# HEADLESS RELATIVE CLAUSES IN PESH <br> Claudine Chamoreau 

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# Headless Relative Clauses in Pesh 

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#### Abstract

The aim of this study is to describe the two main kinds of headless relative clauses that are attested in Pesh, a Chibchan language spoken in Honduras: free relative clauses, which use a $w h$-word that functions as a relative pronoun at their left edge and a subordinator at their right edge, and headless relative clauses, which lack a wh- word but show a case marker or the topic marker at the right edge of the clause. The first type is less frequently attested in the natural corpus this study relies on, although the corpus does contain various instances of maximal, existential, and free-choice free relative clauses. Each of the constructions is distinguished by features of the whword and/or by certain restrictions regarding the tense of the verb in headless relative clauses or the type of verb in matrix clauses. The second type of headless relative clause, the ones that do not use a $w h$-expression, are much more frequent in the corpus and behave like headed relative clauses that lack a $w h$-expression. They are like noun phrases marked by a phrase-final case marker or the topic maker. The case or topic markers are used for light-headed relative clauses and for almost all types of maximal headless relative clause that have neither a light head nor a $w h$-expression, in contrast to maximal free relatives, in which only locative $w h$-words occur.


## 1. Introduction and Basic Features of Pesh

The aim of this chapter is to describe headless relative clauses in Pesh, a Chibchan language spoken in Honduras. Pesh possesses two main types of headless relative constructions. Free relative clauses are one of these two types. They use a $w h$-expression (see §2) that functions as a relative pronoun at their left edge, and a subordinator at their right edge (see §4.1). Pesh exhibits all three main subtypes of free relative clauses that are attested across languages: maximal, existential, and free choice. Each of these is distinguished by features of the wh-expression and/or by certain restrictions regarding the tense of the verb of the free relative clause or the nature of verb in the matrix clause. The other type of headless relative clause lacks a wh-expression and features a case marker or the topic marker at its right edge (see $\S 4.2$ ), analogous to headed relative clauses that lack $w h$-expressions (see $\S 3$ ). This second type encompasses light-headed relative clauses and headless maximal relative clauses without a whexpression.

### 1.1. Background on Pesh distribution

Pesh (Pech, Paya, ISO 639-3: [pay]) is the northernmost of the sixteen living Chibchan languages (Constenla Umaña, 2012; Quesada, 2007), and the only one spoken in Honduras. It is classified as an isolate within the Chibchan family: it is the sole language that does not belong to Core Chibchan (see Figure 1).

Figure 1. Chibchan language family (adapted from Constenla Umaña 2012)


Pesh is endangered: it has roughly 500 speakers, $80 \%$ of whom are over sixty years old. The language is spoken in fourteen villages. Figure 2 shows the area where Pesh is spoken; the stars indicate the eight villages where the data used in this research were collected. There are three dialects in total: the Carbon dialect, spoken in Carbon, La Laguna, and Agua Amarilla; the Las Marias dialect, which is spoken in Las Marias by five speakers; and the Culmi dialect, which is spoken in the remaining ten villages.
There is little information in the literature on Pesh. An overview dating from 1928 contains a list of Pesh words translated into Spanish (Conzemius, 1928). More recently, an incomplete overview of the grammar was published by Holt (1999). The data presented here were collected as part of the Major Documentation Project "A cross-varietal documentation and description of Pesh, a Chibchan language of Honduras," funded by the Hans Rausing Endangered Languages Programme (HRELP). ${ }^{1}$

Figure 2. Pesh speaker location in Honduras

[^0]

### 1.2. Basic Clause Features

Pesh exhibits the main features associated with verb-final languages. The respective roles of the noun phrases preceding the verb are indicated by their position, as shown in (1), where the subject wifãakaki 'the mother of the fishes' precedes the object $\tilde{a}$ arw $\tilde{a}$ 'that man'. Postpositional phrases (PPs) usually appear before the verb and are marked by an enclitic such as the comitative $=y o$ or the locative $=y \tilde{a}$, as shown in (2).
(1) wìjằ àkákì ắ áf ${ }^{\mathrm{h}}$ wố kì:ná ${ }^{2}$

S O V
wifã a-kaki $\tilde{\mathbf{a}}$ arwã Ø-kaP- -i=na
fish POSS3SG-mother DEM.DIST man OBJ3SG-make-SBJ3SG-PST=REP ${ }^{3}$
'The mother of the fishes did it to that man, they said.' $\{\text { txt }\}^{4}$
(2) tàḩắ tàrkìyó ás kàpáfkốĩ́wî́
$\begin{array}{llll}\text { LOC } & \text { COM } & & \text { V } \\ \text { taha=yã } & \text { ta-arki=yo } & \text { as } & \text { kapaf-k-a-i=wĩ }\end{array}$
path=LOC POSS1-man's_brother=COM/INS one speak-K-SBJ1SG-PST=long_ago
'Long ago, I spoke with one of my brothers on the path.' \{txt \}
Pesh features a split alignment that is conditioned by the way the arguments are expressed. It has a nominative-accusative alignment for indexing argument-verb agreement affixes, and a differential ergative-absolutive alignment for flagging free NP arguments. Pesh is a double marking language: it can simultaneously index and flag the same participant. ${ }^{5}$ Pesh has obligatory verb agreement. The sole argument of an intransitive verb, as in example (2), and the two arguments of a monotransitive verb, as shown in (3), are obligatorily encoded in the verb. A verb has two argument slots. In the case of a ditransitive verb, Pesh exhibits a secundative alignment (or a primary object) for indexing: the recipient is the only argument that can be encoded, as shown in (4) and (5), while the patient cannot (Chamoreau, 2017).

## Monotransitive verb:

(3) ùtfà àkwắsárā àrkàpàrrkrà
ut $\int a$ a-kwãsa $=r a \quad$ a-r-kapar-k-er-wa
fish POSS3SG-spirit=ABS OBJ3SG-APPL.P-thank-K-SBJ3PL-PFV
'They thank the spirit of the fish.' [and no other spirit] \{txt\}

## Ditransitive verb:

(4) tàtùs tàs tàsùwá wíjkrí

| ta-tus | tas | ta-suwa | $\boldsymbol{\emptyset}$-wif-k-er-i |
| :--- | :--- | :--- | :--- |
| POSS1-father | PRO1 | POSS1-grandmother | OBJ3sG-give.OBJ3-K-SBJ3PL-PST |
| 'My parents entrusted me to my grandmother.' |  |  |  |

[^1](5) tàsùwá tã̀ỹhèrí
ta-suwa ta-ãyh-er-i
POSS1-grandmother OBJ1-give.OBJ1/2-SBJ3PL-PST
'They entrusted my grandmother to me.' \{txt\}
Pesh is a case-marking language with the six phrasal case enclitics listed in (6).
(6) Phrasal case enclitics:
\[

$$
\begin{array}{ll}
=y a & \text { Ergative } \\
=r a & \text { Absolutive (=ro, a dialectal variation used in the Carbon dialect) } \\
=y \tilde{a} & \text { Locative } \\
=y o & \text { Comitative/instrumental } \\
=k a n & \text { Similative (=ken, a dialectal variation used in the Carbon dialect) } \\
=r i & \text { Temporal/manner }
\end{array}
$$
\]

Case-marking enclitics are phrase final, as shown in (3) above and (7) below. A differential ergative and absolutive enclitic marking is displayed. Ergative and absolutive markers are triggered by focus (Chamoreau, 2018). For flagging, the subject of a transitive verb may be indicated by the ergative marker $=y a$, as in (7). In contrast, the subject of an intransitive verb, as shown in (8), the object of a monotransitive verb, as shown in (3) and (7), and both objects in a ditransitive verb may all be marked by the absolutive case marker $=r a$. The marker $=r a$ is never used with the subject of an intransitive verb in the Culmi dialect. In a ditransitive verb, Pesh exhibits a neutral alignment for flagging.
(7) tíkíí tó?mànìhyá ákõ̀rèrò

| Ø-ti-k-i-i | to? | manih=ya | ã | kõre=ro |
| :--- | :--- | :--- | :--- | :--- |
| OBJ3SG-say-K-SBJ3SG-PST | DEM.MED rabbit=ERG | DEM.DIST | uncle=ABS |  |
| 'The rabbit said [something] to that uncle.' $\{t \mathrm{txt}\}$ |  |  |  |  |

(8) wấtárá tòkkí
wãta=ra tok-k-Ø-i
shaman=ABS enter-K-SBJ3SG-PST
'The shaman got in.' \{txt\}
Tense is obligatory on finite verbs. Four tense markers exist: $i / r i$ ' PST ', as in (8), $/ i$ 'PST.REC', as in (9), wa 'PFV', as in (3), and pi 'FUT', as in (10a). The future tense can display potential values and is also used in conjunction with past and recent past, as seen in (10b) and (10c) respectively.
(9) kwákwánàrí kápàJkúfí
kwakwana=ri kapaf-k-u-fi
hardness=TEMP/MAN speak-K-SBJ3SG-PST.REC
'He spoke with severity.' $\quad$ ttxt $\}$
(10) a. àsòrò ừpmústépí
aso=ro ũp-mus-t- $\varnothing$-pi
water=ABS CAUS-fill-DUR-SBJ3SG-FUT
'The water will rise.' $\{t x t\}$
b. kàPpárí
Ø-ka?-pa-ri
OBJ3SG-make-SBJ1SG.FUT-PST
'I was going to do it.' \{txt \}
c. noั̀pífí
nã-u-pi-fi
go-SBJ2-FUT-REC.PST
'You were going to go (recently).' \{txt $\}$

### 1.3. The Noun Phrase

A simplified template for the NP is provided in (11):
(11) Pesh noun phrase:

Dem + Poss-Root- $\{$ Indf.Art $/$ Pl.Poss $\}+$ Adj $+\{$ Num $/$ Quant $\}+=$ Case $+=\{$ Top $/$ Foc $\}$
The properties of the NP are those typically associated with head-final characteristics. The possessor occurs before the possessum; that is, in an NP the modifier is preposed to the head, as in (12a). The indefinite article $-s$ is always postposed, as shown in (12b), as are numerals, shown in (13).

Possessor-Possessum (modifier-head):
(12)

| a. ta-ye? | a-wãri |
| :---: | :---: |
| Poss1-small | POSS3SG-pig |

b. korta-s
'My son's pig' (Lit. "My son, his pig") \{txt $\}$ 'a woman' \{txt
(13) tó? íspáràh àmùktá tềnáhpó:kyó kàtừjkáwá
to? isparah amukta tẽnah po:k=yo katũf-k-a-wa DEM.MED machete rotten heavy two=COM/INS work-K-SBJ1SG-PFV 'I worked with these two rotten, heavy machetes.' \{txt \}

Demonstratives indicate definiteness, such as $t o$ ? in (13), while indefinite determiners, such as indefinite quantifiers and indefinite articles like $-s$, express indefiniteness, as in (12b). Nevertheless, bare NPs are frequently used. Usually the context is sufficient to encode definiteness, as in (14), or indefiniteness, as in (15). In (14) the noun takaskro constitutes the definite NP 'the Sisimite', ${ }^{6}$ and in (15) the noun arwã constitutes the indefinite NP 'a man'.
(14) Î́kằkếs tàkáskrò kàù̀trốPtíhéré
ĩ=kan akẽs takaskro ka-ũtro?-Ø-tV-i=here
DEM.PROX=SIM thus Sisimite OBJ3PL-kidnap-SBJ3SG-NEG-PST=MIR
'Thus, the Sisimite kidnapped them.' \{txt $\}$
(15) krís árwã́ t fîí;
kris arwã t $\int$ a-i-ri
time man be_there-SBJ3SG-PST
'Some time ago, there was a man.' \{txt $\}$
The three demonstrative pronouns-that is, proximal $\tilde{l}$, medial to $?(t u ?)$, and distal $\tilde{a}(t a)$-play an important role for indefinite pronouns and $w h$-words (Table 1).

[^2]Table 1. Demonstrative pronouns and determiners

| Deictic feature | Demonstrative |
| :--- | :--- |
| Proximal | $\tilde{\imath}$ |
| Medial | $t o \rho / t u P$ (dialectal variant) |
| Distal | $\tilde{a} / t a$ (dialectal variant) |

Demonstratives may serve as pronouns or determiners. Examples (16a-c) illustrates their use as pronouns; as such they can optionally be marked by the topic marker, as in (16b) (see $\S 1.4 .5$ ), or a case marker, as in (16c) (see §1.2). By contrast, when used as determiners they cannot be marked by a case marker or the topic marker. If such markers occur in the NP they will be phrase final, as shown in (7), (13), and (16b).

## Demonstrative pronoun:

(16) a. àkrékè yè?mà î́ kàtfúífkàlèryó àtfúífkèrpé
akreke ye?=ma $\tilde{\mathbf{i}} \quad$ ka-tfuif-k-a-ler=yo
but small=TOP DEM.PROX APPL.R-learn-K-NMLZ-PL=COM/INS
a-tfuif-k-er-pi
OBJ3SG-learn-K-SBJ3PL-FUT
'But the young will learn this (one) with the teachers.' $\{$ txt $\}$
b. tóPmà ã́yèkórtàrá éhkí́, kwằsà wárkì pàkérpírírás

| to? $=\mathrm{ma}$ | ã | ye | korta=ra | $\emptyset$-eh-k-i-i | kwãsa | arki |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DEM.MED=TOP DEM.DIST small woman=ABS OBJ3SG-treat-K-SBJ3SG-PST spirit bad |  |  |  |  |  |  |
| Ø-pa-k-er-pi-ri=ras |  |  |  |  |  |  |
| OBJ3SG-take-K-SBJ3PL-FUT-PST=REAS |  |  |  |  |  |  |
| ${ }^{\text {'This on }}$ |  | g girl | because the bad | d spirits were going to take | r.' |  |

c. táyá takìúsí
ta=ya ta-ka-u-si
DEM.DIST=ERG OBJ1-make-SBJ3SG-PST.REC
'That one struck me.' \{txt \}
The proximal demonstrative pronoun $\tilde{\imath}$ and the distal demonstrative pronoun $t a$ (see Table 1) are also used as indefinite pronouns. The non-human indefinite pronoun is $\tilde{i}=n a$ 'something', as seen in (17a), with the marker $=n a$ expressing indefiniteness. The human indefinite pronoun is $a s=n a$ (or less frequently $a s$ alone), that is, the numeral as 'one' and the marker of indefiniteness, shown in (17b).
(17) a. î̀ktã̃mã̀ î́nà úPtfâhítfí
îkata=ma $\quad$ ì=na $\quad \emptyset$-uPtfah-i-tfi
now=TOP DEM.PROX=INDF OBJ3SG-sell-SBJ2-PST.REC
'Did you sell something today?' $\{t x t\}$
b. ásnà kàpotfúífkó tfà̀ấrí
as=na kaPo-tfuif-ko Ø-tfã-a-ri
one $=$ INDF house-learn-CONT OBJ3SG-ver-SBJ1SG-PST
'I saw someone in the school.' $\{t x t\}$
The non-human indefinite pronoun for 'nothing' is $\tilde{\imath}=r i=n a$-that is, the combination of the proximal pronoun $\tilde{l}$, the coordinator $=r i$ and the indefinite marker $=n a$; an example is given in (18a). The human indefinite pronoun for 'no one, nobody' is $a s=n a=r i=n a$, shown in (18b), or $t a=y a=r i=n a$, as shown in (18c). The former is used as the subject of an intransitive verb and the object of a transitive verb; the latter is used as the subject of a transitive verb. In these clauses, the verb always contains the negative marker, shown in (18b); its absence is ungrammatical, as seen in (18d), and it cannot be used to mean 'someone' either.
a. írínà úptfâhtát $\int$ í
$\tilde{i}=r i=n a \quad \emptyset$-uPt $\int a h-a-t V-t \int i$
DEM.PROX=COORD=INDF OBJ3SG-sell-SBJ1SG-NEG-PST.REC
'I sold nothing.' (Lit. "I didn't sell nothing.")
b. ásnàrínà àkàìtìjtèrí

| $\mathbf{a s}=\mathbf{n a}=\mathbf{r} \mathbf{i}=\mathbf{n a}$ | a-ka-itif-er-tV-ri |
| :--- | :--- |
| one $=I N D F=$ COORD $=$ INDF | REFL/RECP-APPL.R-steal-SBJ3PL-NEG-PST |
| 'They stole no one.' (Lit. "They didn't steal no one.") | $\{$ txt $\}$ |

c. î̀ktā̃mã̀ pàtàòryàrímã̀: táyàrínà kìtwố

| îkita=ma pa-ta | orya=ri=ma | ta=ya=ri=na |
| :--- | :--- | :--- |
| now=TOP | INCL-POSS1 | culture=TEMP/MAN=TOP |
| DEM.DIST=ERG=COORD=INDF |  |  |
| Ø-ka-i-tV-wa |  |  |

'Nowadays, no one makes (anything) by means of our culture.' (Lit. "Nowadays, no one doesn't make (anything) by means of our culture.") \{txt
d. *ásnàrínà àkàitìjkèrí
*as=na=ri=na a-ka-itif-k-er-ri
*one=INDF=COORD=INDF REFL/RECP-APPL.R-steal-K-SBJ3PL-PST
['They stole no one.' or 'They stole someone.']

### 1.4 The Predicate Enclitic Markers

Five predicate enclitics among those that are attested in Pesh are particularly relevant for this study; these are shown in Table 2 below. Two of them mark matrix interrogative clauses, while the other three mark subordinate clauses. They always occur at the right edge of the predicate, and none can co-occur with any of the others.

Table 2. Relevant predicate enclitic markers

| Marker | Function | Distribution |
| :--- | :--- | :--- |
| $=s a$ | wh- interrogative marker | matrix wh- interrogative clause |
| $=r e ?$ | polar interrogative marker | matrix polar interrogative clause |
| $=k a n /=k e n^{*}$ | dubitative marker |  |
| $=s r i$ | uncertainty marker | embedded <br> declarative/interrogative/relative clauses |
| $=m a$ | certainty marker |  |
| $=k a n$ is =ken in the Carbon dialect. |  |  |

Although the predicate is usually in clause-final position, when it is followed by some other constituent, the enclitic still combines with the predicate, as shown in (19b). I discuss each enclitic in turn below.

### 1.4.1. Wh-interrogative marker

The enclitic $=s a$ characterizes matrix wh- interrogative clauses, as shown in (19a,b). A comparison of (16c) and (19a) shows that only the presence of =sa distinguishes the two clauses and allows the interpretation of (19a) as a constituent (or wh-) interrogative clause and of ta=ya 'DEM.DIST=ERG' as a wh-word.
(19) a. táyá pìkiúsísà

$$
\mathbf{t a}=\mathbf{y a} \quad \text { pi-ka-u-si=sa }
$$

DEM.DIST=ERG OBJ2-make-SBJ3SG-PST.REC=WH
'Who struck you?' \{txt\}
b. tárá kàkàpéPkísísà ùtfà
ta=ra ka-ka-per-k-i-si=sa ut $\int \mathrm{a}$
DEM.DIST=ABS OBJ3PL-APPL.R-bring-K-SBJ2-PST.REC=WH fish
'For whom (pl) did you (sg) bring the fish?' \{txt $\}$

### 1.4.2. Polar interrogative marker

The enclitic $=r e ?$ characterizes matrix polar interrogative clauses in the Carbon dialect, as shown in (20a). In the Culmi dialect, however, matrix polar interrogative clauses are not marked with any special enclitic and are identical to declarative clauses in form. A final higher pitch distinguishes polar interrogative clauses, like (17a) above, from declarative clauses. Interestingly, $=r e$ ? is used in the Culmi dialect to trigger doubt about whether an event will happen or has happened; this is shown in (20b).

```
a. neั̀ríré?
nã-er-ri=re?
    go-SBJ3PL-PST=Y/N
    ‘Did they go?' \{txt\}
b. tè̀neั̀rítípíríré?
    te \(3-n a ̃-i-t V-p i-r i=r e ?\)
    come-go-SBJ3SG-NEG-FUT-PST=Y/N
    'He was going to come (but) did he come or not?' \{txt\}
```

The remaining three enclitics mark different degrees of probability or possibility that the event described in the respective embedded clause will happen or has happened (Bybee 1985).

### 1.4.3. Dubitative marker

The use of $=k a n /=k e n$ expresses doubt or the weak possibility that the event described in the clause may occur or may have occurred ('irrealis'). For instance, in (21), the speakers do not know whether they can take the grandmother somewhere, or how to take her there.
(21) Î́kànkà pàbèrpékén ừntãkàtfúà
[ĩ=kan-ka-a Ø-pa-ber-pe=ken]
DEM.PROX=SIM-make-SBJ1 OBJ3SG-take-SBJ1PL.EXCL-FUT=DBT
ũn-ta-ka-tfa-Ø-wa
EXCL-OBJ1-APPL.R-be_there-SBJ3SG-PFV
'[It is not sure whether] we can [and we are not sure how to] take her.' \{txt\}
The dubitative enclitic $=k a n$ is related to the similative case maker $=k a n$ used with NPs (see §1.2). Crosslinguistically, the relation between similarity and irrealis or doubt is well known (Creissels 2017).

### 1.4.4. Uncertainty marker

The enclitic =sri signals uncertainty about whether an event will happen or has happened. Usually the speaker knows various conditions that make it probable, but uncertainty still exists. In (22), the speaker knows how to take the grandmother; the uncertainty resides in whether or not they will take her.
Example (22) can be compared to example (21) with the dubitative enclitic $=k a n$.
(22) Îkànkà pàbèrpésrí ừntãkàtfúà
[ĩ=kan-ka-a
Ø-pa-ber-pe=sri]
DEM.PROX=SIM-make-SBJ1 OBJ3SG-take-SBJ1PL.EXCL-FUT=UNCRT
ũn-ta-ka-tfa-Ø-wa
EXCL-OBJ1-APPL.R-be_there-SBJ3SG-PFV
'We may have a way to take her.'
In (23) below, the speaker knows that he will eat, but he doesn't know if the person he is speaking with will agree to cook something for him. The bracketed embedded clause in (23) is a free-choice free relative clause, and the free-choice expression that is translated with whatever results from the
repetition of the demonstrative proximal. We will discuss free-choice free relative clauses and their whexpressions in §4.1.3.
(23) Í̛rírí tàkàtùhúpísrí ã́pã́hã́?

| $\left[\begin{array}{l}\text { ĩ=ra }\end{array}\right.$ | $\tilde{1}=$ Ina | ta-ka-tuh-u-pi=sri] |
| :--- | :--- | :--- |
| DEM.PROX=ABS | DEM.PROX=ABS | OBJ1-APPL.R-cook-SBJ2-FUT=UNCRT |
| Ø-ã-pa=hã? |  |  |
| OBJ3SG-eat-SBJ1SG.FUT=FOC |  |  |
| 'I will eat whatever you may cook for me.' |  |  |

### 1.4.5. Certainty marker

The use of the enclitic =ma at the end of a predicate indicates that the event has happened or is in the process of happening. In (24), this is an affirmation that the narrator and his brothers know how to take the grandmother to hospital. Example (24) can be compared with (21), which contains the dubitative marker $=k a n$, and with examples (22) and (23), which contain the uncertainty marker =sri.
(24) îkànkà pàbèrpémà ừntãkàtfúà
[ĩ=kan-ka-a $\quad$-pa-ber-pe=ma]
DEM.PROX=SIM-make-SBJ1 OBJ3SG-take-SBJ1PL.EXCL-FUT=CRT
ũn-ta-ka-t $\int a-\varnothing$-wa
EXCL-OBJ1-APPL.R-be_there-SBJ3SG-PFV
'We have a way to take her.'
In (25), the meal is already prepared and the narrator is about to eat it. The certainty marker $=m a$ corresponds to a realis interpretation. Compare (25) with (23), where the uncertainty marker $=s r i$ is used.
(25) îririrí tàkàtùhúpímà ấpấhấ?
[ $\mathrm{i}=\mathrm{ra} \quad \tilde{1}=r a \quad$ ta-ka-tuh-u-pi=ma]
DEM.PROX=ABS DEM.PROX=ABS OBJ1-APPL.R-cook-SBJ2-FUT=CRT
Ø-ã-pa=hã?
OBJ3SG-eat-SBJ1SG.FUT=FOC
'I will eat whatever you cooked for me.'
The certainty marker $=m a$ is related to the topic marker $=m a$ in an NP. Topic and certainty markers share the same characteristic of introducing a given or actualized participant or event. The topic marker is optional and usually correlates with thematic discontinuity or referent complexity-that is, with the need to identify and encode the topic to maintain discourse coherence (Chamoreau, forthcoming.a). The NP that contains the topic is usually preposed, as in (26). When the topic marking enclitic =ma occurs on a subject or object NP, it is impossible to add the ergative or absolutive case marker on the same constituent (again, shown in (26)).
(26) tàsùwámà ấkắn oั̀:nínà wíhnà:yó
$\begin{array}{llll}\text { ta-suwa=ma } & \tilde{a}=\text { kan } & \tilde{o}-\mathrm{n}-\emptyset \text { - } \mathrm{i}=\mathrm{na} & \text { wihna=yo } \\ \text { POSS1-grandmother=TOP } & \text { DEM.DIST=SIM } & \text { sleep-DUR-SBJ3SG-PST=REP } & \text { shaman=COM/INS }\end{array}$
'They said that my grandmother died like this, due to the shaman.' $\{$ txt \}

## 2. Wh-interrogative clauses

This section introduces $w h$-interrogative clauses in Pesh and their $w h$-expressions, which will be relevant for our discussion of free relative clauses in §4.1. Matrix $w h$ - interrogative clauses are presented first, followed by embedded $w h$ - interrogative clauses. The two constructions exhibit a key difference, which will be important for free relative clauses as well.

Pesh forms wh-expressions from five different sources, as shown in (27):
(27) 1. ta DEM.DIST [+ HUMAN] for 'who'
2. ĩ DEM.PROX [- HUMAN] for 'what', 'how', 'why', 'when'
3. ã DEM.DIST for 'when'
4. the verb pi- 'place, put down' for 'where', 'which'
5. pif for 'how many', 'how much'

The complete list of $w h$-expressions in Pesh is given in Table 3.
Table 3. Inventory of wh-expressions in interrogative clauses

| Basic meaning | Further specifications | Wh-expression | Gloss |
| :---: | :---: | :---: | :---: |
| 'who' | 'who' + $\mathrm{V}_{\text {tr }}$ | $t a=y a$ | DEM.DIST=ERG |
|  | $\begin{aligned} & \text { 'who' }+\mathrm{V}_{\text {intr }} \\ & \text { 'to who' }+\mathrm{V}_{\text {tr }} \end{aligned}$ | $t a=r a$ | DEM.DIST=ABS |
|  | 'with who' | $t a=y o$ | DEM.DIST=COM/INS |
|  | 'in whose house' | $t a=y \tilde{a}$ | DEM.DIST=LOC |
|  | 'whose' + N | ta-Peh | DEM.DIST=FT.POSS.PRO |
| 'what' | 'what' + $\mathrm{V}_{\text {tr }}$ | $\tilde{\imath}=y a$ | DEM.PROX=ERG |
|  | 'what' $+\mathrm{V}_{\text {intr }}$ | $\tilde{\imath}=r a$ | DEM. $\operatorname{PROX}=\mathrm{ABS}$ |
|  | 'to what' $+\mathrm{V}_{\text {tr }}$ |  |  |
|  | 'with what' | $\tilde{\imath}=y o$ | DEM.PROX=COM/INS |
| 'where' |  | pi-ah | place-NMLZ |
|  |  | pi=kan | place=SIM |
| 'when' | 'when' (past) | $\tilde{\imath}=$ kawar | DEM.PROX=? |
|  | 'when' (perfective/future) | $\tilde{a}=h \tilde{l}$ | DEM.DIST=? |
|  | 'at what time' | $\tilde{a}-p e=r i$ | DEM. DIST-TIMES=TEMP/MAN |
| 'how' |  | $\tilde{\imath}=k a n(-k a)$ | DEM.PROX=SIM-('make') |
| 'why' |  | $\tilde{i}=r e \oint$ | DEM.PROX=REAS |
| 'what'/'which' |  | pi-ah=ra | place-NMLZ=ABS |
| 'how much'/ 'how many' |  | pi¢ |  |

To form wh-expressions, the case markers are obligatory with the demonstratives, as already shown in (19a,b), and with the verb pi-, as shown in (28). For some wh-expressions, instead of a case enclitic, a possessive or a nominalizer is used, as shown in (29) and (30) respectively. This feature contrasts with the optionality of a case marker when the demonstratives function as pronouns in an NP (see §1.3). A wh-expression must occur in clause-initial position, never in situ. The predicate usually occurs at the
right edge; it is obligatory marked by the $w h$ - interrogative marker $=s a$. For reasons of information structure some adverbs may appear after the predicate, as shown in (30).
(28) piáhrà kúhísísà
pi-ah=ra $\quad$-kuh-i-si=sa
place-NMLZ=ABS OBJ3SG-buy-SBJ2-PST.REC=WH
'Which one did you buy?'
(29) táPà tùsrà wàháyấ nềísà
ta-?eh tus=ra waha=yã nã- $\varnothing$ - $\mathrm{i}=\mathbf{= s a}$
DEM.DIST-FT.POSS.PRO father=ABS hill=LOC go-SBJ3SG-PST=WH
'Whose father went to the hill?' ('the father of whom') \{txt \}
(30) pyā́h noั̀písà t fá
pi-ah nã-u-pi=sa tfa
place-NMLZ go-SBJ2-FUT=WH tomorrow
'Where will you go tomorrow?' \{txt \}
Embedded wh-interrogative clauses require a $w h$-expression at the left edge of the clause, like matrix $w h$ - interrogative clauses. But the two types of clauses differ: embedded wh-interrogative clauses need one of the three subordinators we discussed in §1.4: the uncertainty marker =sri (cf. (31)), the dubitative $=k a n$ (cf. (32)), or the certainty marker $=m a$ (cf. (33)). Embedded interrogative clauses always follow their matrix clause.
(31) àhírtáwá táyó tè Pkúrísrí
a-hir-a-tV-wa tee ta= k -u-ri=sri]
OBJ3SG-know-SBJ1SG-NEG-PFV DEM.DIST=COM/INS come-K-SBJ2-PST=UNCRT
'I don't know who you should have come with.' \{txt\}
(32) àhíríjkíwá ấhĩ̀ àtfằmìrmkánwắ?
a-hir-if-k-i-wa $\quad\left[\tilde{\mathbf{a}}=h \tilde{i} \quad\right.$ a-t $\int \tilde{a}-$ ber-pi=kan=wã? $\left.{ }^{7}\right]$
OBJ3SG-know-DES-K-SBJ3SG-PFV DEM.DIST=? REFL/RECP-see-SBJ1PL.EXCL-FUT=DBT=PSB
'He wants to know when we may be able to see each other.' \{txt $\}$
(33) nằhrî́ ĩná kàtfúífkámà

Ø-yẽh-a-ri $\quad\left[\tilde{\mathbf{1}}=\mathbf{y a} \quad\right.$ ka-t $\int u i f-k-\varnothing$-wa=ma $]$
OBJ3SG-say-SBJ1SG-PST DEM.PROX=ERG APPL.R-learn-K-SBJ3SG-PFV=CRT
'I told him who teaches.' $\{\mathrm{txt}\}$

## 3. Headed Relative Clauses

This section introduces the three main types of restrictive headed relative clauses that are found in Pesh. The crucial factor that distinguishes them is the syntactic role of the head noun within the relative clause (RC) (Chamoreau, forthcoming.b). The first type occurs when the head noun is a genitive or an argument in the RC. The enclitic that occurs at the end of the RC, which may be a case marker or the

[^3]topic marker, corresponds to the syntactic role of the noun in the matrix clause (MC). In (34), the accusative ${ }^{8}=r a$ marks the fact that the noun korta 'the woman' is the primary object in the MC regardless of its role in the RC. In (34), the noun korta 'the woman' is the subject of the RC. This behavior coincides with Comrie's (1989 [1981]) description of an internally headed relative clause.
(34) tàsmà [kàpàn kàpàn kórtà tà-yè? kàtfềmirà] wífkárí
tas=ma [ kapani kapani korta ta-ye?
PRO1=TOP morning morning woman POSS1-small
$\emptyset$-ka-t $\left.\int a ̃-\emptyset-\mathrm{pi}\right]_{\mathrm{RC}}=\mathbf{r a} \quad$ Ø-wif-k-a-ri
OBJ3SG-APPL.R-see-SBJ3SG-FUT=ACC OBJ3SG-give.OBJ3-K-SBJ1SG-PST
'I entrusted him to the woman who will take care of my son every morning.' $\{t x t\}$
The second type of relativization is used when the head noun has a non-argumental, non-genitive, peripheral (oblique or adjunct) role in the RC. The case marker that obligatorily occurs at the end of the RC corresponds to the syntactic role of the noun in the RC. In (35), the comitative/instrumental $=y o$ indicates that the noun kukarska 'the hoe' is the instrument in the RC, regardless of its role in the matrix clause. (In this example the noun kukarska 'the hoe' is the object in the matrix clause.) The noun that functions as the head of the RC occurs outside of it, being represented in the RC by a gap marked by __ in (35). The whole construction is an externally headed relative clause.
[kúkàrskà yè?há tàkíyó] úhàrí

| $[$ kukarska | $[$ ye?-ha  <br> hoe small-NMLZ$-\quad$ta-ka- $\varnothing$-i=yo $\left.]_{\text {RC }}\right]$ <br> OBJ1-hit-SBJ3SG-PST=COM/INS | $\emptyset$-uh-a-ri <br> OBJ3SG-hide-SBJ1SG-PST |
| :--- | :--- | :--- | :--- | 'I hid the hoe with which the small boy hit me.' \{txt \}

The third type of relativization is observed when the head has the role of a locative adjunct in the RC, regardless of its role in the matrix clause. In this case, a locative wh-expression can introduce the RC and function as a relative marker. Thus in (36) below the noun taha 'the path', the object in the matrix clause which functions as the head of the RC, occurs outside the RC but is referred to inside it by means of the clause-initial locative wh-expression pikan 'where, in which direction', which shows its semantic role within the RC. Syntactically speaking, the movement of the constituent indicating the locative role to the fronting position leaves a trace marked by $t$ in the original position (Comrie 1989 [1981]). The relative clause is obligatorily marked by a subordinator encliticized at the end of the verb: for example, with the uncertainty subordinator $=s r i$, as in (36), or the dubitative subordinator $=k a n$, as in (37). When the head noun is locative in the RC and the matrix clause, it is flagged by the locative case, as in (37). This feature distinguishes this kind of headed relative clause from those without a whexpression, where it is impossible for the case to mark the head noun (cf. (35)). The wh-expressions pikan 'where/in which direction' in (36) and piah 'where' in (37) are the only two that are used in headed relative clauses.
(36) tàhà pìkàn nềrísrí tyà̀árí
[ [taha] $\left.]_{N}[\mathbf{p i}=k a n \quad t \quad \text { nã-er-ri=sri }]_{R C}\right] \quad$-tfã-a-ri
path place=SIM go-SBJ3PL-PST=UNCRT OBJ3SG-see-SBJ1SG-PST
'I saw the path that they went toward.' \{txt \}

[^4](37) tàpàtfâ kúpkàkáyắ piáh tfèrèríkén tè $\mathrm{Pkrí}$

'My sisters came from the spacious land where they lived.' \{txt\}
In the first two kinds of headed relative clauses, the marker that obligatorily occurs at the end of the relative clause is a case marker or the topic enclitic prototypically used at the end of noun and postpositional phrases. In contrast, the third kind of headed relative clause is marked by the clauseinitial locative wh-expression and a clause-final subordinator. The head noun may be marked by the locative case marker. This is impossible in headed relative clauses that lack wh-words, where the case marker always occurs clause finally.
The distribution of the three kinds of restrictive headed relative clauses thus clearly responds to the accessibility restrictions on specific roles summarized in Table 4: arguments and genitives with internally headed relative clauses, obliques and adjuncts (comitatives, instrumentals, locatives, and objects of comparison) with externally headed relative clauses, and locatives with relative clauses with a wh-expression.

Table 4. Accessibility for relativization to different syntactic roles in headed RCs

| Strategy | SBJ | OBJ (1² $\left.\mathbf{2}^{\mathbf{o}}\right)$ | GEN | INS | COM | LOC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Internally headed RC | $\checkmark$ | $\checkmark$ | $\checkmark$ | $*$ | $*$ | $*$ |
| Externally headed RC | $*$ | $*$ | $*$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| RC with locative wh- | $*$ | $*$ | $*$ | $*$ | $*$ | $\checkmark$ |

Note. $\checkmark$ : acceptable; *: not acceptable.

## 4. Headless Relative Clauses

This section describes the two main types of headless relative clause in Pesh and their various subtypes. $\S 4.1$ introduces the first type, i.e. the free relative clause, which is characterized by a $w h$-expression at the left edge and a subordinator at the right edge. §4.2 discusses the second type of headless relative clause, which lacks a wh-expression: both the subtype known as a light-headed relative clause and the subtype that has neither a light head nor a $w h$-expression, in which a case marker or the topic marker is found at its right edge.

### 4.1. Free Relative Clauses

Free relative clauses are headless relatives that are introduced by a wh-expression. A subordinator appears at the right edge of the predicate, as in embedded interrogative clauses (§2). However, free relative clauses occur before their matrix clauses, while embedded interrogative clauses follow their matrix clauses. All three kinds of subordinators are used. Maximal, existential, and free-choice FRs are distinguished from each other by the type of $w h$-expression they employ: in maximal FRs (§4.1.1) only the two locative $w h$-words may be used; in existential FRs (§4.1.2) different $w h$-words are used; and in free-choice FRs (§4.1.3) the wh-word is reduplicated.

### 4.1.1. Maximal free relative clauses

Maximal free relative clauses (Max-FRs) are limited in Pesh; there are very few examples in the corpus. The majority of headless relative clauses with a maximal interpretation are constructed without a wh-expression. Only the locative wh-expressions piah 'where' (cf. (38)) and pikan 'where, in which direction' (cf. (39)) can occur, as was the case in headed relative clauses with a wh-expression (§3). The subordinator may be any of the three subordinators discussed in §1.4: the uncertainty marker =sri, as in (38), the dubitative $=k a n$, as in (39), or the certainty marker $=m a$, as in (40).
(38) pyấh nằísrí pàyó nằíftàkíwá
[pi-ah nã-u-i=sri] pa=yo nã-if-ta-ka-i-wa place-NMLZ go-SBJ2-PFV=UNCRT PRO2=COM/INS go-DES-OBJ1-make-SBJ3SG-PFV
'I want to go with you where you should go.'
(39) pìkế pāyòkế fếnínấ
[pi=ken $\quad$-pa-k- -i=ken] $\quad$--fã- $П-\mathrm{tV}-\mathrm{i}=\mathrm{na}$
place $=$ SIM $\quad$ OBJ3SG-take-K-SBJ3SG-PST=DBT $\quad$ OBJ3SG-see-SBJ3SG-NEG-PST=REP
'They said that he didn't see where she could have taken him.' \{txt $\}$
(40) pyắh tfórímà tfằbrí
[pi-ah tfa-u-ri=ma] Ø-tfã-ber-i
place-NMLZ be_there-SBJ2-PST=CRT OBJ3SG-see-SBJ1PL.EXCL-PST
'We saw where you were born.' \{txt\}
The structures in (38)-(40) are attested in the corpus for Max-FRs, but as stated above, the most frequent strategy for the locative role is the one illustrated in (41), which lacks a $w h$-expression. We discuss it in §4.2.2.
t fóríyắ tfằbrí
$\left[t \int a-u-r i=y a ̃\right] \quad$ Ø-t $\int$ ã-ber-i
be_there-SBJ2-PST=LOC OBJ3SG-see-SBJ1PL.EXCL-PST
'We saw where you were born.' \{txt\}
Example (42a) was found in a text; it shows the construction of a headless relative clause without a whexpression and receives a maximal interpretation. My informants reject the corresponding sentence containing the Max-FR in (42b).
(42) a. tùhúrímà à̀?áfí
[Ø-tuh-u-ri=ma] Ø-ãP-a-fi
OBJ3SG-cook-SBJ2-PST=TOP OBJ3SG-eat-SBJ1SG-PST.REC
'I ate what you cooked.' \{txt \}
b. *ĩrá tùhúrísrí à̀Ráfi

$$
\begin{array}{lcl}
{[\tilde{\mathbf{1}=\mathbf{r a}}} & \text { Ø-tuh-u-ri=sri }] & \emptyset-\mathrm{ã} 2-\mathrm{a}-\int \mathrm{i} \\
\text { DEM.PROX=ABS } & \text { OBJ3SG-cook-SBJ2-PST=UNCRT } & \text { OBJ3SG-eat-SBJ1SG-PST.REC }
\end{array}
$$

['I ate what you cooked.']

### 4.1.2. Existential Free Relative Clauses

In this section, I discuss existential free relative clauses ( $E x-F R s$ ). The Pesh corpus contains several examples of Ex-FRs. As in all other Mesoamerican languages with Ex-FRs, they occur as the complement of a matrix predicate conveying a meaning of existence. The predicate most commonly used for Ex-FRs in Pesh is $t \int a$ 'be there, inhabit, exist, have', seen in (43) and (44).


In Ex-FRs, as in all other wh-clauses in Pesh we have seen so far, wh-expressions occur in clauseinitial position - though for discourse reasons, an adverb such as $\tilde{z} y \tilde{a} m a$ 'here' can appear before the $w h$-expression, as seen in (45). The verb of the Ex-FR is in clause-final position and is marked by one of the three subordinators (§1.4): the uncertainty marker $=s r i($ cf. (44) above), the certainty marker $=m a$ (cf. (45) below), or the dubitative $=k a n$ (cf. (51) below).
'Which'/Subject in the Ex-FR:
(45) yấh mằ pìyàrà téPũntãtfé́mímà tfítwà

| $[\mathfrak{1}=\mathrm{ya}=\mathrm{ma}$ | pi-ah=ra | te?-un-ta-t¢̃̃-Ø-pi=ma] |
| :---: | :---: | :---: |
| DEM.PROX=LOC=TOP | place-NMLZ=ABS | come-EXCL-OBJ1-see-SBJ3SG-FUT=CRT |
| tfa-i-tV-wa |  |  |
| be_there-SBJ3SG-NEG |  |  |

'There is no one who will come here to see us.' (Lit. "There isn't who will come here to see us.") \{txt $\}$

The verb of the Ex-FR always appears marked by a future tense that expresses the possibility that the event will happen or has happened, even if the event at issue seems to be real and current. Thus in (46) below, despite the subordinator being the certainty marker $=m a$, the tense is obligatorily future, as indicated by the future marker -pi. My consultants reject any other tense marking for this example, like the perfective marker -wa in (47). Ex-FRs carry the future marker even if the matrix clause is marked as past, triggering a counterfactual interpretation of unrealized possibility, as in (48).
'Where'/ Locative in the Ex-FR:
(46) pyā́h tfópímà pìkàtfúà
[pi-ah t $\mathrm{fa}-\mathrm{u}-\mathrm{pi}=\mathrm{ma}] \quad$ pi-ka-t $\int \mathrm{a}-\varnothing$-wa
place-NMLZ be_there-SBJ2-FUT=CRT OBJ2-APPL.R-be_there-SBJ3SG-PFV
'You have a place where you may live.' $\{t x t\}$
(47) *pyá́h t fówámà pìkàt fúà
pi-ah tfa-u-wa=ma pi-ka-t $\int a-\emptyset-w a$
place-NMLZ be_there-SBJ2-PFV=CRT OBJ2-APPL.R-be_there-SBJ3SG-PFV
['You have a place where you live.']
(48) pyắh nằpárísrí tàkàt $\int$ íí
[pi-ah nã-pa-ri=sri] ta-ka-tfa-i-i
place-NMLZ go-SBJ1SG.FUT-PST=UNCRT OBJ1-APPL.R-be_there-SBJ3SG-PST
'I had a place where I could have gone.'
Besides $t \int a$ 'be there, inhabit, exist, have', other matrix verbs are attested with Ex-FRs in Pesh, such as proh 'look for', in (54), and pãs 'find', in (49) and (50).
All in all, sixteen of the seventeen wh-expressions available in the language are used in Ex-FRs. Four of these occurred in examples (43)-(46) above; the other twelve are given in (49)-(60):
'Who'/Object in the Ex-FR:
(49) tárá èyè $\int$ písrí pắskút $\int$ í

| $[\mathbf{t a}=\mathbf{r a}$ | $\emptyset$-eye $\int-\emptyset-\mathrm{pi}=$ sri] | $\emptyset$-pãs-k-u-t $\int \mathrm{i}$ |
| :--- | :--- | :--- |
| DEM.DIST=ABS | OBJ3SG-sing-SBJ3SG-FUT=UNCRT | OBJ3SG-find-K-SBJ3SG-PST.REC |

'He found someone to sing for.'
'Who'/ Comitative in the Ex-FR:
(50) táyó kàtừfpésrí pắskí
[ta=yo katũf-Ø-pi=sri] Ø-pãs-k- - -i
DEM.DIST=COM/INS work-SBJ3SG-FUT=UNCRT OBJ3SG-find-K-SBJ3SG-PST
'He found somebody to work with.' \{txt \}
'Who'/Locative in the Ex-FR:
(51) táyắ nằpákánwắ tàkàtfítwa
[ta=yã nã-pa=kan=wã] ta-ka-tfa-i-tV-wa
DEM.DIST=LOC go-SUBJ1SG.FUT=DBT=PSB OBJ1-APPL.R-be_there-SBJ3SG-NEG-PFV
'I don't have anyone's house to go to.' \{txt \}
'Who'/Genitive in the Ex-FR:
(52) táqà àkàPórá séhpísrí pắskárí

| [ta-Peh | a-kaPo=ra | Ø-seh- $\varnothing$-pi-i=sri] |
| :--- | :--- | :--- |
| DEM.DIST-FT.POSS.PRO | POSS3sG-house=ABS | OBJ3SG-burn-SBJ3SG-FUT-PST=UNCRT |

Ø-pãs-k-a-ri
OBJ3SG-find-K-SBJ1SG-PST
'I found anybody whose house they said was burnt.'
'What'/ Subject in the Ex-FR:
(53) ĩyá àhírpísrí tfùá
[ $\mathbf{1}=\mathbf{y a} \quad$ a-hir-i-pi=sri]
DEM.PROX=ERG OBJ3SG-know-SBJ3SG-FUT=UNCRT
t $\int a-\varnothing$-wa
be_there-SBJ3SG-PFV
'There is something he would like to know.' $\{t x t\}$
'What'/ Object in the Ex-FR:
(54) î̃rá pã̀yhpásrí próhàwà
[ĩ=ra pi-ãyh-pa=sri] Ø-proh-a-wa
DEM.PROX=ABS OBJ2-give.OBJ1/2-SBJ1SG.FUT=UNCRT OBJ3SG-look_for-SBJ1SG-PFV
'I'm looking for something I should give you.' \{txt $\}$
'How'/ Manner in the Ex-FR:
(55) îkàn pàbèrpékén ừntãkàt $\int$ ûá
[ĩ=kan $\quad$-pa-ber-pe=ken]
DEM.PROX=SIM OBJ3SG-take-SBJ1PL.EXCL-FUT=DBT
ũn-ta-ka-tfa-Ø-wa
EXCL-OBJ1-APPL.R-be_there-SBJ3SG-PFV
'We may have a way to take it.' \{txt \}
'When'/Temporal in the Ex-FR:
(56) î́kàwàr tèppárísrí próhàrí
[ĩ=kawar te?-pa-ri=sri] $\quad$-proh-a-ri
DEM.PROX=? come-SBJ1SG.FUT-PST=UNCRT OBJ3SG-look_for-SBJ1SG-PST
'I looked for him at a time when I was supposed to come.'
(57) ấhĭ̀ nằpámà pắskàrí
[ã=hĩ nã-pa=ma] Ø-pãs-k-a-ri
DEM.DIST=? go-SBJ1SG.FUT=CRT OBJ3SG-find-K-SBJ1SG-PST
'I found a moment in which I was able to go (somewhere).' $\{$ txt $\}$
(58) ãpérí tè?pámà kè tàkàtftùá
[ã-pe=ri
te?-pa=ma] ke
DEM.DIST-times=TEMP/MAN come-SBJ1SG.FUT=CRT already
ta-ka-tfa-i-tV-wa
OBJ1-APPL.R-be_there-SBJ3SG-NEG-PFV
'I haven't decided on a time at which I will come.' \{txt \}
'Where'/ Locative in the Ex-FR:
(59) píkán oั̀:npárísrí tàkàtfíí
[pi=kan $\quad \tilde{o}:-n-p a-r i=s r i] \quad$ ta-ka-tfa-i-i
place=SIM sleep-DUR-SBJ1SG.FUT-PST=CRT OBJ1-APPL.R-be_there-SBJ3SG-PST
'I had a place where I could have slept.' \{txt \}
'How many'/'how much'/ Subject (quantity) in the Ex-FR:
(60) píf tè?kèrpírímà pắskàrí
$\begin{array}{lll}\text { [pi } \int & \text { te } 2 \text {-k-er-pi-ri=ma] } & \text { Ø-pãs-k-a-ri } \\ \text { how_many/much } & \text { come-K-SBJ3PL-FUT-PST=CRT } & \text { OBJ3SG-find-K-SBJ1SG-PST }\end{array}$
'I found several (people) who would have come.' \{txt \}
In Ex-FRs, the enclitic case of the $w h$-word always marks the role of the $w h$-word in the FR. Table 5 summarizes the distribution of wh-expressions in Ex-FRs.

Table 5. Distribution of wh-expressions in Ex-FRs

| Basic meaning | Further specifications | Wh-expression | Ex-FRs |
| :---: | :---: | :---: | :---: |
| 'who' | 'who' + $\mathrm{V}_{\text {tr }}$ | $t a=y a$ | $\checkmark$ |
|  | 'who' + $\mathrm{V}_{\text {intr }}$ | $t a=r a$ | $\checkmark$ |
|  | 'to who' $+\mathrm{V}_{\text {tr }}$ |  |  |
|  | 'with who' | $t a=y o$ | $\checkmark$ |
|  | 'in whose house' | $t a=y \tilde{a}$ | $\checkmark$ |
|  | 'whose' + N | ta-Peh | $\checkmark$ |
| 'what' | 'what' $+\mathrm{V}_{\text {tr }}$ | $\tilde{\imath}=y a$ | $\checkmark$ |
|  | 'what' + $\mathrm{V}_{\text {intr }}$ | $\tilde{\imath}=r a$ | $\checkmark$ |
|  | 'to what' $+\mathrm{V}_{\text {tr }}$ |  |  |
|  | 'with what' | $\tilde{\imath}=y o$ | $\checkmark$ |
| 'where' |  | pi-ah | $\checkmark$ |
|  |  | pi=kan | $\checkmark$ |
| 'when' | 'when' (past) | $\tilde{\imath}=$ kawar | $\checkmark$ |
|  | 'when' (perfective/future) | $\tilde{a}=h \tilde{l}$ | $\checkmark$ |
|  | 'at what time' | $\tilde{a}$-pe $=r i$ | $\checkmark$ |
| 'how' |  | $\tilde{\imath}=k a n(-k a)$ | $\checkmark$ |
| 'why' |  | $\tilde{i}=r e \int$ | * |
| 'what'/'which' |  | pi-ah=ra | $\checkmark$ |
| 'how much'/ |  | pif | $\checkmark$ |
| 'how many' |  |  |  |

Note. $\checkmark$ : acceptable; *: not acceptable.
The construction with $\tilde{\imath}=r e \int_{\text {' }}$ why' is the only one that is impossible. Instead the subordinator for reason $=r e f$ is used, as in (61a); that the $w h$-word is ungrammatical is seen in (61b).
a. árwấ òníh tàkàkìyó àrkàpáftè?ner̀ríréf ţîrí
[arwã onih ta-kaki=yo a-r-kapaf-te?-nã-er-ri=ref]
man dead POSS1-mother=COM/INS OBJ3SG-APPL.P-speak-come-go-SBJ3PL-PST=REAS
t $\int$ a-i-ri
be_there-SBJ3SG-PST
'There is some reason why the dead men came to speak with my mother and went away.' $\{\operatorname{txt}\}$
b. *îréf wép kàtừ $\int$ písrí pắskàrí
*[ĩ=ref we? katũf-Ø-pi=sri] Ø-pãs-k-a-ri

* DEM.PROX=REAS a_lot work-SBJ3SG-FUT=UNCRT OBJ3SG-find-K-SBJ1SG-PST
['I found a reason why he could work hard.']
When piah 'where' and pikan 'where, in which direction' are used (these are the only wh-expressions that can be used in both kinds of FRs), it is easy to distinguish between Ex-FRs and Max-FRs (§4.1.1): first, the tense of the verb is always the future in Ex-FRs; and second, the verb of the matrix clause in Ex-FRs is an existential predicate.


### 4.1.3. Free-Choice Free Relative Clauses

Free-choice free relative clauses (FC-FRs) are easily distinguishable from the two preceding FR types because the wh-expression is reduplicated. In Pesh, verbs and nouns may be reduplicated with an iterative meaning, and adjectives may be reduplicated to mark intensity. For FC-FRs, there are two possibilities: either only the $w h$-expression is reduplicated, as in (62), or the coordinator $=r i$ and the indefinite marker $=n a(\S 1.4)$ are added to each element, as in (63).
'Who'/Subject in the FC-FR:
(62) táré táŕ́ tókkīh $\int k u ́ k a ́ n ~ n a ̀ s p e ́ ~$

| $[$ ta=ra | ta=ra | tok-k-i $\left.\int-\varnothing-k a-i-w a=k a n\right]$ |
| :--- | :--- | :--- |
| DEM.DIST=ABS | DEM.DIST=ABS | enter-K-DES-OBJ3SG-make-SBJ3SG-PFV=DBT |
| nas-Ø-pi |  |  |
| jump.AFF-SBJ3SG-FUT |  |  |
| 'Whoever would like to enter will jump.' $\{t x t\}$ |  |  |

'Who'/Comitative in the FC-FR:
(63) tàyórínà tàyórínà tè ppísrí wípá

```
[ta=yo=ri=na
    ta=yo=ri=na
DEM.DIST=COM/INS=COORD=INDF DEM.DIST=COM/INS=COORD=INDF
    te?-\emptyset-pi=sri] wi-pa
    come-SBJ3SG-FUT=UNCRT dance-SBJ1SG.FUT
    'I will dance with whoever comes.'
```

Usually, the verb of the FC-FR is in the future tense. It can appear in another tense, but when this happens, the verb of the matrix clause must be in the future tense. The predicate may end with the uncertainty marker $=s r i$, as in (63), the dubitative $=k a n$, as in (62), or the certainty marker $=m a$, as in (67). The reading is generally that of indifference to available choices, but an ignorance reading is also a possible, as shown by (62).
In FC-FRs, the enclitic case of the $w h$-word always marks the role of the FR in the matrix clause. See examples (63), (69), and (73), where the two roles - the one in the FR and that in the matrix clause are different.
Fourteen of the seventeen $w h$-expressions are used in FC-FRs. Two of them appeared in examples (62) and (63); the other twelve are given in (64)-(74):

## 'Who'/Subject in the FC-FR:

(64) táyá táyá kàkòrspésrí kàkòrspí

| $[\mathbf{t a}=\mathbf{y a}$ | ta=ya | Ø-ka-kors- $\varnothing$-pi=sri] |
| :--- | :--- | :--- |
| DEM.DIST=ERG | DEM.DIST=ERG | OBJ3SG-APPL.R-write-SBJ3SG-FUT=UNCRT |
| Ø-ka-kors- |  |  |
| OBJ3Si |  |  |

'Who'/ Locative in the FC-FR:
(65) táyắrínà táyắrínà énpítífpísrí nằúh

$$
[\mathbf{t a}=\mathbf{y} \tilde{a}=\mathbf{r} i=\mathbf{n a} \quad \text { ta }=\mathbf{y} \tilde{a}=\mathbf{r i}=\mathbf{n a} \quad \text { ena }
$$

DEM.DIST=LOC=COORD=INDF DEM.DIST=LOC=COORD=INDF good
pi-tif-Ø-pi=sri] nã-u-h
OBJ2-become-SBJ3SG-FUT=UNCRT go-SBJ2SG-IMP
'Go to whichever house you'd like.'
'Who'/Genitive in the FC-FR:
(66) táPàrínà tápàrínà àkákì ờ:nípírísrí ừnàhárí

| [ta-Peh=ri=na | ta-Peh=ri=na |
| :---: | :---: |
| DEM.DIST-FT.POSS.PRO=COORD=INDF | DEM.DIST-FT.POSS.PRO=COORD=INDF |
| a-kaki on-n-i-pi-ri=sri] | ũ-yẽh-a-ri |
| POSS3SG-mother sleep-DUR-SBJ3S | UT-PST=UNCRT CAUS-say-SBJ1 SG-PST |
|  |  |

'What'/ Subject in the FC-FR:
(67) Î́yá Ĩyá bõnpémà énàtífpí

| [ĩ=ya | I=ya | bõ-n-Ø-pi=ma] |
| :---: | :---: | :---: |
| DEM.DIST=ERG | DEM.DIST=ERG | bloom-DUR-SBJ3SG-FUT=CRT |
| ena Ø-tif- $\varnothing$-pi |  |  |
| good OBJ3SG-b | ome-SBJ3SG- |  |
| 'No matter what blooms, it will be beautiful.' \{txt\} |  |  |

'What'/ Object in the FC-FR:
(68) îrĩ̛rí tàkàtùhúmà ăpấhắ?
[ $\mathbf{i}=\mathbf{r a} \quad \tilde{\mathbf{i}}=\mathbf{r a} \quad$ ta-ka-tuh-u-wa=ma]
DEM.PROX=ABS DEM.PROX=ABS OBJ1-APPL.R-cook-SBJ2-PFV=CRT
Ø-ã-pa=hã?
OBJ3SG-eat-SBJ1SG.FUT=FOC
'I will eat whatever you cook for me.'
'What'/ Instrumental in the FC-FR:
(69) Î̃yó Ĩyó tằyhúpékán kàtừ Cpa
[ĩ=yo $\quad$ ĩ=yo ta-ãyh-u-pi=kan]
DEM.PROX=COM/INS DEM.PROX=COM/INS OBJ1-give.OBJ1/2-SBJ2-FUT=DBT
katũf-pa
work-SBJ1SG.FUT
'I will work with whatever (instrument) you might give me.'

## 'When'/Temporal in the FC-FR:

(70) ắpérírnà ắpérírnà noั̀písrí nằpá
[ã-pe=ri=ri=na $\quad \tilde{\mathbf{a}}-p e=r i=r i=n a$
DEM.DIST-times=TEMP/MAN=COORD=INDF DEM.DIST-times=TEMP/MAN=COORD=INDF
nã-u-pi=sri] nã-pa
go-SBJ2-FUT=UNCRT go-SBJ1SG.FUT
'I will come at whatever time you're able to come.' \{txt \}
'Where'/ Locative in the FC-FR:
(71) pjáh pjā tè Jpāmò pròháwá:
[pi-ah pi-ah te $\left.\int-\mathrm{pa}=\mathrm{ma}\right] \quad$-proh-a-wa
place-NMLZ place-NMLZ travel-SBJ1SG.FUT=CRT OBJ3SG-look_for-SBJ1SG-PFV
'I am looking for anywhere to travel to.' \{txt \}
(72) píkánrínà píkánrínà ãPpárísrí òhárí
[pi=kan=ri=na $\quad$ pi=kan=ri=na $\quad$-ãp-pa-ri=sri]
place $=$ SIM $=$ COORD $=$ INDF place=SIM=COORD=INDF OBJ3SG-eat-SBJ1SG.FUT-PST=UNCRT
oh-a-ri
run-SBJ1SG-PST
'I was running to wherever I could eat (something).' \{txt \}
'Which'/ Object in the FC-FR:
(73) pìhàrà pĩ̀yằrà próhnằùmà àrkàpàhã́?
[pi-ah=ra pi-ah=ra $\quad$-proh-nã-u-wa=ma]
place=NMLZ=ABS place=NMLZ=ABS OBJ3SG-look_for-go-SBJ2-PFV=CRT
a-r-ka-pa=hã?
OBJ3SG-APPL.P-make-SBJ1SG.FUT=FOC
'I will hit whichever thing you go looking for.' \{txt \}
'How many'/'how much'/ Subject (quantity) in the FC-FR:
(74) pifrínà pifrínà nèpísrí doña Juana Carolina pàtàóhryềhwá [pif=ri=na pif=ri=na
how_many/much=COORD=INDF how_many/much=COORD=INDF
nã-i-pi=sri] doña Juana Carolina pa-ta-ohria Ø-yẽh- $\varnothing$-wa
go-SBJ3SG-FUT=UNCRT doña Juana Carolina INCL-POSS1-culture OBJ3SG-say-SBJ3SG-PFV
'Doña Juana Carolina talks about our culture to anyone who can come.' \{txt \}
Of the seventeen wh-expressions, fourteen can function in free-choice free relatives (Table 6).

Table 6. Distribution of $w h$-expressions in FC-FRs

| Basic meaning | Further specifications | Wh-expression | FC-FRs |
| :---: | :---: | :---: | :---: |
| 'who' | 'who' + $\mathrm{V}_{\text {tr }}$ | $t a=y a$ | $\checkmark$ |
|  | 'who' $+\mathrm{V}_{\text {intr }}$ | $t a=r a$ | $\checkmark$ |
|  | 'to who' $+\mathrm{V}_{\text {tr }}$ |  |  |
|  | 'with who' | $t a=y o$ | $\checkmark$ |
|  | 'in whose house' | $t a=y \tilde{a}$ | $\checkmark$ |
|  | 'whose' + N | ta-Peh | $\checkmark$ |
| 'what' | 'what' + $\mathrm{V}_{\text {tr }}$ | $\tilde{\imath}=y a$ | $\checkmark$ |
|  | 'what' $+\mathrm{V}_{\text {intr }}$ | $\tilde{\imath}=r a$ | $\checkmark$ |
|  | 'to what' $+\mathrm{V}_{\text {tr }}$ |  |  |
|  | 'with what' | $\tilde{\imath}=$ yo | $\checkmark$ |
| 'where' |  | pi-ah | $\checkmark$ |
|  |  | pi=kan | $\checkmark$ |
| 'when' | 'when' (past) | $\tilde{\imath}=$ kawar | * |
|  | 'when' (perfective/future) | $\tilde{a}=h \tilde{l}$ | * |
|  | 'at what time' | $\tilde{a}$-pe $=r i$ | $\checkmark$ |
| 'how' |  | $\tilde{\imath}=k a n(-k a)$ | n/a |
| 'why' |  | $\tilde{\imath}=r e \int$ | * |
| 'what'/'which' |  | $p i-a h=r a$ | $\checkmark$ |
| 'how much'/ |  | pif | $\checkmark$ |
| 'how many' |  |  |  |

Note. $\checkmark$ : acceptable; *: not acceptable; n/a: data not available.
As with Ex-FRs, the construction for $\tilde{\imath}=r e \int^{\prime}$ why' is not possible in FC-FRs; a subordinate clause is used instead. This is seen in (75a) with the subordinator $=r a s$ (a dialectal variation of $=r e f$ used in the Culmi dialect). The construction in (75b) is ungrammatical; according to my informants the only possibility is the construction in (75a).
(75) a. kàtừjkáwá éntátífkùrás
katũf-k-a-wa [ena ta-tif-k-Ø-wa=ras]
work-K-SBJ1SG-PFV good OBJ1-become-K-SBJ3SG-PFV=REAS
'I work because I like it.' \{txt \}
b. *î́réf î́réf éntátífkwásrí kàtừfpá
[ĩ=re $\quad \tilde{\mathbf{1}}=\mathrm{re} \int$ ena ta-tij-k- $\varnothing$-wa=sri]
DEM.PROX=REAS DEM.PROX=REAS good OBJ1-become-K-SBJ3SG-PFV=UNCRT
katũf-pa
work-SBJ1SG.FUT
['I work whether I like it or not.']
Contrary to Ex-FRs, in FC-FRs the constructions for 'when'-that is, $\tilde{\imath}=k a w a r$ for a past event, as in (76), and $\tilde{a}=h \tilde{\imath}$ for a perfective or future event, as in (77)-are also ungrammatical. My informants always propose constructions with the temporal subordinator $=m \tilde{a}$ instead, as in (78).
*î́kàwàr î́kàwàr paulina wàpírísrí kètfá tè?párí
[ĩ=kawar í=kawar Paulina wa-Ø-pi-ri=sri] ketfa
DEM.PROX=? DEM.PROX=? Paulina wake_up-SBJ3SG-FUT-PST=UNCRT yesterday
te?-pa-ri
come-SBJ1SG.FUT-PST
['Yesterday, I would have come whenever Paulina woke up.']
(77)
*ấhí ắhî́ tè?pímà nàpá
$[\tilde{\mathbf{a}}=\mathbf{h i ̃} \quad \tilde{\mathbf{a}}=\mathbf{h} \tilde{\mathbf{1}}$ te?- -pi=ma] na-pa
DEM.DIST=? DEM.DIST=? come-SBJ3SG-FUT=CRT go-SBJ1SG.FUT
['I will go whenever he comes.']
(78) nàpá tè ppímằ
na-pa [te2-Ø-pi=mã]
go-SBJ1SG.FUT come-SBJ3SG-FUT=when/if
'I will go when he comes.'
However, in FC-FRs, the temporal $w h$-expression that indicates a precise moment, $\tilde{a}=p e=r i$ ' $a t$ what time', is used, as was shown in (70).

### 4.1.4. Summary

A free relative construction that uses a $w h$-expression at its left edge and a subordinator at its right edge is used for maximal, existential, and free-choice FR clauses. Each of the constructions is distinguishable by features of the wh-expression and/or by certain restrictions regarding the tense of the verb in the free relative clause or the type of verb in the matrix clause. In Max-FRs, only the locative wh-words piah 'where' and pikan 'where, in which direction' can appear, as in the case of headed relative clauses with wh-expressions. In Ex-FRs a much wider range of different wh-words can be used, but there is a restriction since only the future tense is available for the FR verb. In FC-FRs, the whword is obligatorily reduplicated.
Table 7 shows the distributions of wh-expressions across clause types. Four points stand out. First, the two locative wh-words, which are the most widespread, appear in all types of clauses. Second, the wh-expressions for 'which', 'who', 'what', and 'how many, how much' appear in both Ex-FRs and FCFRs. Third, two $w h$-expressions for tense, $\tilde{\imath}=k a w a r$ and $\tilde{a}=h \tilde{l}$ 'when', show a different behavior according to the type of FR in which they appear: they can never appear with headed RCs and MaxFRs, but are in fact used with Ex-FRs (interestingly, only the more precise $w h$-word $\tilde{a}-p e=r i$ 'at what time' can be used in FC-FRs). And fourth, the wh-word $\tilde{\imath}=r e \int^{\text {' }}$ why' is not used in relative clauses at all. Data are not available for the $w h$-expression $\tilde{\imath}=k a n$ 'how' in FC-FRs.

Table 7. Distribution of $w h$-expressions across constructions

| Basic meaning | Further specifications | Whexpression | Headed RCs | $\begin{aligned} & \text { Max- } \\ & \text { FRs } \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline \text { Ex- } \\ & \text { FRs } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { FC- } \\ & \text { FRs } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'who' | 'who' + $\mathrm{V}_{\text {tr }}$ | $t a=y a$ | * | , | $\checkmark$ | $\checkmark$ |
|  | $\begin{aligned} & \text { 'who' }+\mathrm{V}_{\text {intr }} \\ & \text { 'to who' }+\mathrm{V}_{\mathrm{tr}} \end{aligned}$ | $t a=r a$ | * | * | $\checkmark$ | $\checkmark$ |
|  | 'with who' | $t a=y o$ | * | * | $\checkmark$ | $\checkmark$ |
|  | 'in whose house' | $t a=y \tilde{a}$ | * | * | $\checkmark$ | $\checkmark$ |
|  | 'whose' + N | ta-Peh | * | * | $\checkmark$ | $\checkmark$ |
| 'what' | 'what' + $\mathrm{V}_{\text {tr }}$ | $\tilde{\imath}=y a$ | * | * | $\checkmark$ | $\checkmark$ |
|  | $\begin{aligned} & \text { 'what' }+\mathrm{V}_{\text {intr }} \\ & \text { 'to what' }+\mathrm{V}_{\text {tr }} \end{aligned}$ | $\tilde{\imath}=r a$ | * | * | $\checkmark$ | $\checkmark$ |
|  | 'with what' | $\tilde{\imath}=y o$ | * | * | $\checkmark$ | $\checkmark$ |
| 'where' |  | pi-ah | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
|  |  | pi=kan | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| 'when' | 'when' (past) | $\tilde{\imath}=$ kawar | * | * | $\checkmark$ | * |
|  | 'when' (perfective/future) | $\tilde{a}=h \tilde{l}$ | * | * | $\checkmark$ | * |
|  | 'at what time' | $\tilde{a}-p e=r i$ | * | * | $\checkmark$ | $\checkmark$ |
| 'how' |  | $\tilde{\imath}=k a n(-k a)$ | * | * | $\checkmark$ | n/a |
| 'why' |  | $\tilde{i}=r e ¢$ | * | * | * | * |
| 'what'/'which' |  | $p i-a h=r a$ | * | * | $\checkmark$ | $\checkmark$ |
| 'how much'/ <br> 'how many' |  | pif | * | * | $\checkmark$ | $\checkmark$ |

Note. $\checkmark$ : acceptable; *: not acceptable; n/a: data not available.

Ex-FRs and FC-FRs show a relevant difference according to the role of the wh-expression: in ExFRs, the enclitic case of the $w h$-expression marks the role of the $w h$-expression in the FR, whereas in FC-FRs, the enclitic case of the $w h$-expression marks the role of the FR in the matrix clause.

### 4.2. Headless Relative Clauses That Lack a Wh-expression

In headless relative clauses that lack a $w h$-expression, a case marker or else the topic marker is found to the right edge of the RC , as in headed relative clauses that lack wh-expressions (see §3). Two types will be described: first, light-headed relative clauses (§4.2.1), and second, headless relatives without a light head or a $w h$-expression (§4.2.2).

### 4.2.1. Light-Headed Relative Clauses

Light-headed relative clauses (LHRs) behave like headed relative clauses that lack wh-expressions (§3). The enclitic that occurs at the end of an LHR may be a case marker or the topic marker. When the light head is a genitive or an argument in the LHR, the enclitic corresponds to the syntactic role of the light head in the matrix clause (MC), as comitative/instrumental, seen in (79).

Medial demonstrative 'to?': Subject in the LHR; Instrumental in the MC:
(79) tó? tàkàtfùwáyó kàtừ jkáwá
[to? ta-ka-t a-i-wa]=yo katũf-k-a-wa DEM.MED OBJ1-APPL.R-be_there-SBJ3SG-PFV=COM/INS work-K-SBJ1SG-PFV
'I work with the one I have always worked with.' \{txt \}
If the light head functions as the genitive and the subject in the LHR, the marker $=m a$ is used, as seen in (80), (81). In such a context, this marker does not indicate the topic, as no opposition with focus is possible. The alignment in light-headed relatives is nominative-accusative (see $\S 3$ for headed relative clauses and Chamoreau, forthcoming.b). The marker $=m a$ is the nominative marker and it is used unambiguously for the subject and the genitive.

Distal demonstrative ' $\tilde{a}$ ': Subject in the LHR and in the MC:
(80) ã̀ tốfkừmārĕ̀ pàtàsyắhí::

| $[\tilde{\mathbf{a}}$ | ta- $\tilde{\sim} \int-\mathrm{k}-\varnothing$-wa] $=\mathbf{m a}=\mathbf{r e}$ | pa-tas=yã=hi |
| :--- | :--- | :--- |
| DEM.DIST | MID-lose-K-SBJ3SG-PFV=NOM=? | INCL-PRO1=LOC=COP.SBJ3SG.PFV |

'What has been lost (i.e., the Pesh language) has been lost with you (i.e., your generation).' \{txt $\}$

Medial demonstrative 'to?': Genitive in the LHR; Subject in the MC:
(81) tó? àwằrí kà?yè?ímà àsìrà énẽpé

$$
\begin{aligned}
& \text { [to? a-wãri } \quad \text {--kaP-ye?-Ø-i]=ma a-sira ena } \\
& \text { DEM.MED POSS3SG-pig OBJ3SG-make-small-SBJ3SG-PFV=NOM POSS3SG-food good } \\
& \text { Ø-ã-Ø-pi } \\
& \text { OBJ3SG-eat-SBJ3SG-FUT } \\
& \text { 'The one whose sow gave birth will eat well.' }
\end{aligned}
$$

The three demonstrative pronouns, medial toP, as in (81), distal $\tilde{a}$, as in (80), and proximal $\tilde{l}$, as in (82), can function as light heads.

## Proximal demonstrative ' $\imath$ ': Subject in the LHR; Manner in the MC:

(82) ãnã ĩtf1́íkàn sài
$[$ ã=yã $\tilde{\text { a }}$ tfa-i-i] $=\mathbf{k a n} \quad \mathrm{sa}=\mathrm{i}$
DEM.DIST=LOC DEM.PROX be_there-SBJ3SG-PST=SIM rock=COP.SBJ3SG.PFV
'What seems to be here is a stone.' $\{t \mathrm{txt}\}$

Light heads are generally demonstratives; cf. (80)-(82). The quantifier 'all', seen in (83), and the numeral 'one', in (84), can also introduce LHRs, but these elements are very infrequent.

Quantifier 'krih' ('all'): Object in the LHR and in the MC:
(83) kètfá krìh tùhúrímà aั̀ áfí
$\begin{array}{llll}{[\text { ket } f a} & \text { krih } & \emptyset \text {-tuh-u-ri]=ma } & \text { Ø-ã2-a-fi } \\ \text { yesterday } & \text { all } & \text { OBJ3SG-cook-SBJ2-PST=TOP } & \text { OBJ3SG-eat-SBJ1SG-PST.REC }\end{array}$
'I ate all (the things) you cooked yesterday.' \{txt \}

Numeral 'as' ('one'): Subject in the LHR; Instrumental in the MC:
(84) kàpákàpá ás tàkàtfúáyó kàtừfkáwá
[kapakapa as ta-ka-t $\left.\int a-\emptyset-w a\right]=\mathbf{y o}$ katũf-k-a-wa
always one OBJ1-APPL.R-be_there-SBJ3SG-PFV=COM/INS work-K-SBJ1SG-PFV
'I work with the one (machete) that I have always had.' \{txt \}
The light head usually has the role of an argument (or genitive) in the LHR, as seen in (79)-(84), but occasionally it can have another role, as in (85), (86). In this context, the marker corresponds to the syntactic role of the light head in the LHR.

Medial demonstrative 'to?': Comitative in the LHR; Object in the MC:
(85) tó? tè?kúríyó kàhírtáwá
[to? te?-k-u-ri=yo] ka-hir-a-tV-wa
DEM.MED come-K-SBJ2-PST=COM/INS OBJ3PL-know-SBJ1SG-NEG-PFV
'I don't know (that one) with whom you came.' \{txt \}
Proximal demonstrative ' $\mathfrak{\imath}$ ': Manner in the LHR; topicalized subject in the MC:
(86) ĩ kàtùhúkánmà tàhtétwá

| $[\tilde{1}$ | Ø-ka-tuh-u-wa=kan=ma] | ta-hte- $\varnothing$-tV-wa |
| :--- | :--- | :--- |
| DEM.PROX | OBJ3SG-APPL.R-cook-SBJ2-PFV=SIM=TOP | OBJ1SG-like-SBJ3SG-NEG-PFV |

'I don't like this way you cook it.' \{txt\}
For LHRs, the accessibility to different roles is wide: the only role that has not been found is the locative; cf. (87a). In example (87b) the combination of the proximal demonstrative and the locative case $\tilde{\imath} y \tilde{a}$ means 'here'. The resulting construction is the headless relative clause in ( 87 c ), which will be discussed in §4.2.2.
(87) a. î́t tfàúnãtè?kí
*[ĩ tya-a-wa=yã] te?-k-Ø-i

* DEM.PROX be_there-SBJ1SG-PFV=LOC come-K-SBJ3SG-PST
['He came to the place where I am.']
b. Ĩ́yấ tfâúnãtè $\mathrm{Pkí}$

| $[\tilde{1}=y a ̃$ | $\left.t \int a-a-w a=y a ̃\right]$ | te2-k- $\emptyset-i$ |
| :--- | :--- | :--- |
| DEM.PROX=LOC | be_there-SBJ1SG-PFV=LOC | come-K-SBJ3SG-PST |

c. tfâúnãà̀ekí
[tfa-a-wa=yã] te?-k-Ø-i
be_there-SBJ1SG-PFV=LOC come-K-SBJ3SG-PST
'He came where I am.'
Table 8 shows the accessibility to different roles for light-headed RCs.

Table 8. Accessibility for relativization to different syntactic roles in LHRs

| Strategy | SBJ | OBJ ( $1^{\circ} / 2^{\circ}$ ) | GEN | INS | COM | MAN | LOC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LHRs | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | * |

Note. $\checkmark$ : acceptable; *: not acceptable; OBJ $\left(1^{\circ} / 2^{\circ}\right)$ : primary and secondary objects.

### 4.2.2. Headless Relative Clauses Without a Light Head or Wh-expression

In headless relative clauses without a light head or wh-expression (Ø-HRs), a case or topic marker occurs in clause-final position. This is a very frequent strategy used for definite-like maximal headless relative clauses. Various types of syntactic role are possible, as shown in (88)-(94):

Subject in the $\emptyset-H R$ and in the $M C$ :
(88) kàpáfkúmà tàyèrí
[kapa $\int-\mathrm{k}-\varnothing$-wa=ma] ta-ye?=i
speak-K-SBJ3SG-PFV=NOM ${ }^{9}$ POSS1-small=COP.SBJ3SG.PFV
'The one who is speaking is my daughter.' $\{$ txt $\}$
Object in the $\emptyset-H R$ and in the $M C$ :
(89) tùhúrímà aั̀ Páfí
[Ø-tuh-u-ri=ma] Ø-ã?-a-fi
OBJ3SG-cook-SBJ2-PST=TOP OBJ3SG-eat-SBJ1SG-PST.REC
'I ate what you cooked.' \{txt \}
Object in the Ø-HR and in the MC:
(90) jez̃herìrà kàrnāwî̀
[Ø-yẽh-er-i=ra] $\quad$-ka-er-i=na=wĩ
OBJ3SG-say-SBJ3PL-PST=ACC OBJ3SG-make-SBJ3PL-PST=REP=long_ago
'Long ago, they said that they made what they said.' \{txt \}
Comitative in the $\emptyset-H R$ and in the $M C$ :
(91) wî?túpíríyó wî?túrí
[wił-t-u-pi-ri=yo] wił-t-u-ri
dance-DUR-SBJ2-FUT-PST=COM/INS dance-DUR-SBJ2-PST
'You danced with the one you were going to dance with.' \{txt $\}$
Instrumental in the $\varnothing$-HR; object in the MC:
(92) tàyè? kàtứfkúyó àkiốh kàárí
[ta-ye? katũf-k-i-wa=yo] akiõh Ø-ka-a-ri
POSS1-small work-K-SBJ3SG-PFV=COM/INS edge OBJ3SG-make-SBJ1SG-PST
'I sharpened the one that my son uses to work with.' \{txt \}

[^5]Manner in the Ø-HR; object in the MC:
(93) kàtùhúkán tàhtétwá
[Ø-ka-tuh-u-wa=kan] ta-hte-Ø-tV-wa
OBJ3SG-APPL.R-cook-SBJ2-PFV=SIM OBJ1SG-like-SBJ3SG-NEG-PFV
'I don't like the way you cook it.' \{txt \}

## Locative in the $\emptyset-H R$; object in the $M C$ :

(94) tSóríyắ t tằbrí
[t $\mathfrak{a}-\mathrm{u}-\mathrm{ri}=\mathbf{y a ̃}] \quad$ Ø-t f ã-ber-i
be_there-SBJ2-PST=LOC OBJ3SG-see-SBJ1PL.EXCL-PST
'We saw where you were born.' \{txt\}
The accessibility to different roles is different for Ø-HRs than LHRs. As with the examples in (87), the locative is not available for LHRs, but it is for Ø-HRs, as seen in (94). Conversely, the genitive is available for LHRs but not for $\emptyset$-HRs, as seen in (95a). This is probably due to the fact that in Ø-HRs, the possessor cannot be expressed. For this case, my informants proposed a LHR, namely (95b).
(95) a. *àkákì oั̀:nímà carbonã àsùwáyó nềtfúá
[a-kaki ö-n- $\emptyset-\mathrm{i}]=\mathrm{ma} \quad$ Carbon=yã

POSS3SG-mother sleep-DUR-SBJ3SG-PST=NOM Carbon=LOC
a-suwa=yo nã-tfa- $\emptyset$-wa
POSS3SG-grandmother=COM/INS go-be_there-SBJ3SG-PFV
['(The one) whose mother died is going to live in Carbon with his grandmother.']
b. tó? àkákì ồ:nímà carbonã àsùwáyó nềtfúá

| [to? | a-kaki | õ-n-Ø-i]=ma | Carbon=yã |
| :---: | :---: | :---: | :---: |
| DEM.MED | POSs3SG-mother | sleep-DUR-SBJ3SG-PST=NOM | Carbon=LOC |
| a-suwa=yo |  | nã-t¢a-Ø-wa |  |
| POSS3SG-gr | andmother=COM | NS go-be_there-SBJ3SG-PFV |  |
| he one | se mother | oing to live in Carbon | andm |

Table 9 shows the accessibility to different roles for $\emptyset$-RCs.
Table 9.
Accessibility for relativization to different syntactic roles in Ø-HRs

| Strategy | SBJ | OBJ (1 $\left.\mathbf{1}^{\mathbf{2}}{ }^{\mathbf{}}\right)$ | GEN | INS | COM | MAN | LOC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\varnothing$-HRs | $\checkmark$ | $\checkmark$ | $*$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |

Note. $\checkmark$ : acceptable; *: not acceptable; OBJ $\left(1^{\circ} / 2^{\circ}\right)$ : primary and secondary objects.

## 5. Conclusion

Pesh possesses two types of headless relative constructions: the first type, free relative clauses, uses a wh-expression at the left edge and a subordinator at the right edge of the RC. This construction manifests itself in three subtypes: maxima, existential, and free-choice FRs. Its structure is similar to that of headed relative clauses with a wh-word. The second type of headless relative clauses-LHRs
and $\emptyset$-HRs—lacks a wh-expression and may or may not contain a light head; here the topic marker rather than a subordinator is found at the right edge of the construction. Tables 10 and 11 compare the two types with respect to their accessibility to different syntactic roles. The higher frequency of headless relatives without wh-expression correlates with the higher frequency headed relative clauses without $w h$-expression.

Table 10. Free relative clauses: Accessibility to syntactic roles by means of a wh-expression

| Construction |  | SBJ | OBJ ( $1^{\circ} / 2^{\circ}$ ) | GEN | INS | COM | MAN | LOC | QUANT | REAS | TEMP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Headed RCs |  | * | * | * | * | * | * | $\checkmark$ | * | * | * |
| FRs | Max. | * | * | * | * | * | * | $\checkmark$ | * | * | * |
|  | Ex. | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | * | $\checkmark$ |
|  | FC | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | n/a | $\checkmark$ | $\checkmark$ | * | $* / \checkmark$ |

Note. $\checkmark$ : acceptable; *: not acceptable; n/a: data not available.

Table 11. LHRs and $\emptyset$-HRs: Accessibility to syntactic roles without using a wh-expression

| Construction | SBJ | OBJ <br> $\left(\mathbf{1}^{\mathbf{0}} \mathbf{2}^{\boldsymbol{o}}\right)$ | GEN | INS | COM | MAN | LOC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Headed RCs | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| LHRs | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $*$ |
| Ø-HRs | $\checkmark$ | $\checkmark$ | $*$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |

Note. $\checkmark$ : acceptable; $*^{*}$ not acceptable; OBJ $\left(1^{\circ} / 2^{\circ}\right)$ : primary and secondary objects.

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[^0]:    ${ }^{1}$ The data consist of 40 hours of narratives, procedural texts, conversations, and discussions during workshops with members of the community, plus data elicited by asking questions about visual stimuli.

[^1]:    ${ }^{2}$ In the Pesh examples in this chapter, the first line represents a phonetic transcription. The accents indicate types of stress and tone, and the tilde indicates nasalization. The second line gives the phonological transcription without stress/tone marks, the third the morpheme-by-morpheme glosses, and the fourth the English translation. In some examples, an extra line occurs between the first one and the second one in which the main syntactic roles are highlighted.
    ${ }^{3}$ Abbreviations not listed in the Leipzig Glossing Rules: CONT: container (nominalizer); CRT: certainty subordinator; DES: desiderative; DBT: dubitative subordinator; EHRC: externally headed relative clause; FT: formative; IHRC: internally headed relative clause; K: unknown suffix; MC: matrix clause; MED: medial; MID: middle; MIR: mirative; NUM: numeral; PRO: pronoun; PSB: possibility; QUANT: quantifier; R: recipient; RC: relative clause; REAS: reason; REC: recent; REP: reportative; SIM: simulative; TEMP/MAN: temporal/manner; UNCRT: uncertainty subordinator; WH: constituent question marker; Y/N: polar question marker.
    ${ }^{4}\{\mathrm{txt}\}$ means that the example comes from the corpus. For examples that come from elicited data, nothing is indicated.
    5 "Flagging" is the operation of using/marking a substantive/pronoun by a case marker.

[^2]:    ${ }^{6}$ The Sisimite is a mythological character in Central America. He is described as a hairy monster with manlike characteristics and feet that are turned backwards, who kidnaps women to take them into his cave.

[^3]:    ${ }^{7}$ The co-occurrence of the subordinator =kan and the marker of weak possibility =wã? expresses that there is both a doubt and a weak possibility that the event described in the clause will take place or has taken place.

[^4]:    ${ }^{8}$ In headed relative clauses, the alignment is nominative-accusative (Chamoreau, forthcoming.b).

[^5]:    ${ }^{9}$ The alignment is nominative-accusative as for headed relative clauses and light-headed relative clauses.

