killed’

Attachment of Pass3 **(ʊ)ra**:

ô(t) + **(ʊ)ra** > **óra(t)**
â(t) + **ra** > **ára(t)**

Examples:

ɔɲô ‘fry’	**ɔɲ-óra** ‘be fried’
ɔppôt ‘collect at’	**ɔpp-óra-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’ > **ɔkwɛ́ntakɪne** ‘be left over for’ (BEN + PASS1)

The following Passives have irregular forms:

ɔkákɔ ‘grind’	**ɔk-ətta ‘**be ground’
ɔʧəkô ‘eat’	**ɔʧə́-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** **pʊʈʊpɛ̂**
PERS-Lɔttɪ C-release:COMPL bird

Lɔttɪ has released the bird

pʊʈʊpɛ́ **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 **ń-** ‘with, by, (away) from’ (see chapter 16.6 for the absolute prepositions):

pʊʏʊpɛ́ p-ɛlɪkk-ákɔ.t ɔ-lɔ́ttí ŋ́.ŋɪn
bird C-release-PASS1:COMPL PERS-Lɔttɪ with:ABS
the bird has been released by Lɔttɪ

pʊʏʊpɛ́ 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’:

n̪ʊk n̪-ɔkkwɔt̪.ɛ́ pəlla
dog C-kill:COMPL cat
the dog has killed the cat

pəlla p-ɔkk-ʊttá.t̪.ɛ n-n̪ʊ̌k
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.t̪ɔ ɟmɟ́t
child C-be:PR C-pull:INCOMPL goat
the child is pulling the goat

ɟmɟt w-a.ɪk w-a.t̪-úra ú́kʊl ŋ.ŋɪn / n-ú́kʊl
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 **ɔt̪úra** ‘be pulled’, Pass1 **ɔt̪ákɔ** and Pass2 **ɔt̪útta** or **ɔt̪átta** 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 **ɔkáɽɪttakɔt** ‘be(come) narrow, hold arms against/around the body and legs together’ (< **ɔkáɽɪttɔt** ‘make narrow, squeeze’) is another example of a verb expressing a state. The example below can refer to a path (**kaṯár**) 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 **ʊl ŋŋɪn** (third example below) is understood as people standing on the path, causing the road to be narrow due to their presence.

kaṯər	**k-ɔkəɽítt-akɔ.ṯ.ɛ**
road	C-become_narrow-PASS1:COMPL

the path is narrow

kaṯər	**k-ɔkəɽítt-akɔ.ṯ.ɛ**	**m-mîl**
road	C-become_narrow-PASS1:COMPL	with-sorghum

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

kaṯər	**k-ɔkəɽítt-akɔ.ṯ.ɛ**	**n-ôl**	/ **ʊl**	**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 **ɔmétta** ‘be engraved’ (< **ɔmɛ̂** ‘engrave’).

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

the *cakkəlɔk*-calabash is decorated

cakkálɔk	**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**.

cɨŋkɨ	**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)

cɨŋkɨ	**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 **ɛn̪éttat**) 'be given' (< **ɛn̪êt** 'give') allows for both the patient and the recipient to take the subject position.

caṯṯak **c-ɛɛ́-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** **cáṯṯak**
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 **ɔnɛ́kɪttanɛ** 'be carried for' (base verb **ɔnɛ́kɔ** 'carry'). Note that the order of the derivational suffixes remains unchanged.

ɔ-kakká **p-ɔnɛk-ítta-kanṯɛt** **ŋəɽɪ̌**
PERS-Kakka C-carry-PASS2-BEN:PST water
the water was carried for Kakka (she did not carry it herself)

ŋəɽɪ **ŋ-ɔnɛk-ítta-kanṯɛt** **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 **arəttakɪnṯɛt 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-ínṯɛ́t** **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-ínṯɛ́t** **pʊ́l** **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-kʊkkʊ́	**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.t̪áttɔ**	**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.t̪átt-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-ɟ́cat**	**na-aɽaŋkal**	**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)

aɽaŋkal	**én-n-í**	**w-ɟ́ca-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.kéccɛ**	**t̪ún**	**ŋ-kəɽɟ́ttaŋ**	**éŋ-k-í**
people	C-cut.PLUR:INCOMPL	onion	with-knife	DEM-C-NEARSP

people cut onions with this knife

kəɽɟ́ttaŋ	**éŋ-k-í**	**k-á.kéccɛ-tta**	**t̪ún**	**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)

kəɽɟ́ttaŋ	**éŋ-k-í**	**k-á.kéccɛ-tta**	**n-t̪ûn**
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 **ŋəʈ̌** ‘water’ are not possible.

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

people drink water from this *caṯ̪tak*-calabash

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

this *caṯ̪tak*-calabash is for drinking water

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

ʊl	**w-únɔ**	**ŋəʈɪ**	**n.tɪ**	**ɪ-kʊmmʊ́k**	**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-əʈ̌**
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: **ɔŋwúttɔ** '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'	**ɔllátta**, **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'
ɔkáʈɪttɔt 'make narrow, squeeze'	**ɔkáʈɪttakɔt** 'be made narrow, hold arms against/around the body and legs together'	
ɔpárəttɔt tít 'turn (tr.)'	'be turned', 'turn oneself' **ɔpárəttakɔt tít** 'be surprised'	

ɔkkárəttɔ ‘return (tr.)’	**ɔkkárəttakɔ** ‘be returned’, ‘return (intr.)’	
ɔkkápərəttɔ ‘return (tr.)’	**ɔkkápərəttakɔ** ‘be returned’, ‘return (intr.)’	
aɣəntɔt ‘collect’	**aɣəntakɔt** ‘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’ **ɔkékɔ** (PASS1) and **ɔkétta** (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.ké-tta**
1-C-be:PR C-shave-PASS2:INCOMPL

I am being shaved (by somebody else)

m-p-a.ɪk **p-a.ké-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.ké** **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 **ɔmê** ‘decorate, scarify’. **ɔmê** combines both with PASS1 and with PASS2. Both function as regular passives, but their meanings are different. **ɔmétta** ‘be decorated’, with PASS2, is used for objects (for example a calabash), PASS1 **ɔmékɔ** ‘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 **i̧**, 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*
ɔɣɔ̂ 'apply on sb.'	**ɔɣɔ́kɔ** 'apply on oneself'	**ɔɣákɔ**, **ɔɣótta** / **ɔɣətta**, **ɔɣóra** 'be applied on sb.'
ɔccɔ̂t 'receive at'	**ɔccɨ́kɔt** 'hear, listen' **ɔccɔ́kɔt** 'catch' (receive at body)	**ɔccákɔt**, **ɔccóttat** / **ɔccəttat**, **ɔccórat** 'be received at'
aɣɛ 'hang (tr.)'	**aɣɪkɔ** 'stay longtime, hang out (intr.)'	**aɣɛtta** '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.

ılakkɔ	‘wash one’s hands or feet’
ɔpákkɔ	‘wash one’s body, take shower’
ɔɲírıkɔ	‘blow one’s nose’
akɔ	‘wear’
ʊrəkɔ	‘get up, stand up, start’
apəʈılakɔ	‘hang (intr., of human or animal, from the hands)’
accakɔ	‘get soaked’
appəʈıkɔ	‘get loose’
aʈəkɔ	‘float, swim’
ɔkkɔ̂	‘pass, arrive’
ɔʈʊŋkɔ	‘set (of the sun)’
ıkkɔ cık	‘sit, stay’
ıʈıkıttakɔ	‘hurry (intr.)’
aṭ̈əntakɔ	‘dream’
ɔkwárıkɔt	‘recall’
ɔkkʊnakɔ	‘smell’ (intr.)
ɔkkʊnakɔt	‘smell’ (tr.)
accakɔ	‘get soaked’
appəʈıkɔ	‘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*
ɔcɔ́ṭɔ 'break in two' (tr., object is sth. hard)	**ɔcɔ́ṭakɔ** 'be broken in two' (subject is sth. hard)	**ɔcɔ́tta** 'break in two' (intr., subject is sth. hard)	**ɔcɔ́ttakɔ** 'be cancelled, be broken off'
ɔmɔ́ṭɔ 'break in two' (tr., object is sth. bendable)	**ɔmɔ́ṭakɔ** '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/ ɔŋətta** '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)
ɔŋáṭɔ 'tear from a tree' (object is part for which force is needed: bark, small branch)	**ɔŋáṭakɔ** 'be torn from a tree' (subject is part for which force is needed: bark, small branch)		

Some sentential examples:

attɪ	**kwɔ́ʔɛn**	**k-ɪna**	**ɔcɔ́ʈ-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)

ʈɔʔək	**ʈ-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.

ʈɔʔək	**ʈ-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:

ɟmɟt	**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 **ɔkə́ttɛ** 'trade' / **ɔkə́tta** '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'	**ɔlláraɔ** 'be wiped (away), be swept'
ɔn̰ô 'pull'	**ɔn̰úra** 'be pulled'	**ɔn̰úrakɔ** '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.’
ɔccíkɔt	‘hear’	**ɔccík-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.’
ɔmmɔ̂	‘not know’	**ɔmmá-rɔ**	‘not know e.o.’
ɔkwárɪccat	‘search’	**ɔkwárɪcca-rɔ-t**	‘search e.o.’

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

ɔʈəkɔ nɔ-pôl 'eat from a person' ('eat from a person's plate or portion')
ɔʈákk-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.'
ɔʈákɪɛ	'feed'	**ɔʈákɪɛ-ttɔ**	'feed e.o.'
ɔŋwíɛ	'make sb. kill (PLUR)'	**ɔŋwíɛ-ttɔ**	'make e.o. kill'
ɪkkɛt	'give (PLUR)'	**ɪkkɛ-ttɔ-t**	'give e.o.'
ɔʈêt	'save'	**ɔʈé-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** + **ɪn̪̊ɛt,** are respectively realized as (**a**)**rənɛ** and (**a**)**rənt̪̊ɛt.** 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-ɪn̪̊ɛt** 'listen to' **ɔccík-ar-ənt̪̊ɛt** 'listen to e.o.'
ɔkkɔ̂t 'do, make' **ɔkk-ínt̪̊ɛt** 'do for, make for'
ɔkk-ár-ənt̪̊ɛt '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.'
ɔccį́k-arɔ-t	'hear e.o.'	**ɔccį́k-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.'
ɔʈə́kɪɛ-ttɔ	'feed e.o.'	**ɔʈə́kɪɛ-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:

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

ɔn̪t̪é-tt-arɔ nán 'leave e.o.', **ɔn̪t̪é-tt-ar-arɔ nán** 'leave e.o.'
< **ɔn̪t̪ɛ nɔ-pôl** 'leave a person'
also: **ɔn̪t̪é-ttɔ nán** 'leave e.o.', **ɔn̪t̪é-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.’

ɔn̪tía-tt-ar-ənɛ cɪk ‘fear e.o.’, **ɔn̪tía-tt-ar-ar-ənɛ cɪk** ‘fear e.o.’
< **ɔn̪tía-nɛ cɪk** ‘fear sb.’ < **ɔn̪tía cɪk** ‘become afraid’
also**: ɔn̪tía-r-ənɛ cɪk**, **ɔn̪tía-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 **ɔpə́llɛ-tt-ar-ənɛ** (< **ɔpə́llɛnɛ** ‘fear sb., run from sb. (out of fear)’ < **ɔpə́llɛ** ‘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 **ɔkkínn̪ɛt** 'do for' however can serve as a basis for the Reciprocal **ɔkkárənn̪ɛt** 'do for e.o.':

n-ɔkk-ár-ənn̪ɛt	**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 **akınɛ** 'wear for, wear instead of sb.' serves as a basis for the Reciprocal stem **akarənɛ**:

ɔ-kín	**n̪-á.ík**	**n̪-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 **ıpıttɔ** '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 **ıpıttɔt** 'ask sb.', with Locative-applicative **t**, has the addressee as object. The Reciprocal verb 'ask e.o.' is based on this verb.

ıpıttɔ	'ask (about)'	**ıpıttarɔ**	'greet e.o.'
ıpıttɔt	'ask sb.'	**ıpıttarɔt**	'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-papɛ̂**
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-əʈɛ́**	**p-aʈɔ.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-aʈ-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-kʊkkô**
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.’

ɔt̪íl̪lɛ ‘push (PLUR)’
ɔt̪íl̪lɛ-ttɔ / ɔt̪íl̪lɛ-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:

i̪ʈi̪kɔ ‘tie’
i̪ʈi̪k-arɔ / i̪ʈi̪k-ar-ar-ɔ ‘hug e.o.’

i̪ʈi̪ki̪kkɔ ‘tie (PLUR: several objects or one object tied with several windings)’
i̪ʈi̪ki̪kk-arɔ / i̪ʈi̪ki̪kk-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-t̪ɔ-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-ɔ́nó**	**ŋəʈɪ**	**ŋ-ɔppɔt**
river	C-be:COMPL	C-have	water	C-many

ɪ-a.nɛ́k-arɔ	**tíat̪-t̪ɪak**
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 **ṯapəɽɛṯṯă** ‘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 **ṯapəɽɛṯṯă** involves no reciprocity: one group beats, the other group (those being initiated) get beaten.

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

ana	**ɪ-a.kkwé-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.

ɔṯáttɔ (**tít**) ‘fight’ **ɔṯáttarɔ tít**, **ɔṯáttararɔ 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):

i̧n-ṯ-ɔcʊrɔ́ṯɛ ‘we (EXCL) met (e.o.)’
i̧n-ṯ-ɔcʊrɔ́ṯɛ ɪ-kəllân ‘we (EXCL) met with the old woman’
i̧n-ṯ-ɔcʊrɔ́ṯé 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.

i̱n-t̪-ɔcʊrárɔt̪ɛ	‘we (EXCL) met each other’
i̱n-t̪-ɔcʊrárɔ́t̪é 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-ɔcʊrɔ́t̪ɛ ɪ-kəllân	‘I met the old woman’
***m-p-ɔcʊrɔ́t̪ɛ**	
m-p-ɔcʊrárɔt̪ɛ ɪ-kəllân	‘I and the old woman met e.o.’
***m-p-ɔcʊrárɔt̪ɛ**	

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)nt̪ɛt**. 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-i̱nɛ** '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-ɪn̪ʈɛt** 'catch for sb.'
+ Causative **ɪɛ:**
ɔccɔ́k-ɪn̪ʈɛt 'catch for sb.' **ɔccɔ́k-ɪɛ-n̪ʈɛt** 'make catch for sb.'

Final **t** + Reciprocal (**a**)**rɔ** + Benefactive (ɪ)**nɛ:**
ɔccɨ́kɔt 'hear, listen' **ɔccɨ́k-ar-ən̪ʈɛt** '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:**
ɔcɛ́ʈ-ɛ 'make stand, make wait' **ɔcɛ́ʈ-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-íɛ-t 'make do, make make' **ɔkk-íɛ-tta-t** 'be made to do, be made to make'

Causative **ɪɛ** + Passive (V)**tta** or (**a**)**kɔ:**
ɛn̪ʈɪa, ɪn̪ʈɪa 'become cool' **ɛn̪ʈɪɛtta**, **ɛn̪ʈɪɛkɔ**, **ɪn̪ʈɪɛtta**, **ɪn̪ʈɪɛkɔ** 'be made cool, be blessed

A sentential example of 'build' with Causative, Passive and Benefactive suffix follows here:

m-p-ɔká.t	**cık**	**a-n-ún-ıɛ-tta-nɛ**	**ţ̪ɔ́mɔccɔ**	**măn**
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.,

apəɣılakɔ 'hang (subject is human or animal, from the hands)' /
apəɣılak-ıɛ 'make hang (a human or animal, from the hands)'

A Passive suffix can also be attached:
apəɣılak-ıɛ-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 **ıɛ**, and the Causative suffix **ıɛ** can precede the Reciprocal suffix (V)**ttɔ** (REC2). First an example of REC1 (**a**)**rɔ** followed by the Causative suffix:

ɔ-kʊkkʊ́	**p-á.ŋw-ár-ıɛ**	**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-kʊkkʊ́	**p-á.ŋw-íɛ-ttɔ**
PERS-Kʊkkʊ	C-kill.PLUR-CAUS2-REC2:INCOMPL

Kʊkkʊ will make us kill e.o.

ɔ-kʊkkʊ́	**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 **ɔŋwô** '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-kʊkkʊ́	**p-á.ŋw-ár-ɪɛ-ttɔ**	**ôl**
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' **ɔkkwô**t:

cʊpʊ́	**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)