Chapter 15
Relative clauses

15.1 Introduction

Relative clauses in Tukang Besi may be divided into two structurally distinct types. In the first of these constructions the relative clause follows the head noun, and this is called the external relative clause. The second structural type shows the head noun as part of the relative clause and the whole relative construction, here termed an internal relative clause, serves as an argument in the matrix clause.

The relativised argument of most relative clauses must be a core argument of the verb in the relative clause. In order to make a relative clause about a non-core argument of its verb, applicative morphology must first be used in order for that argument to appear as a core one. The only exception to this involves the instrumental relative clause.

There are three major types of the external relative clause, divided on morphological and functional grounds:

- The subject relative clause is used to relativise an argument that is an [S] or [A] in the relative clause, and involves the use of the subject infix -\(\text{um}\) and the dropping of subject prefixes on the verb. This is called the subject relative clause verb form (SRC verb form).

- The object relative clause is used to relativise on an argument in [O] function, and involves the object prefix \(i\) in place of subject prefixing. This is the object relative clause verb form (ORC verb form). The relative clause takes on a nominal character, and the by-phrase is indicated by the use of possessive marking (chapter 13).

- The ‘instrument’ relative clause is used to relativise on an argument that is core (but is not necessarily [A], [S] or [O]), or oblique. The verb is not affixed in any special way, and only the lack of subject prefixes serves to indicate the subordinate nature of the verb. This construction is most frequently encountered to relativise the instrument of the matrix clause, and so is termed the instrumental relative clause. This construction may also be used to relativise the base object of (at least some) applicative constructions (data on this are extremely limited).

The internal relative clause has the (necessarily nominative) head inside the relative clause, and the whole relative construction serves as the nominative [S] or [O] argument in both the matrix clause and the relative clause. This restriction means that the object of a transitive verb must be indexed by object suffixes on the verb, if it is to appear as the head
of this construction, and that the subject of a transitive verb cannot appear in an internal relative clause.

Examples of each of these four relative clause types are given in (1) - (4):

Subject relative clause:

(1) *Eaka no-koruo [na mia [b'umalu te pandola]RC]KP.*

Not 3R-many NOM person buy.SI CORE eggplant

‘Not many people buy eggplants.’

(Lit., ‘The people who buy eggplants are not many.’)

Instrument relative clause:

(2) *No-moboha [na palu-su [hoko-lobu te poda]RC]KP.*

3R-heavy NOM hammer-1SG.POSS FACT-straight CORE knife

‘My finishing hammer for knives is heavy.’

(Lit., ‘The hammer that is used to make knives straight is heavy.’)

Object relative clause:

(3) *O-koruo [na kengke [i-hembula di Wanse]RC]KP.*

3R-many NOM cloves OP-plant OBL Wanci

‘There are a lot of cloves grown on Wanci.’

(Lit., ‘The cloves that are grown in Wanci are many.’)

Internal relative clause:

(4) *No-wila-mo [[ku-'ita-'e na mia]RC]KP.*

3R-go-PF 1SG-see-3OBJ NOM person

‘The person I saw has left.’

(Lit., ‘[I saw the person] has gone.’)

The structure of the three post-head types of relative clauses and the internal relative clause can be summarised in the structural models in figure 8:

Subject: ART HEAD [ Verb + {-um} ]RC

Instrumental: ART HEAD [ Verb (ART CORE OBJECT) ]RC

Object: ART HEAD [ i- + Verb (GEN CORE NOMINAL) ]RC

Internal: Ø [ SUBJ-Verb(-OBJ) (ARTNOM NOMINAL) ]RC

Figure 8. Structural models of the relative clauses

A non-verbal phrase that modifies a head noun also fills the same position and restrictions as does a relative clause. This is discussed briefly following the discussion of the four verbal relative clause types. Preceding this is a discussion of the structural features common to all types of relative clauses.

15.2 Aspect and polarity in relative clauses

Aspect and modality are marked at the beginning of a relative clause, immediately before the verb (but following the head that is modified), just as various aspectual auxiliaries can occur immediately preceding the verb in the verb phrase of a main clause. Aspect may be specified by the use of *ba'i ‘previously’, *monda ‘already’, *ako ‘future’, and *mina ‘ever’
or po’oli ‘already’, as seen in (5) - (12):

Different types of aspectual modifiers:

(5)  
Te mia [ba’i w[um]ila ae]$_{RC}$ no-rato-mo.  
CORE person PREV go.SI foot 3R-arrive-PF  
‘The person who was earlier walking has already arrived.’ (T1:25)

(6)  
Te mia [monda w[um]ila ae]$_{RC}$ no-rato-mo.  
CORE person already go.SI foot 3R-arrive-PF  
‘The person who was earlier walking has already arrived.’

(7)  
Te mia [ako w[um]ila ae kua Waelungo]$_{RC}$ no-like-mo.  
CORE person PURP go.SI foot ALL Waelungo 3R-awake-PF  
‘The person who is going to walk to Waelungo is awake.’ (T1:25)

(8)  
Te kene-su [mina-mo k[um]arajaa i Singapura]$_{RC}$...  
CORE friend-1SG.POSS ever-PF work.SI OBL Singapore  
‘My friend who’s worked in Singapore...’

(9)  
Te kalambe [(m)o’oli w[um]ila i Baubau iso]$_{RC}$ no-mandawulu.  
CORE girl finish.SI go.SI OBL Baubau yon 3R-beautiful  
‘That girl who’s been to Baubau (is beautiful).’

Aspect marked on different relative clause types:

Object relative clause:

(10)  
Te sengasenga [la’a-mo i-hole]$_{RC}$ atu o-saori-mohana.  
CORE fried.food just-PF OP-fry that 3R-very-chilli.hot  
‘The senga-senga which was just fried is very hot.’

Instrumental relative clause:

(11)  
No-tokabi-mo na palu [la’a-mo pake]$_{RC}$.  
3R-lost-PF NOM hammer just-PF use  
‘The hammer which was just used is lost.’

Internal relative clause:

(12)  
No-tokabi-mo [la’a-mo ku-pake’e na palu]$_{RC}$.  
3R-lost-PF just-PF 1SG-use-3OBJ NOM hammer  
‘The hammer which I just used is lost.’

Negation is expressed with the predicate negator mbeaka:

(13)  
Te mia [mbeaka l[um]emba te pai-paira]$_{RC}$ no-menti’i.  
CORE person not carry.SI CORE RED-what 3R-fast  
‘The person who isn’t carrying anything at all is pretty fast.’
Chapter 15

(14) *Te emai [mb ea-do ku-po-'awa-ngkene'-e na mia]RC?
   CORE who not-EMPH ISG-REC-get-COM-3OBJ NOM person
   ‘Who is that person who I haven’t met yet?’

The existential negator *mb ea’e* is treated as a verb if it is used in a relative clause to express the absence of something. It may appear in either a subject relative clause or an instrument relative clause (see section 15.6):

(15) *Kab i-e na tasi-tasi pulástii mb[um]ea'-e-m(o)
   discard-3OBJ NOM RED-bag plastic not.exist.SI-PF
   (n)a ne’i-no.
   NOM contents-3POSS (G:58)
   ‘Throw out the empty plastic bags.’

15.3 Multiple relative clauses

More than one relative clause may modify a single head noun. These relative clauses may be, but do not have to be, of the same type. Sentence (16) shows two subject relative clauses modifying the one head, and (17) is an example of one subject relative clause and one object relative clause on the one head:

   CORE child run.SI hold.SI CORE wood yon
   ane-ho o-saori morunga.
   exist-yet 3R-very young
   ‘The child who’s running, holding the stick, is still very young.’

(17) *Te mia [di-’ita-su]RC [’um]aso te kaubarasa
   CORE person OP-see-1SG.POSS sell.SI CORE custard.apple
   di aba’i-ba’i]RC no-pake te wurai mokuri.
   OBL RED-prior 3R-wear CORE sarong yellow
   ‘The person who I saw selling little custard apples a moment ago was wearing a yellow sarong.’ (G:11)

Occasionally (and unsurprisingly) a serial verb construction is found in the one relative clause:

(18) *Te i-manga [i-saori i-poilu-su]RC iso te kaitela.
   CORE OP-eat OP-extreme OP-like-1SG.POSS yon CORE corn
   ‘The food that I most like is corn.’

(19) *Te mia [b[um]asa-wila-wila te boku]RC iso
   CORE person read.SI-RED-go CORE book yon
   no-koni torusu.
   3R-tooth continue
   ‘That person who’s reading the book whilst walking along is smiling all the time.’

In (18), *isaori* cannot be a relative clause on its own, as *saori* can only take objects when serialised with other verbs, so it must be in the same relative clause as *ipoilusu*. In (19),
the fact that only one subordinating affix (-[um]-) is present on the serial verb construction is indicative of their being in one clause together.

The sentences in (16) - (17) presented two relative clauses unambiguously modifying one head noun. Ambiguities arise if there are nominal arguments (in either KPs or DPs) present in the first relative clause without demonstratives at the end of the NP, in that there are now two options for the scope of the second relative clause. In (20), there are two possible readings, whose structures are shown in (20)' and (20)":

(20)  
No-lagu-mo na La Judi [um]ala te loka  
3R-song-PF NOM La Judi buy.SI CORE banana  
là’a-mo b[um]uti.  
just-PF fall.SI  
‘La Judi, who is carrying some bananas and has just fallen over, is singing.’  
‘La Judi, who is carrying some bananas that have just fallen down, is singing.’

(20)'  

(20)"  

The ambiguity is resolved if there is a demonstrative following the nominal in the relative clause, since a relative clause must precede a demonstrative in an NP, and so the second of the two relative clauses cannot be taken to refer to the NP in the relative clause:

(21)'  

(21)"  

Another strategy that is used to help resolve ambiguity is the use of the second relative clause in an appositional phrase (see chapter 12), in which case both relative clauses are more likely to be taken to refer to the same head:

(22)  
Ku-po-‘awa-ngkene-‘e na [La Judi [um]ala te loka]RC ]NP  
1SG-REC-get-COM-3OBJ NOM La Judi buy.SI CORE banana  
[na Ø [la’a-mo b[um]uti]RC ]NP  
NOM just-PF fall.SI  
‘I just bumped into La Judi, who was fetching some bananas, who had just fallen down.’  
# ‘I just bumped into La Judi, who was fetching some bananas, which had just fallen down.’

The same problems with ambiguity are found with other relative clause types used on the same head noun as well. One example is presented in (23) with object relative clauses:

(23)  
Di ‘umpa na kalambensala mandawulu i-po-ilu  
OBL where NOM young girl beautiful OP-REC-lust  
nu ikaka-su i-kahu-no nu raporapo?  
GEN elder.sibling-1SG.POSS OP-send-3POSS GEN peanut  
‘Where’s that girl who my bother is in love with and has sent peanuts to?’  
‘Where’s that girl who my brother who was sent peanuts to is in love with?’
Again, these ambiguities can be resolved by using demonstratives at the end of the NPs in the relative clause, or by using an appositional phrase strategy:


Furthermore, despite the apparent ambiguity of sentences involving two relative clauses modifying the same head, intonational cues are usually adequate for differentiating them.

An example of one internally headed relative clause and one externally headed one modifying the same noun is also possible, provided that the head of the external relative clause is also nominative.

(25) No-mombaka mondo-mo no-manga-'e na kaujawa 3R-delicious already-PF 3R-eat-3OBJ NOM cassava
[t[um]-hembula di koranga di Waginopo]RC iso.
PASS.SI-plant OBL garden OBL Waginopo yon
‘The cassava which they ate, which (came) from the garden in Waginopo, was delicious.’

I have had no success in my attempts at eliciting two internally headed relative clauses with the same head; even constructing the sentence proved to be hard, and having it accepted as grammatical was impossible ((attempts were with sentences like * No-pamuru (')u-'it-'e-mo no-wila na mia 3R-angry 2SG.R-see-3OBJ-PF 3R-go NOM person ‘The person who you saw, who left, is angry.’)).

15.4 Subject relative clause

A Subject relative clause (SRC) is used to relativise an argument in [S] or [A] (ie., subject) function in the relative clause. The SRC verb form has the verb of the relative construction infixed with -[um]- (see also chapter 7.3 for other uses of this morpheme), and any arguments other than the relativised subject are marked just as they would be in a normal clause, either nominatively or non-nominatively:

(26) No-lagu-mo na La Judi [b[um]-alu te loka 3R-song-PF NOM La Judi buy.SI CORE banana
ako te ina-no]RC.
for CORE mother-3POSS
‘La Judi, who bought some bananas for his mother, is singing.’
Relative clauses

(27)  O-koruo na mia [w[um]i]la kua Lia]RC
  3R-many NOM person go.SI ALL Lia
  i rearea ai.
  OBL morning ANA
  ‘There were a lot of people who left for Lia this morning.’

Sentences (26) and (27) show examples of both an [A] (example (26)) and an [S] (example (27)) serving as the relativised constituent in the relative clause. Notice that in (26) the object of balu, te loka, is marked by the non-nominative article, as would be expected in a clause headed by a verb without object suffixes.

If the transitive verb does have object suffixes, then the (non-relativised) object appears with the nominative article:

(28)  Te ama [mbeaka '/um]ita-'e na kodipo]RC
  CORE father not see.SI-3OBJ NOM shark
  no-motuturu-mo.
  3R-sleep.RED-PF
  ‘That man who didn’t see the shark was feeling sleepy.’

This strategy cannot be used to relativise the [O] of a transitive clause:

(29)  * Te kodipo mbeaka '/um]ita-'e te ama.
  CORE shark not see.SI-3OBJ CORE father
  ‘The shark which the man didn’t see.’

See 15.6 for details on how this [O] argument may be relativised.

The head noun can bear different grammatical relations in the matrix clause and in the relative clause. Note that use of the object suffixes in a subject relative clause specifies the event as being completed in much the same way that -mo in a matrix clause marks the perfective aspect:

(30)  Ku-sepa-'e na mia t[um]opa te La Udi]RC.
  1SG-kick-3OBJ NOM person slap.SI CORE La Udi
  ‘I kicked the person who was slapping Udi.’
  * ‘I kicked the person who had slapped Udi.’ (T1:55)

(31)  Ku-sepa-'e na mia t[um]opa-'e na La Udi]RC.
  1SG-kick-3OBJ NOM person slap.SI-3OBJ NOM La Udi
  ‘I kicked the person who had been slapping Udi.’ (T1:55)

Notice that the relative clause, apart from the verb and the relative clause head, is identical to the matrix clause from which it was derived: the noun phrases retain their articles as they were, and only the presence of the infix and lack of subject prefixes on the verb distinguishes it from a matrix clause verb. The head of the relative construction is not formally present in the relative clause, but its role may be deduced from the type of affixing on the verb, the use of the -[um]- infix indicating that the head of the construction is in an [S] or [A] role in the relative clause.

The selection procedure for determining if an argument is eligible to be the head of a subject relative clause is the following:
That is, the highest ranked argument in a predicate is eligible to appear in this clause type; no other argument may. With a complex predicate, it is the outermost layer that is consulted to determine eligibility. This is illustrated with a causative argument structure:

\[
\text{(33) } \text{‘CAUS } \langle [\ ], [\ ] \rangle \text{ PRED } \langle [\ ], [\ ] \rangle \text{’}
\]

A pair of sentences illustrating this structure and its consequences for grammaticality are (33a)' and (33b)'. The first of these has the causer as head of the SRC, and is grammatical. In (33b)', however, the head of the SRC is the causand, and so is ungrammatical:

\[
\text{(33)’ a. Te mia p[um]a-lemba te La Adi te wemba koro u atu, karama-no sa-hu’u-mo mbeak(a) o-ala’e i.}
\]

\text{‘The person who made La Adi carry all that bamboo, he didn’t carry even one piece himself, you know.’}

\[
\text{(33)’ b. * Te La Adi p[um]a-lemba te wemba …}
\]

\text{‘La Adi, who was made to carry all that bamboo, …’}

\text{(Good with the reading: ‘La Adi, who made (someone) carry all that bamboo …’)}

The intended reading can be produced with an Object Relative Clause (see 15.6): \text{Te La Adi ipalemba (nu mia iso) nu wemba koro u atu …}

15.4.1 Passive relative clauses

An object may be present as the head of a relative clause by means of the [O] in the relative clause being derived as an [S] status through the use of a passive construction, after which it can be made the head of a subject relative clause. In this case, however, the actor of the verb cannot be mentioned, as is the general case with (non-Instrumental) verbs derived by means of a passive prefix:

\[
\text{(34) } \text{To-’ita-e-mo na kodipo.}
\]

\text{1PL.R-see-3OBJ-PF NOM shark ‘We saw the shark.’}

\[
\text{(35) } \text{No-to-’ita-mo na kodipo.}
\]

\text{3R-PASS-see-PF NOM shark ‘The shark was visible.’}
The passive relative clause functions just as does a normal subject relative clause, except that applicative verbs may not enter into the construction (see chapter 10). Note that the passive relative clause is different from the object relative clause in that there can be no mention of the by-phrase in a passive relative clause:

(37) *Te kodipo [tumo-ita (-su / te iaku)]RC no-to'oge.
   CORE shark PASS.SI-see 1SG.POSS CORE 1SG 3R-big
   ‘The shark that was seen by me was big.’

The ability of different arguments to be genitively indexed on the verb of an object relative clause is discussed in section 15.6.

15.4.2 Archaic case marking

In archaic speech the case marking of the non-head nominals in a subject relative clause does not mirror their marking in matrix clauses. Instead of using the nominative or non-nominative core articles na and te, the genitive article is used to index any nominals to the verb:

(38) Toka te ia tabeda no-wila i 'olota 'ura-ura-a but CORE 3SG must 3R-go OBL wilderness RED-live-NL 
    nu nggoalu [/m]anga nu mia [/w]um ila GEN k.o.ghost eat.SI GEN person go.SI
    i limbo hele)RC ]RC.
    OBL village (arch.) other
    However he had to go into the wilderness that was the dwelling place of the Nggoalu who ate people who travelled between villages.'

(39) Te mia meana'e ai te mia [/m]ande 
    CORE person REF-this ANA CORE person frequently.SI
    hoko-mate nu mia)RC, entaeda bisa no-salama-mo
    FACT-die GEN person because even.though 3R-safe-PF
    mina di mawi toka mbeaka no-hada-'ita'e na-['um]ido
    from OBL sea but not 3R-want-see.OBJ 3I-live.SI
    te Mo'ori [/m]ande-timbangi,
    CORE god frequently.SI-bless
    'This person must surely be a murderer, because even though he has arrived safely from the sea, merciful God does not want to see him live.'

The second of these examples was produced by a 25-year old informant in 1993, whilst translating, and deliberately attempting a very formal and old-fashioned style. This indicates that, even if the use of genitives to index the non-head arguments of a subject relative clause is no longer common, it is a very recent change that has seen this usage abandoned.
15.5 Instrumental relative clause

An instrument may be relativised, without the use of any special morphology on the verb (in most cases it is also possible to relativise these arguments with using the \([-\text{um}\]- infix found in subject relative clauses (section 15.4) or the \(-\text{i}\)- prefix (discussed in 15.6) on the verb.). The internal structure of the relative clause is almost the same as a subject relative clause, with a partially complete clause left behind. In the case of an instrumental relative clause there can be no mention of a by-phrase, only the patient/theme of the verb being present. Since there is no morphology on the verb that specifies it as subordinate, only the absence of a subject prefix on the verb indicates that the verb is introducing a relative clause. Examples of the derivation of this relative clause type from a matrix clause can be seen in (40) - (41):

Matrix clause:

(40) *Ku-bongko te hao te osimpu.
   1SG-tie CORE rope CORE young.coconut
   ‘I tied the young coconuts (together) with a piece of rope.’

Relative clause:

(41) Te iso te hao [bongko te osimpu]\textsubscript{RC}.
   CORE yon CORE rope tie CORE young.coconut
   ‘That there is the rope that (I used / was used to) tie the young coconuts.’

Unlike the object relative clause, the by-phrase may not be expressed in the relative clause:

(42) Te baliu-su [tu’o te kau]\textsubscript{RC} no-mohama.
   CORE axe-1SG.POSS chop CORE tree 3R-sharp
   ‘My axe that (I) chop trees with is sharp.’

(43) *Te baliu-su [tu’o te kau (na / nu) iaku]\textsubscript{RC}.
   CORE axe-1SG.POSS chop CORE tree NOM GEN 1SG
   ‘My axe that (I) chop trees with is sharp.’

This morphologically unmarked relative clause type is distinguished from an adjective only by its position in the noun phrase, appearing consistently after possessive suffixing, whereas the adjective appears before the possessive:

(44) Te baliu-su [tu’o]\textsubscript{RC}…
   CORE axe-1SG.POSS chop
   ‘My axe that (I) chopped with’

(45) *Te baliu [tu’o]\textsubscript{RC-su}…
   CORE axe chop-1SG.POSS

(46) Te baliu to’oge-su…
   CORE axe big-1SG.POSS
   ‘My big axe’

(47) *Te baliu-su [to’oge]\textsubscript{RC}…
   CORE axe-1SG.POSS big
This sentence is acceptable if to'oge is treated as a verb, and marked as such:

(47)’ Te baliu-su [um]o'oge.
    CORE axe-1SG.POSS big.SI

The fact that this relative clause type is available to any argument in instrumental semantic role, and is not limited to a particular syntactic role, means that the object of the verb pake ‘use’ may appear in an instrumental relative clause, as a result of its semantic role as the instrument of the matrix clause, or in an object relative clause, as a result of its syntactic role as the object in the matrix clause. In an instrumental relative clause, however, the agent of the sentence may not be mentioned:

(48) Te ndamu [pake]RC iso…
    CORE axe use yon
    ‘The axe that was used…’

(49) Te ndamu [i-pake(-no)]RC iso…
    CORE axe OP-use(-3POSS) yon
    ‘The axe that was used (by them)…’

All the examples so far have been of non-subject instruments appearing as the heads of instrumental relative clauses. It is also possible for an instrumental subject to head an instrumental relative clause, as well as a subject relative clause:

(50) [Te wande [raho-kami i aba]RC]KP
    CORE rain affect-IPA.OBJ OBL previous
    mbea-ho ako-m(o) te [m]eransa.
    not-yet PURP-PF CORE die.down.SI
    ‘The rain that soaked us just then doesn’t look like dying down in a hurry.’

(51) [Te wande [rum]aho-kami i aba]RC]KP
    CORE rain affect.SI-IPA.OBJ OBL previous
    mbea-ho ako-m(o) te [m]eransa.
    not-yet PURP-PF CORE die.down.SI
    ‘The rain that soaked us just then doesn’t look like dying down in a hurry.’

From this we must conclude that the conditions on the ability to appear as the head of an instrumental relative clause are dependent directly on the representation of the argument in the subcategorisation frame, and not on the syntactic roles [A], [S] and [O]. The argument structure representation of the conditions on access to heading an IRC are as follows:

(52) ⟨…[Instr]…
    IRC

That is, the argument must be an instrument, but its relative prominence in the argument
structure is irrelevant for the purposes of access to this construction.

This pattern of having two relative clause options is also found for existential clauses: *ane* and *mbea'e* may be used in instrumental relative clauses or subject relative clauses without a change in meaning. Compare the following sentences:

(53) **Ku-hugu** [te saioro]
1SG-slice CORE vegetables

[i [pangka [ane ke komporo dua-ba'e[RC [NP [RC ]KP]
OBL kitchen be and gas.cooker 2-CLASS (T1:54)
‘I’ll be chopping the vegetables in the kitchen with two gas cookers.’

(54) ... *ba'a-no-mo te anabou*

[na [um]ane RC KP.
focus-3POSS-PF CORE small.child NOM exist.SI
‘...there are only children there.’
(Literally ‘There it is only children that are.’) (G:61)

(55) **Te Pulo Hoga iso**
TOP Pulo Hoga yon

[e pulo [mbea'e na kampo-no]RC ]KP
CORE island not.exist NOM village-3POSS
‘Pulau Hoga is an island without any villages.’

(56) **Kabi-'e** [na tasi-tasi pulástii [mb[um]ea-'e-m(o)
 discard-3OBJ NOM RED-bag plastic not.exist.SI-PF
(n)a ne'i-no]RC]KP
NOM contents-3POSS (G:58)
‘Throw out the empty plastic bags.’

There appears to be no difference between the forms that use a subject relative clause and those that use an instrumental relative clause. Further discussion on problems associated with the grammatical status of existential clauses is presented in chapter 20.

As has been mentioned, the only requirement for eligibility to be head of an instrumental relative clause is that the argument must be an instrument. An instrument in a lower predicate may not head an instrumental relative clause:

(57) ‘CAUS ⟨[ ], [ ] PRED ⟨[ ], [Instr]⟩⟩’

* InsirRC

The instrumental relative clause type has also been observed, once, on an applicativised verb, *hembulati'e*, as seen in (58):

(58) **Te koranga-su i Katapi, [te [hembula-ti-'e]]RC ]KP**
TOP garden-1SG.POSS OBL Katapi CORE plant-DIR-3OBJ

*te jambu, lima-ta'o-mo no-ba'e.*
CORE jambu 5-year-PF 3R-fruit (Kor: 7)
‘My garden in Katapi, it’s planted with jambus, and I’ve been getting a crop for the last five years now.’

This calls for further investigation. The argument structure representation of (68) is as shown in (58):
Relative clauses

It is interesting to note that when the two predicates are collapsed, the argument that may appear in an instrumental relative clause is in the same position that an instrument would occupy in a single predicate, between the highest and lowest ranked arguments:

\[(58)' \text{APPL} \langle [\text{Ag}], [\text{Loc}] \text{ PRED} \langle [\text{Ag}], [\text{Thm}] \rangle \rangle \]

It is not clear whether this is a productive use of the instrumental relative clause type or not; only this one example has been recorded.

15.6 Object relative clauses

The object relative clause is marked by the use of \(i\)- (idiolectally and dialectally \(di\)-, \(ni\)) prefixed to the verb. All core arguments in an object relative clause are optional, and, if present, are indicated by possessive suffixes or genitive phrases attached to the verb. The first of these genitive phrases usually refers to the \(by\)-phrase, but in combination with an applicative suffix or a ditransitive verb this first possessive suffix position can mark another argument of the verb:

Possessive marking \(by\)-phrase:

\[(59) \text{Te ia te mia } [i-\text{ita-su}]_{\text{RC}}. \]

CORE 3SG CORE person OP-see-1SG.POSS  ‘S/he is the person who I am looking at.’

\[(60) \text{Te } [i-\text{aso-no}]_{\text{RC}} \text{ te pandola.} \]

CORE OP-sell-3POSS CORE eggplant  ‘Eggplant is what she sells.’

Possessive marking the second object or \(by\)-phrase on a ditransitive verb:

\[(61) \text{Te baju } [i-\text{hu'u-no}]_{\text{RC}} \text{ o-saori-leama.} \]

CORE shirt OP-give-3POSS 3R-very-good  ‘The shirt given to him is very beautiful.’ OR  ‘The shirt that he gave is very beautiful.’

Possessive marking the second object or \(by\)-phrase on an applied verb:

\[(62) \text{Te po'o } [i-\text{balu-ako-su (u) ina-no}]_{\text{RC}}. \]

CORE mango OP-buy-APPL-1SG.POSS GEN mother-3POSS  ‘The mango that was bought for me by his mother…’ OR  ‘The mango that was bought for his mother by me …’

(See chapter 10 for a detailed account of the restrictions involved with relative clauses built on applicative constructions)
Whilst somewhat clumsy, this label is an accurate description, in the English sense of an object-oriented (ie., passive) sentence describing the role of the argument in question. Note that in Tukang Besi there is no main clause equivalent of the ORC, and so no tests for determining the core or oblique status of these by-phrases, though the fact that they are genitively linked to the verb rather than present prepositionally is indicative of core status. Compare the marking of ‘him’ in (61) with its oblique status in the following sentence:

(61)’ Te sintere i-kahu i ia o-saori-leama.
    CORE torch OP-send OBL 3SG 3R-very-good
    ‘The torch that was sent to him is very good.’

With many object relative clauses containing a verb with applicative morphology, there are complications in the possibilities available for the reference of the possessive marking. This is covered in Chapter 10:

The verb in an object relative clause may not be further marked with either the -[um]-infix or object suffixes, even if ditransitive:

(63) O-koruo na mia [i-hu'u]RC.
    3R-many NOM person OP-give
    ‘There are lots of people who were given something.’
    (Literally ‘Many are the people that were given (to).’)

(64) * O-koruo na mia [i-hu'u-ke]RC.
    3R-many NOM person OP-give-3OBJ
    ‘There are lots of people who were given it.’

(65) * O-koruo na mia [i-[m]o'u]RC.
    3R-many NOM person OP-give
    ‘The soap that was given to us.’

Other languages in the area, eg., Pancana, display more typical symmetrical behaviour. Compare (64) with (64)’:

(64)’ O sabo ne-waa-kainta.
    ART soap OP-give-1PL.IN.OBJ2
    ‘The soap that was given to us.’

The object relative clause prefix can only be used with a head noun in [O] function, never with those in an [S] function, even if the noun is semantically a Theme/Patient. If the object prefix does appear on an ambitransitive verb, the verb can only be interpreted as transitive:

(66) * Te kene-su [i-mohoo]RC.
    CORE friend-1SG.Poss OP-sick
    ‘My friend who was sick.’

(67) Te kaluku [i-buti]RC.
    CORE coconut OP-fall
    ‘The coconut that was dropped.’
    * ‘The coconut that fell.’
The argument that may enter into an object relative clause is generally the lowest ranked one in its predicate. This is as follows:

\[(\ldots, [\ 
\]]
\]

\[\text{ORC}\]

That is, the lowest ranked argument in a predicate is eligible to appear in this clause type; no other argument may. A discussion of the exceptions that ditransitive verbs represent is found in chapter 20.14.3.

With a complex predicate, it is the outermost layer that is examined to determine eligibility. This is illustrated with causative and applicative combined predicates:

\[(\text{CAUS} \langle [\ 
\], [\ ] \text{PRED} \langle [\ 
\], [\ ]\rangle\rangle\)
\]

\[\text{ORC}\]

\[(\text{APPL} \langle [\ 
\], [\ ] \text{PRED} \langle [\ 
\], [\ ]\rangle\rangle\)
\]

\[\text{ORC}\]

15.6.1 Object relative clauses and applicative constructions

With applicative constructions, the data for which have already been presented in chapter 10, the applied object may head an object relative clause in which the possessive suffix (or equally the first genitive phrase, for a nominal; I shall include this under the term ‘possessive suffix’ here for the sake of brevity. It may (depending on the semantic role of the applied object) indicate an argument other than the by-phrase, the normal reference of these affixes in relative clauses. The arguments that may be indexed by possessive suffixes for applied object heads of relative clauses (with theme/patient base objects) are shown in table 28:

<table>
<thead>
<tr>
<th>Semantic role of APPLIED object:</th>
<th>Reference of possessive suffixes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Agent]</td>
<td>by-phrase</td>
</tr>
<tr>
<td>[Dative], [Instrument]</td>
<td>by-phrase</td>
</tr>
<tr>
<td>[Theme]</td>
<td>by-phrase, [Dative]</td>
</tr>
<tr>
<td>[Locative]</td>
<td>by-phrase, [Theme]</td>
</tr>
</tbody>
</table>

Some examples of this are presented here again in (71) and (72), showing how the possessive suffix with the base object heading an object relative clause can indicate either the by-phrase (in both cases), or the base object, the dative argument in (71), or the theme argument in (72):
In addition to this quirky marking of arguments other than the by-phrase on the relative clause verb, in many cases the base object of the construction may head an object relative clause. In those cases, the options for the reference of the possessive suffix are determined by the semantic role of the APPLIED object (not the base object), and are as shown in table 29:

<table>
<thead>
<tr>
<th>Semantic role of APPLIED object:</th>
<th>Reference of possessive suffixes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Agent]</td>
<td>n/a</td>
</tr>
<tr>
<td>[Dative], [Instrument]</td>
<td>[Dative], [Instrument]</td>
</tr>
<tr>
<td>[Theme]</td>
<td>n/a</td>
</tr>
<tr>
<td>[Locative]</td>
<td>[Agent]</td>
</tr>
</tbody>
</table>

Examples of base objects in applicative constructions heading object relative clauses are given in (73) and (74):

(73)  *No-mobai na lo'ia i-hugu-ako-no.*
3R-hard NOM ginger OP-chop-DIR-3POSS
‘The ginger that was being chopped with it is hard.’

(74)  *Te po'o i-tompa-api-su u La Mar no-sangka-mo ki'iki'i.*
CORE mango OP-throw-DIR-1SG.POSS GEN La Mark 3R-exceed-PF little
‘The mango that I threw over to Mark is a bit overripe.’

Note that applicative constructions with [Agent] or [Theme] applied objects do not allow the base object to head an object relative clause, whether possessive suffixes are present or not:

(75)  *Te wurai i-homoru-ngkene(-su) no-leama.*
CORE sarong OP-weave-COM-1SG.POSS 3R-good
‘The sarong that was woven (by me) with [someone] is beautiful.’

(76)  *Te mansuana i-ema-ako(-su) no-motuturu.*
CORE elder OP-ask-APPL-1SG.POSS 3R-sleepy
‘The elder that was asked [something] (by me) is sleepy.’

(Good with the interpretation: ‘The elder that was asked about (by me) is
sleepy."

Attempting to explain the asymmetries found in table 28, we note that only [Theme] or [Locative] applied objects allow indexing of an argument other than the by-phrase. In terms of the thematic hierarchy, this is a contiguous group of semantic roles:

agent - dative - instrument - [theme/patient - locative]

Furthermore, the arguments that may be indexed are in both cases the arguments that are higher on the thematic hierarchy. In terms of the individual argument structures, the possibilities of possessive indexing may be modelled as in (77) and (78). In these and subsequent diagrams modelling the behaviour of relative clauses the arrows indicate the possible reference of the possessive suffix:

(77) 〈[Agent], [Dative], [Theme]APPL〉

(78) 〈[Agent], [Theme], [Location]APPL〉

An applicative object in [Dative] or [Instrumental] role is placed higher on the thematic hierarchy than the base object, which is a [Theme/Patient] (in most cases; see examples (81) - (85)). If we posit a rule stipulating that the possessive suffixing on a verb in a relative clause headed by an applied object may index any subcategorised-for argument bearing a higher semantic role than the applied object itself, we can account for the failure of applied objects bearing these semantic roles to index theme or patient base object. This is modelled in (79):

(79) 〈[Agent], [Dative/Instrument]APPL, [Theme]〉

The data in table 29 concerning the details of object relative clauses headed by the base object of an applicative construction can also be explained by the relative prominence of arguments on the thematic hierarchy. A base object may head an object relative clause of an applicative construction if and only if the applied object is higher than it on the thematic hierarchy, or is locative. The possessive suffixes must index an argument higher on the thematic hierarchy than the base object, but not an agent, unless the applied object is one that could not be a core argument of a simple predicate (i.e., locative). The models for examples (73) and (74) are given as (73)' and (74)'.

...
Chapter 15

The ungrammaticality of a base object heading an object relative clause if it bears a lower-ranked semantic role than the applied object can be explained in terms of the unavailability of a higher non-agent argument. An example of this is given in (80):

(80) 〈[Agent], [Agent]APPL, [Theme]〉

This still leaves the question of the behaviour of base objects in applicative constructions which are in [Dative] or [Instrumental] role, when the applied object is also either [Dative] or [Instrumental]. If we examine a verb which subcategorises for an instrumental object, and then has a dative applicative object added, we find the following patterns of indexing in object relative clauses:

(81) Ku-pake-ako te ina-su te kabali
1SG-use-APPL CORE mother-1SG.POSS CORE machete
(i koho-'(a) u balangkuni).
OBL chop-NL GEN k.o.fish
‘I used a machete for my mother (to chop up the balangkuni).’

Applied object head of object relative clause:

(82) Te ina-no i-pake-ako-su nu kabali...
CORE mother-3POSS OP-use-APPL-1SG.POSS GEN machete
‘My mother who it was used for by me…’

(83) * Te ina-no i-pake-ako-no nu iaku...
CORE mother-3POSS OP-use-APPL-3POSS GEN 1SG

Base object head of object relative clause:

(84) * Te kabali i-pake-ako-su...
CORE machete OP-use-APPL-1SG.POSS
‘The machete that was used for (someone) by me…’

(85) Te kabali i-pake-ako-no...
CORE machete OP-use-APPL-3POSS
‘The machete that was used for her…’

Sentences (81) - (85) establish that [Dative] must be ranked higher than [Instrument] on the thematic hierarchy (an assertion argued for by Bresnan and Kanerva (1989), but for which
they did not provide any supporting evidence). The ungrammaticality of (83) is due to the fact that the dative applied object cannot index a lower-ranked instrumental base object, modelled in (83)'. Sentence (85) owes its grammaticality to the fact that the dative base object is higher on the thematic hierarchy than the instrumental base object, seen in (85)'.

\[(83)\] * \([\text{[Agent]}, \text{[Dative]}_{\text{APPL}}, \text{[Instrument]}]\)  
\[(85)\] \([\text{[Agent]}, \text{[Dative]}_{\text{APPL}}, \text{[Instrument]}]\)

In summary, we can say that a base object may head an applicative relative clause if there is an argument other than the [Agent] which bears a higher-ranked semantic role. The possessive suffixes on the verb of the object relative clause headed by the applied object may index either the agent or an argument bearing a higher semantic role than the applied object.

15.7 Internal relative clauses

In this type of relative clause, the relative clause contains the noun that it modifies, and does not use any special morphology to indicate the subordinate nature of the verb. The main restriction placed on the relative clause is that the head noun must be nominatively marked. The matrix clause must also be constructed to allow the relative construction to occur in an KP position that can be nominatively marked. In the following examples, the marked Predicate-Head order in an equative clause provides that prerequisite:

\[(86)\] \(\text{Te } \text{wowine } [\text{ku-} \text{ita-} \text{e } \text{na } \text{mia}]_{\text{RC}}.\)  
\(\text{woman } 1SG-\text{see-3OBJ NOM person}\) \(\text{‘The person that I see is a woman.’} \) (WaI:18)

\[(87)\] \(\text{Te } \text{porai-su } [\text{no-makanjara } \text{na } \text{kalambensala}]_{\text{RC}}.\)  
\(\text{fiancee-1SG.POSS 3R-‘disco’ dance NOM young girl}\) \(\text{‘The young woman dancing is my fiancee.’}\)

The following two sentences show verbal predicates in the matrix clause:

\[(88)\] \(\text{No-wila-mo } [\text{ku-} \text{ita-} \text{e } \text{na } \text{mia}]_{\text{RC}}.\)  
\(3R-\text{go-PF } 1SG-\text{see-3OBJ NOM person}\) \(\text{‘The person I saw has left.’}\)

\[(89)\] \(\text{Ku-} \text{ita-} \text{e } [\text{no-wila } \text{na } \text{mia}]_{\text{RC}}.\)  
\(1SG-\text{see-3OBJ } 3R-\text{go NOM person}\) \(\text{‘I saw the person who left.’}\)

The interesting constraint associated with this construction emerges when we consider that the following sentences are NOT acceptable:
In sentence (90) the relative construction is in a position to be nominatively marked in the matrix clause, but the sentence is unacceptable because the nominative argument in the relative construction is not an [O], but the [A] of its clause. In (91) the [S] of the relative clause is nominative, but the relative construction is not in a position that could be nominative in the matrix clause, and so is also ungrammatical (the nominative argument of the matrix clause must be the object, which is first person, and so cannot be the third person na mia) The ungrammaticality lies in the syntactic role played by the head noun in the relative clause: in addition to being nominatively marked, the head noun must be in [S] or [O] function, or be the ‘subject’ of an equative clause, in both clauses.

An example using a non-verbal equative clause is given in (92):

We can formulate the conditions necessary for being the head of an internal relative clause as follows:

\[
(93) \langle \ldots [ \text{NOM} ] \rangle
\]

\text{IntlRC}

This states that the argument must be the lowest core argument in the subcategorisation frame for its predicate. In the case of an intransitive predicate, this is the sole argument. In the case of a transitive predicate, this is the argument in [O] syntactic role. Furthermore, the argument needs to be specified as nominative.

15.8 Non-verbal modification: relative phrases

Oblique phrases are often used to modify a head noun, presenting information about its location or destination. Examples have already been seen in chapter 12. The examples below serve to show that regarding aspect marking these relative phrases fulfil the same conditions that relative clauses do.
Relative clauses 387

(94) Kara [te karatu-su [ba'i di ana]RC ]KP?
where CORE card-1SG.POSS previous OBL here
‘Where’re my cards that were here just a moment ago?’

(95) Te ia [te [ako-m(o) te wowine-su]RC ]KP?
CORE 3SG CORE PURP-PF CORE woman-1SG.POSS
‘She’s my fiancee.’
(Lit., ‘She is the (one) who is to be my wife.’)

Since there are no verbs involved in this attributional structure, it cannot be classified in terms of the morphosyntactic criteria that have been used to classify the other attributional structures in this chapter. In no case, however, can the object of an oblique phrase be used as the head of the relative phrase. For example, contrast (94) with (96), which attempts to use the location of the oblique phrase as the head:

(94) * Kara [te meja [ba'i ane ke karatu-su
where CORE table previous exist and card-1SG.POSS
[di wawo (nu (ia))]RC ]RC ]KP?
OBL above GEN 3SG
‘Where’s the table that had my cards on (it) a moment ago?’

In order to express this meaning, the table must first be made the object of a verb, via the use of applicative morphology (see Chapter 10), and then relativised with an ORC:

(95) Kara [te meja [ba'i i-torae-api
where CORE table previous OP-place-DIR
nu karatu-su]RC ]KP?
GEN card-1SG.POSS
‘Where’s the table that (I) placed my cards on a moment ago?’

These grammatical restrictions on accessibility to relative clauses are a strong functional motivation for the many applicative constructions that are employed by the language, creating objects out of otherwise oblique arguments.