

Non-witnessed evidentiality in Tuparí and its connection to resultative constructions in the perfect aspect

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Abstract

Tupían languages typically mark evidentiality through freestanding particles located in a predicate- or clause-peripheral position. In Tuparí, however, non-witnessed evidentiality is realized by a bound verbal suffix (*-pnẽ/-psira*). This article draws upon original fieldwork to offer a detailed description and analysis of *-pnẽ/-psira*. I argue that using *-pnẽ/-psira* presupposes commitment to the proposition *p* on the part of the speaker. This analysis explains the incompatibility between *-pnẽ/-psira* and clause-typing particles that signal doubt or uncertainty; furthermore, it accounts for how the witnessed/non-witnessed contrast projects out of embedded clauses. This article also puts forth an explanation for the historical origin of *-pnẽ/-psira*. A separate suffix, resultative *-psẽ/-pnẽ/-psira*, is partially homophonous with the evidential but differs from it on several diagnostics. I propose that resultative constructions in the perfect aspect ('the snake is in the state of having died') were reinterpreted as non-firsthand statements in the past tense ('the snake died [NON-WITNESSED]').¹

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Lowland South American languages possess some of the most elaborate systems of grammaticalized evidentiality in the world. Particularly famous cases come from northwest Amazonia, where the elaborate systems of the Eastern Tukanoan languages (Barnes 1984, 1999; Stenzel 2008; Stenzel and Gómez-Imbert 2018) and of their non-Tukanoan neighbors (Aikhenvald 2003; Epps 2005) are found. Complex evidential systems occur in other lowland South American families, as well, including Panoan (Valenzuela 2003; Fleck 2007; Munro et al. 2012) and Nambikwaran (Kroeker 2001; Telles and Wetzels 2006; Eberhard 2012, 2018). Evidentiality in many Tupían languages, meanwhile, remains little described, even though Tupían is one of South America’s largest families both in terms of geographic dispersion and sheer number of languages (Urban 1996; Vander Velden 2010; Rodrigues and Cabral 2012; Eriksen and Galucio 2014). Those Tupían varieties which do possess grammaticalized evidentiality typically mark the category via free rather than bound morphology – see, for example, Seki (2000) on Kamaiurá, Tonhauser (2014) and Velázquez-Catillo (2017) on Paraguayan Guaraní, and Gabas Jr. (1999) on Karo. Outside of the large Tupi-Guaraní branch, the most detailed study of evidentiality in a Tupían language that I know of is Chaves Alexandre (2017), a masters thesis on Karitiana which builds on the empirical foundation provided by Storto (1999, 2001).

The goal of this article is to contribute to our understanding of evidentiality in the Tupían family by examining how this category is realized in Tuparí [ISO: tpr], an endangered language spoken in the Brazilian state of Rondônia by approximately 350 people. Tuparí marks evidentiality via the bound verbal suffix *-pnẽ/-psira*, which occupies a fixed position inside of tense morphology and which agrees in number with the subject. In this respect the language diverges strikingly from the broader Tupían strategy of using clause- or predicate-peripheral evidential particles.

I advance the following claims in this article. First, the suffix *-pnẽ/-psira* sits immediately inside of tense morphology in the Tuparí predicate. Translating into the syntax, the projection headed by *-pnẽ/-psira* – the Evidential Phrase – occupies a position above positional and aspectual auxiliaries but below the Tense Phrase. Second, the witnessed/non-witnessed distinction must be made in all past tense declarative clauses. Outside of declaratives the availability of *-pnẽ/-psira* depends on clause type: the witnessed/non-witnessed distinction is neutralized by clause-typing particles that express doubt, uncertainty, or ignorance. The incompatibility between the evidential distinction and this specific subset of clause-typing particles arises because using *-pnẽ/-psira* presupposes the speaker’s commitment to the proposition *p*. Finally, evidential *-pnẽ/-psira* is partially homophonous with the resultative suffix *-psẽ/-pnẽ/-psira*. Resultative *-psẽ/-pnẽ/-psira* is a non-obligatory morpheme which shows sensitivity to lexical aspect, encodes a positional contrast with singular subjects, and occupies a low syntactic position. I argue that it served as the historical source for *-pnẽ/-psira*, which resides in the clause’s inflectional layer. Diachronically, resultative constructions in the perfect aspect (‘the snake is in the state of having died’) were reinterpreted as

non-firsthand statements in the past tense (‘the snake died [NON-WITNESSED]’).

This article is organized as follows. Section 1 provides background on the study of evidentiality and Section 2 summarizes what has been said about evidentiality in previous descriptive work on Tuparí. Section 3 then describes the morphophonological properties of *-pnẽ/-psira* and the position of this suffix within the language’s clause structure. Section 4 describes and analyzes how *-pnẽ/-psira* interacts with set of second position clause-typing particles. Section 5 details the behavior of the witnessed/non-witnessed distinction in finite embedded clauses and argues that *-pnẽ/-psira* is licit only when the speaker’s commitment to the proposition *p* is presupposed. The historical origins of Tuparí evidentiality are addressed in Section 6, which argues that *-pnẽ/-psira* developed out of resultative *-psẽ/-pnẽ/-psira*. Section 7 concludes. The online appendix addresses the interpretive effects of combining *-pnẽ/-psira* with first person subjects and with negative morphology.

All of the data discussed in this paper were collected by me over the course of ten months of on-site fieldwork in the Brazilian state of Rondônia. A major source of these data are the stories included in *Wan Tupari Ema’en Nika!* (Tupari et al. 2016), a literacy workbook which I co-edited together with three indigenous schoolteachers: Geovane Kamarom Tupari, Isaias Tarimã Tupari and Raul Pat’awre Tupari. I have also made use of several texts collected since that workbook was completed and of my corpus of excerpts from everyday conversation. Elicitation has been used to test the grammatical well-formedness and pragmatic felicity of the conversational data. Non-elicited examples from texts and conversation are prioritized throughout this paper as part of a broader attempt to create a documentary record for Tuparí that is both culturally informed and culturally informative (see Mithun 2001 and Hill 2006:613–614 for useful discussion). Because of the deictic nature of evidential marking, I provide explicit discourse contexts for many examples.

1 Background on evidentiality

This article follows much typological and formal work by defining evidentiality as the grammaticalized marking of the source of information that the speaker has for making a statement (see Jakobson 1957/1971; Chafe and Nichols 1986; Willett 1988; Aikhenvald 2004, 2018; Brugman and Macaulay 2015; Murray 2017, among others). As those authors note (see especially the recent work by Aikhenvald and by Brugman and Macaulay), this definition includes two key components. First, evidentiality proper has as its semantic core the notion of source of evidence. While morphemes that meet this criterion may also contribute other kinds of meaning – such as aspect, tense, epistemic confidence, or some combination of these – only those that primarily indicate source of evidence can be considered evidentials. Second, evidentiality proper is taken to be grammatical rather than lexical; it is canonically expressed via bound morphology rather than as a freestanding adverbial. Hence optional elements like the English adverbs ‘allegedly’ or ‘reportedly’ are not

considered grammatical evidentials *sensu stricto*.

Disentangling epistemic modals and evidentials from one another constitutes a major descriptive and analytic challenge for many languages (see Matthewson 2012 and references therein). In Tuparí such disentangling is not difficult to accomplish, as the sole function of *-pnẽ/-psira* is to mark whether a past tense occurrence was witnessed or not. The speaker’s attitude or epistemic stance, meanwhile, is expressed via the set of second position clause-typing particles. These particles separate certain speech acts from one another and can also indicate the degree of commitment that the speaker has to the proposition *p*: *nãkop* ‘maybe’ signals little to no commitment to *p*, *pa’a/ta’a* ‘assertive’ highlights the speaker’s confidence in *p*, and so on. As shown in Section 4, these particles form a single closed class and are located in a much higher syntactic position than the one occupied by *-pnẽ/-psira*. In short, the clausal organization of Tuparí cleanly separates epistemic and evidential markers from one another; *-pnẽ/-psira* is the only morpheme whose main function is to mark source of evidence.

2 Prior descriptions of evidentiality in Tuparí

In the earliest descriptive work on the Tuparí language, Caspar and Rodrigues (1957:§3.3.4.3.4) identify a suffix, *=na*, whose meaning they describe as follows:² “With the suffix *=na* the null-stem constructs a form that expresses the past in general, but its more exact meaning is perhaps *permansiv*, that is, it means that the subject or object always finds itself in a completed state. . .” Caspar and Rodrigues offer several sentences that include this suffix, but their translations do not include any indication of non-witnessed semantics.

Alves (2004:§4.3.2.2) correctly identifies the basic meaning of the evidential morpheme: “The evidential suffix is used in those situations where the speaker did not witness the event.” She also recognizes that the evidential morpheme contains an initial labial, contrasting the allomorphs *na*, *pna* and *mna* against one other. However, her analysis does not disentangle the singular evidential suffix from the theme vowel *-a*, and it omits the plural form.

Seki (2001) includes several examples where the singular evidential suffix is present. The suffix is glossed as *AUX* in these examples and the translations do not indicate the non-witnessed interpretation. Seki also gives one example where the evidential is treated as part of the verbal root itself: *Amẽko-t kur-et õpopna* ‘The jaguar killed the boy’. Complete segmentation of the verbal word in this example would involve three distinct morphemes:³

²Thank you to Andrew Malilay White for assistance with the German. For the examples cited in this section from Caspar and Rodrigues (1957), Seki (2001) and Alves (2004), I follow the authors’ original orthographic choices. The translations from Portuguese are my own, as is the highlighting of specific morphemes.

³All examples are given in a four-line format. The first line shows the standard orthography approved by the indigenous schoolteachers and utilized in Tupari et al. (2016). The second line gives a morpheme-by-morpheme breakdown; the underlying vowels that are deleted on the surface by the theme vowel *-a* and related affixes are in-

- (1) *Amēkot kuret ōpopnā.*
 amēko-t kut-et **ōpo-pnē-a**
 jaguar-NUC child-NUC **kill-EVID:SG-TH**
 ‘The jaguar killed the boy (NON-WITNESSED).’ (from Seki 2001:305)

I do not know of any other mention in the literature of evidential marking in Tuparí.

3 Basic morphophonology and morphosyntax of *-pnē/-psira*

The evidential suffix in Tuparí agrees with the subject in number. Both the singular and plural evidentials have several phonologically conditioned allomorphs. The allomorphy shown in this ta-

Table 1: Allomorphy of the singular and plural evidential suffixes

	After an oral vowel	After a nasal vowel	After a consonant
SINGULAR	<i>-pnē</i>	<i>-mnē</i>	<i>-nē</i>
PLURAL	<i>-psira</i>	<i>-msira</i>	<i>-sira</i>

ble follows straightforwardly from two general processes at work in Tuparí phonology (Singerman 2016, 2018a). First, oral consonants nasalize in coda position following nasal vowels. Second, $C_1C_2C_3$ sequences are simplified to C_1C_3 , with the two surviving consonants syllabified into different syllables.

(2) Two phonological processes affecting the realization of the evidential

- a. Nasalization of oral coda consonants:

$$C_{[-nasal]} \rightarrow C_{[+nasal]} / V_{[+nasal]} \text{ ----}$$

- b. Consonant cluster simplification:

$$C_1C_2C_3 \rightarrow C_1.C_3$$

cluded. Morpheme-by-morpheme glosses generally do not indicate null morphemes, though the third person proclitics and the third person enclitics have null allomorphs. These are marked with \emptyset . The letter *y* represents a palatal glide. This glide is nasalized when adjacent to a nasal vowel; in coda position following an oral vowel, it is realized as [c^ɰ]. The apostrophe marks glottal stops; grave accents mark long vowels.

Abbreviations used in glosses: \wp = female speech only, σ = male speech only, 1 = first person, 2 = second person, 3 = disjoint third person, 3C = coreferent third person, ADV.FOC = adverbial focus, AUX = auxiliary, AUX_{GO} = member of the auxiliary series related to the lexical verb ‘go’, AUX_{habit} = temporally unspecified habitual auxiliary, AUX_{present} = present habitual auxiliary, COM = comitative-causative, DUR = durative, EVID = evidential, EXCL = exclusive, HZNTL = horizontal, INCL = inclusive, INS = instrumental-lative case, LOC = locative case, NEG = negation, NMZ = nominalizer, NUC = nuclear case (obligatory on all NP subjects), OBL = oblique case, PAUC = paucal, PL = plural, PROG = progressive, PURP = purposive subordinator, RSLT = resultative, SG = singular, TH = theme vowel, VBZ = verbalizer, VRTCL = vertical. Additional abbreviations: AgrSP = subject agreement phrase, C = consonant, CP = Complementizer Phrase, EvidP = Evidential Phrase, NP = Noun Phrase, TP = Tense Phrase, V = vowel, VP = Verb Phrase, ν P = phrase that introduces the external argument, *wh* = formal feature that defines content interrogatives, XP = syntactic phrase of any category. Per *IJAL* glossing practices, a colon is used with portmanteau morphs (i.e., EVID:SG is the gloss for singular evidential *-pnē*).

Applied together, these two processes correctly predict that the initial labial of the singular and plural evidential suffixes will be realized as [p] after oral vowels and as [m] after nasal vowels but will be deleted altogether after consonants. Various other suffixes follow the exact same pattern, including possessive *-psiro/-msiro/-siro* and resultative *-psē/-pnē/-psira*.

The suffix *-pnē/-psira* occupies a fixed position in the Tuparí clause: it attaches to the highest verbal head. This verbal head will be the lexical verb itself in clauses that lack an auxiliary.

(3) Evidential *-pnē/-psira* attaches to the highest verbal head

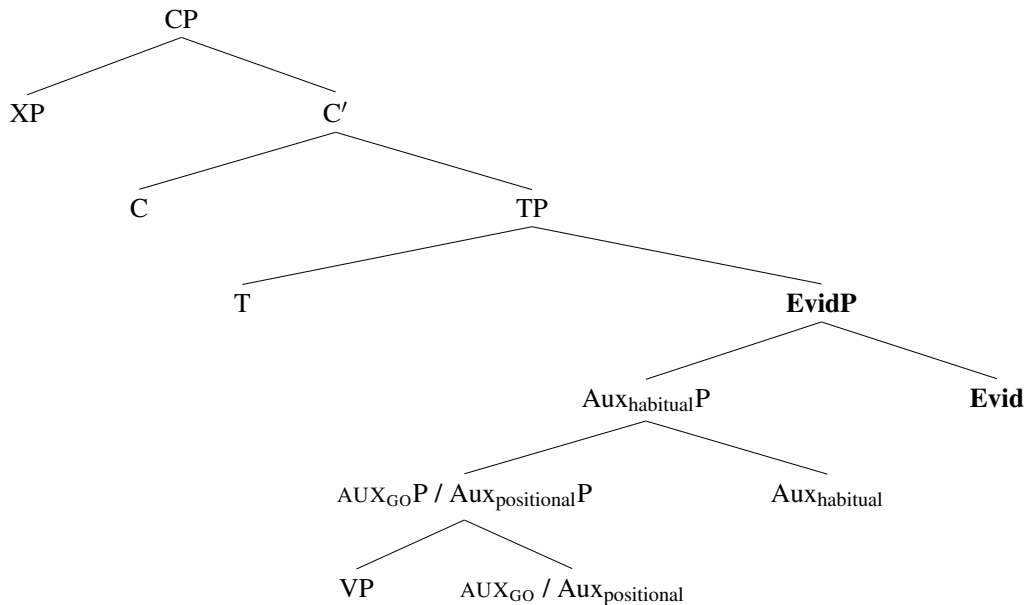
- a. *Easat* *mākērō* *tea'usi patnan?*
 e-asa-t mākērō te-a'usi pat-**nē**-a-n
 2SG-older.brother-NUC confirmative 3C-wife marry-**EVID:SG-TH-NEAR.PAST**
 ‘Your older brother got married, right (NON-WITNESSED)?’
 casual discourse: 2017-08-04
- b. *Pot'at* *tearopkà* *teakapsirat.*
 pot'a-t te-arop-ko-a te-aka-**psira**-a-t
 peccary-NUC 3C-food-eat-TH 3C-AUX_{habit}:PL-**EVID:PL-TH-NEAR.PAST**
 ‘The peccaries were eating their food (NON-WITNESSED).’
 text: Nilson Tupari, narrator
- c. *Ototot* *ōpot* *waohi'anã* *tero'a*
 o-toto-t ōpot wao-hi'a-nē-a tero'e-a
 1SG-grandfather-NUC DISTANT.PAST caiman-like-VBZ-TH AUX_{GO}:SG-TH
te'ekapnã.
 te-'eka-**pnē**-a
 3C-AUX_{habit}:SG-**EVID:SG-TH**
 ‘My grandfather used to like caiman (NON-WITNESSED).’
 casual discourse: 2018-08-?09

In (3a) there is no auxiliary present, so singular evidential *-pnē* attaches directly to the lexical verb *pat* ‘marry’. In (3b) *ko* ‘eat’ is followed by the auxiliary *aka*, so plural evidential *-psira* attaches to *aka*. Finally, two auxiliaries are present in (3c): *tero'e* and *'eka*. The evidential suffix necessarily attaches to the rightmost – which is to say, the structurally highest – of the two auxiliaries.⁴

Tense morphology in Tuparí is a heterogenous category; it includes second position particles, predicate-final suffixes, and post-verbal auxiliaries. Evidential *-pnē/-psira* combines without issue with past tense marking regardless of where this marking sits in the clause. The examples in (3) show *-pnē/-psira* combining with near past *-t* (a predicate-final suffix) and with distant past *ōpot* (a second position particle). The fact that *-pnē/-psira* always sits closer to the verbal root than tense

⁴There is no obligatory marking of number as an inflectional category in the Tuparí nominal domain. Hence an NP like *pot'at* ‘peccary+NUC’ could be interpreted as singular or plural depending on context. We can tell that *pot'at* is interpreted as plural in (3b) since it triggers plural agreement in both the auxiliary root and the evidential suffix.

Figure 1: The respective positions of the Evidential Phrase and the Tense Phrase in Tuparí



morphology does motivates a syntactic analysis like the one given in Figure 1, where the evidential projection is located beneath the Tense Phrase.⁵

The description of the (singular) evidential morpheme in Alves (2004:§4.3.2.2) as *na~pna~mna* conflates the evidential with the theme vowel *-a*, which is a separate formative in the language. The theme vowel triggers the deletion of an immediately prior */e/* without exception: *apsi'e* ‘hear’ → *apsi'a*; *morẽ* ‘throw, play’ → *morã*; *oro'e* ‘AUX_{GO}:PAUC’ → *oro'a*; *yẽ* ‘AUX_{hzntl}.SG’ → *yã*. The theme vowel also frequently causes */o/* and */i/* to delete, though there is some lexical idiosyncrasy: *si* ‘spear, kill, sting’ → *sa*; *nĩ* ‘feel embarrassment’ → *niã*; *ko* ‘eat, drink’ → *kà*; *ato* ‘bathe’ → *atoa*. As a general rule, the theme vowel must be present on the highest verb/auxiliary when there is a clause-initial NP subject. When an NP subject occurs in some other position or is absent, the highest verb/auxiliary will lack the theme vowel. (4) illustrates this contrast. Compare *te'ekapnã* (with final */ã/*) against *i'ekapnẽ* (with final */ẽ/*):⁶

⁵Singerman (2018a:250–271) argues that the Tuparí Tense Phrase does not exhibit uniform headedness: some of its realizations are head-initial while others are head-final. This split in headedness is not important for making sense of the respective positions of the Evidential Phrase and the Tense Phrase, so I give only a head-initial TP in the trees in this article. In addition, the trees omit the AgrS projection proposed in Singerman (2018a:272–284) to account for the distribution of the language’s nominative agreement enclitics.

⁶The change in person marking on the auxiliary – from coreferent *te-* in (4a) to disjoint *y-* in (4b) – is also connected to the position of the NP subject (Singerman 2018a:181–187).

(4) Theme vowel -a deletes final vowel of the singular evidential

- a. *Pamēkgen* *ōpot* *mōket* *malokare* *ototonā*
Pamēk-en *ōpot* *mōket* *maloka-re* *o-toto-nē-a*
Pamēk-NUC DISTANT.PAST long.ago maloca-OBL 1SG-grandfather-VBZ-TH
tero'a *te'ekapnā.*
tero'e-a **te-'eka-pnē-a**
AUX_{GO}:SG-TH **3C-AUX_{habit}:SG-EVID:SG-TH**
‘Pamēk was my grandfather in the maloca [communal long house] (NON-WITNESSED).’
casual discourse: 2017-08-04
- b. *Mōket* *ōpot* *malokare* *Pamēkgen* *ototonā*
mōket *ōpot* *maloka-re* **Pamēk-en** *o-toto-nē-a*
long.ago DISTANT.PAST maloca-OBL **Pamēk-NUC** 1SG-grandfather-VBZ-TH
tero'a *i'ekapnē.*
tero'e-a **i-'eka-pnē**
AUX_{GO}:SG-TH **3-AUX_{habit}:SG-EVID:SG**
‘Pamēk was my grandfather in the maloca (NON-WITNESSED).’
elicitation: 2018-07-29

In (a) the NP subject *Pamēkgen* is clause-initial, positioned immediately prior to the second position distant past particle *ōpot*. Because this NP is clause-initial, it triggers the appearance of the theme vowel on the highest auxiliary. That auxiliary therefore takes the shape *te'ekapnā*, with final /ā/. In (b), however, *Pamēkgen* occurs to the right of the tense particle *ōpot*, and the final auxiliary is *i'ekapnē* – with the underlying /ē/ of the evidential spared from deletion. This alternation provides clear evidence that the singular evidential ends in /ē/, not /ā/.

The theme vowel has no audible effect when added to a verbal base that already ends in /a/ or /ā/: *'apka* ‘fry’ → *'apka*; *mā* ‘place inside of something’ → *mā*. Since the plural evidential suffix also ends in /a/, the position of the NP subject does not impact its pronunciation:

(5) Theme vowel -a does not affect realization of the plural evidential

- a. *Tupari'earet* *ōpot* *wappe* *te'era* *te'anā*
Tupari-'eat-et *ōpot* *wap-pe* *te-'et-a* *te-'anē-a*
Tuparí-many-NUC DISTANT.PAST hammock-LOC 3C-sleep-TH 3C-AUX_{GO}:PL-TH
teakapsira.
te-aka-psira-a
3C-AUX_{habit}:PL-EVID:PL-TH
‘The Tuparí used to sleep regularly in hammocks (NON-WITNESSED).’
elicitation: 2018-08-16

- b. *Wappe* *ōpot* *Tupari'earet* *te'era* *te'anā*
 wap-pe ōpot **Tupari-'eat-et** te-'et-a te-'anē-a
 hammock-LOC DISTANT.PAST **Tuparí-many-NUC** 3C-sleep-TH 3C-AUX_{GO}:PL-TH
sakapsira.
s-aka-psira
3-AUX_{habit}:PL-EVID:PL
 ‘The Tuparí used to sleep regularly in hammocks (NON-WITNESSED).’
 elicitation: 2018-08-16

This pair shows the same contrast illustrated above in (4): the position of the NP subject *Tupari'earet* ‘the Tuparí’ determines the presence/absence of the theme vowel on the highest auxiliary. Yet because the theme vowel has no audible effect on preceding /a/, the final vowel of the plural evidential suffix is always realized the same way.⁷

The contrast between witnessed and non-witnessed past tense events is a clausal-level category in Tuparí. It is not sufficient to signal the contrast once, at the beginning of a discourse; rather, the distinction must be made anew in every finite clause. The textual excerpt in (6) illustrates. Every finite clause in this text contains both ancient past *kut* and *-pnē/-psira*.

- (6) a. *Mōket kut* *kire'ōerē,* *kiakoet koepa eanā kirenā*
 mōket **kut** kire-'om-ere kiakop-et koepa eanā kire-nē-a
 long.ago ANCIENT.PAST person-NEG-OBL sun-NUC moon and person-VBZ-TH
soro'epsira.
s-oro'e-psira
3-AUX_{GO}:PAUC-EVID:PL
 ‘Long ago, when there were no other people, the sun and the moon were people (NON-WITNESSED).’
- b. *Here kut* *koepat tekoit* *meop*
 here **kut** koepa-t te-koy-t meop
 and/then ANCIENT.PAST sun-NUC 3C-sister.of.man-NUC fool.around.with
tet'epnam.
tet'e-pnē-am
AUX_{GO}:SG-EVID:SG-ADV.FOC
 ‘And the moon started to fool around with his own sister (NON-WITNESSED).’

⁷The same phonological effects are triggered by adverbial focus *-ap*, actor nominalizer *-at*, and multipurpose nominalizer *-ap* (Singerman 2018a:384–388). The label “theme vowel” goes back to Caspar and Rodrigues (1957:§3.3.4.3) and appears in work on other Tuparían languages as well (e.g., Galucio 2001:88-90 on Sakurabiá and Aragon 2014:229–232 on Akuntsú). Aragon (2014) discusses the problematic status of the theme vowel in Akuntsú; some of the issues she highlights apply to Tuparí, as well, but I cannot address those here for reasons of space.

- c. *Here kut koepat sim'em tekoy wapsim*
 here **kut** koepa-t sim'ẽ-m te-koy wap-sim
 and/then ANCIENT.PAST moon-NUC night-INS 3C-sister.of.man hammock-inside
temã tewārã i'ekapnẽ.
 te-mã-a te-wan-a i-'eka-**pnẽ**
 3C-lay-TH 3C-go.nearby-TH 3-AUX.SG-EVID:SG
 'And the moon, at night, would go a short distance and lay down in his own sister's
 hammock (NON-WITNESSED).'
 text: Isaias Tarimã Tupari, author

This excerpt comes from a myth that took place long before the author (or any other living person) was born – hence the obligatoriness of the ancient past tense particle *kut* in each clause. However, *-pnẽ/-psira* is not restricted to such remote times. Except for the durative and same-day past (Appendix A), *-pnẽ/-psira* can be used whenever the event being related took place prior to the moment of speaking.

4 Evidentiality and clause typing

This section examines the interaction between *-pnẽ/-psira* and the set of second position clause-typing particles in Tuparí. The data examined here will demonstrate that the language's distinction between witnessed and non-witnessed past tense events is restricted to a clear subset of clause types. In particular, the evidential contrast is neutralized by clause-typing particles that express doubt, uncertainty, or ignorance on the part of the speaker.

Table 2 lists the language's overt clause-typing particles. These morphemes occupy the first slot in the second position particle cluster; they head a head-initial projection located in the highest layer of the clause. In Figure 1 that projection is labeled C (see also Singerman 2018a:240–249).

Table 2: Set of second position clause-typing particles

Particle	Gloss	Syntactic feature of clause-initial constituent
<i>'aet</i>	it's a shame that not <i>p</i>	– <i>wh</i>
<i>mākērō</i>	dunno	+ <i>wh</i>
<i>mākērō</i>	confirmative	– <i>wh</i>
<i>nākop</i>	maybe	– <i>wh</i>
<i>nāpe</i>	emphatic	± <i>wh</i>
<i>nẽ</i>	yes/no	– <i>wh</i>
<i>pa'a/ta'a</i>	assertive	– <i>wh</i>

These particles are sensitive to whether the clause-initial constituent is a *wh*-word (*apo* 'who', *kat'at* 'what', *katkaere* 'when') or is a pied-piped phrase that contains a *wh*-word (*apo ha'up* 'whose son'). Only *nāpe* 'emphatic' and *mākērō* 'dunno' may occur with a *wh*-word:

(7) Sensitivity of clause-typing particles to [$\pm wh$] status of the clause-initial constituent

- a. *Katkaere nāpe omemsiremsĩren tèsapwa y'e?!*
katkaere **nāpe** o-memsiremsin-en te-s-a-pwa y-'e
when **emphatic** 1SG-grandchild-NUC 3C-come:SG-TH-NEAR.FUTURE 3-AUX:SG
‘When on earth is my grandchild going to come here?!’
casual discourse: 2016-11-11
- b. *Katkaere mākērō omemsiremsĩren tèsapwa y'e.*
katkaere **mākērō** o-memsiremsin-en te-s-a-pwa y-'e
when **dunno** 1SG-grandchild-NUC 3C-come:SG-TH-NEAR.FUTURE 3-AUX:SG
‘I don’t know when my grandchild will come here.’
elicitation: 2017-08-06
- c. *Katkaere *ta'a / *nē / *'aet / *nākop omemsiremsĩren tèsapwa y'e*
elicitation: 2017-08-06

Because *nāpe* often serves to express surprise or disbelief on the part of the speaker, I translate it as ‘on earth’ in content questions and as ‘really’ in polar questions.

There are two homophonous clause-typing particles: *mākērō* ‘dunno’ utilized in content questions and the tag-like *mākērō* ‘confirmative’ utilized in polar questions. The two display different behaviors with regards to evidential marking, as discussed below. They are also accompanied by distinct prosodies: there is a sharp intonational rise at the end of polar questions with *mākērō* ‘confirmative’, but no such rise takes place with *mākērō* ‘dunno’. There is never any uncertainty about which of the two is present in a given utterance: polar questions may not contain a *wh*-word, whereas *mākērō* ‘dunno’ always requires one.

4.1 Evidential contrast is maintained with assertive particles *pa'a* and *ta'a*

The gender-indexing assertive particles *pa'a* and *ta'a* (sometimes shortened to *pa* and *ta*) are often used when answering polar questions; when showing strong agreement with something that has already been said; or when stressing the veracity or accuracy of a proposition. The following exchange between two women illustrates a typical usage of *pa'a/ta'a*.

(8) Typical exchange with *pa'a/ta'a* ‘assertive’ utilized in response

- a. *Èsa nē 'en?*
e-s-a **nē** 'en
2SG-come:SG-TH **yes/no** 2SG
‘Did you come?’ / ‘Have you arrived?’

- b. *Hě̀, òsa* *ta'a* 'on.
hě̀, o-s-a **ta'a** 'on
 yes 1SG-come:SG-TH **assertive.Ꝙ** 1SG
 'Yes, I did indeed come.'
 casual discourse: 2016-01-22

Past tense clauses that bear *pa'a/ta'a* continue to draw a witnessed versus non-witnessed distinction, just as superficially unmarked declaratives do. The discourse contexts in (9) highlight the kinds of situations in which speakers may wish or need to emphasize that a particular event took place even though they were not present to witness it.

(9) Examples of *pa'a/ta'a* cooccurring with evidential *-pně/-psira*

- a. CONTEXT: I ask my friend whether her father has arrived in town for medical treatment. Although she did not see him arrive, she confirms that he did so.

Herowap ta *ipně.*
herōwap ta'a *ip-ně*
 yesterday **assertive.Ꝙ** come:SG-EVID:SG
 'He did indeed come here yesterday (NON-WITNESSED).'
 casual discourse: 2017-08-04

- b. CONTEXT: I see many fish in my friend's home and remark that his sons, who'd gone fishing earlier that day, must have done well. Even though he did not accompany them on the river, he confirms that they did so.

Tāramkapsira *pa'ae.*
 Ø-tāramka-**psira**-a **pa'a** e
 3-kill.many-EVID:PL-TH **assertive.ꝛ** 3
 'They did indeed kill many [fish] (NON-WITNESSED).'
 casual discourse: 2016-12-01

- c. CONTEXT: In a myth about the origin of the sun and the moon, a mother sees the temporary *genipapo* dye around her son's eye despite his best efforts to wash it off.

Ero'are ta'a kut isit itopnam
 'ero'are **ta'a kut** i-si-t i-top-**ně**-am
 meanwhile **assertive.Ꝙ** ANCIENT.PAST 3-mother-NUC 3-see-EVID:SG-ADV.FOC
sepa 'ūtpe.
s-epa 'ù-t-pe
 3-eye painted-NUC-LOC
 'All the while, his mother did indeed see it – his painted eye (NON-WITNESSED).'
 text: Marilza Kabatoá Tupari, narrator

case I informed my interlocutor that I had come to the Rio Branco Reserve for only a few weeks' time, and in each case my interlocutor expressed surprise at the brevity of my visit. Since neither speaker had seen me arrive, one would expect both (a) and (b) to bear non-witnessed morphology. Yet *nāpe*, in (a), causes the deictic origo of the evidential contrast to switch from speaker to addressee; and since I did witness my own arriving, *-pnē/-psira* is absent from that utterance. Combining *-pnē/-psira* with *nāpe*, as in (c), is infelicitous in this context.⁸

In content questions the deictic origo switches from speaker to addressee just like in polar questions marked by *nē* 'yes/no' or *nāpe* 'emphatic'. When a speaker asks someone where she was born, *-pnē/-psira* is required; after all, no one can witness her own birth. Hence *-pnē* is obligatory in (13a). If, however, one asks a woman where her child was born, the evidential will be absent – since mothers do witness giving birth. This is why there is no *-pnē* in (13b).

(13) Interrogative Flip takes place in content questions

a. *Pare ōpot esit esinemnam?*
 pare ōpot e-si-t e-sinē-**mnē**-am
 where DISTANT.PAST 2SG-mother-NUC 2SG-give.birth.to-**EVID:SG-ADV.FOC**
 'Where did your mother give birth to you (NON-WITNESSED)?'
 elicitation: 2018-07-29

b. *Pare ōpot 'en nā ememsiret sinam?*
 pare ōpot 'en nā e-memsit-et sinē-am
 where DISTANT.PAST 2SG FOCUS 2SG-child.of.woman-NUC give.birth.to-ADV.FOC
 'Where did you give birth to your child (WITNESSED)?'
 elicitation: 2018-07-29

This pair shows that in normal content questions the deictic origo of the witnessed/non-witnessed contrast undergoes Interrogative Flip from speaker to addressee. In this sense content questions behave identically to non-biased polar interrogatives (with *nē* 'yes/no') and to questions that contain *nāpe* 'emphatic'. This set of sentence types contrasts against declarative utterances with no

⁸Singerman (2018a:329–330) presented the three utterances in (12) as evidence that *nāpe* and *-pnē/-psira* can never cooccur. Further fieldwork showed that conclusion to be incorrect: *nāpe* and *-pnē/-psira* can cooccur provided that the context is appropriate. Example (12c) is therefore infelicitous rather than ungrammatical. A naturally occurring example where *nāpe* combines with *-pnē/-psira* is given in (i):

(i) *Koloradore nāpe yēmo'āksirap?!*
 Kolorado-re **nāpe** y-emo'āk-**sira**-ap
 Colorado-OBL **emphatic** 3-pass.by-**EVID:PL-ADV.FOC**
 'Have they really passed by Colorado (NON-WITNESSED)?!'
 casual discourse: 2018-08-09

This question was spoken by a woman who was waiting for her friends to arrive in the village of Cajuí, several hours downriver from the village of Colorado. Her husband had heard over the radio that the friends had already passed by Colorado. Since he received this news secondhand, his wife's question to him contains *-pnē/-psira*.

overt clause-typing particle, extra-assertive declaratives with *pa'a/ta'a*, and biased questions with *mākērō* ‘confirmative’, all of which fail to trigger Interrogative Flip.

4.3 Evidential contrast is neutralized in contexts of uncertainty or ignorance

While the deictic orientation of *-pnē/-psira* undergoes Interrogative Flip from speaker to addressee in a subset of interrogative contexts, in other clause types the witnessed/non-witnessed evidential contrast is neutralized altogether. This subsection examines the interaction between *-pnē/-psira* and two further clause-typing particles: *nākop* ‘maybe’ and *mākērō* ‘dunno’. These two particles form a natural class in that they both express uncertainty or ignorance. Importantly, neither can cooccur with evidential *-pnē/-psira*.

Dubitative *nākop* does the opposite work of *pa'a/ta'a* ‘assertive’. Whereas *pa'a/ta'a* serves to emphasize the speaker’s commitment to a given proposition, *nākop* is how speakers minimize their commitment to or confidence in the reliability of *p*. That *nākop* lessens the speaker’s commitment to *p* is clear from disjunctions with *pare* ‘either/or’. Such disjunctions usually bring together whole independent utterances, each containing a clause-typing particle.

- (14) CONTEXT: A speaker says that he does not know the sex of his family’s pet parrot.

Okio nākop pare aramirā nākop.
 okio **nākop** ∅ pare aramirā **nākop** ∅
 [male **maybe** 3] either/or [female **maybe** 3]

‘It might be a male or it might be a female.’

casual discourse: 2016-01-10

As it is not possible for a pet parrot to be both male and female, disjunctions such as this one demonstrate that when speakers use *nākop*, they make no commitment to *p*.

Crucially, *nākop* never combines with evidential *-pnē/-psira*. The passage in (15) illustrates. This story tells how a violent monkey jumped out of a tree in the forest and bit the narrator on the arm when she was just a little girl. When she returns to the village, her mother asks what happened. The mother had not accompanied her daughter into the forest, so she had not been present to witness the monkey attack. (15) is how the mother replies when her daughter says that it may have been a *we'u'u* ‘Night Monkey (*Aotus* sp.)’ that bit her.

- (15) a. *Te'anaē we'u'u non,*
 te-'anē-a e we'u'u nō-n
 3C-AUX_{GO}:PL-TH 3 night.monkey other-NUC
 ‘There are other night monkeys,’

- b. *tenō ōporo pesap hèt, kiret amsi wek pesap*
tenō ōpo-ro pesap hèt, kire-t amsi wek pesap
 [people kill-NMZ FUTURE.3PL] NMZ_{hèt}.NUC [person-NUC nose bite FUTURE.3PL]
hèt.
hèt
 NMZ_{hèt}.NUC
 ‘ones that will kill people, ones that will bite a person’s nose.’
- c. *Hè nākop nerō ’at.*
hè nākop ∅ nē-ro ’e-a-t
 that.one **maybe** 3 do.so-NMZ AUX.SG-TH-NUC
 ‘**Maybe** that’s the kind that did it [i.e., bit you].’
- d. *Nāpe nā ewekawekakapnam.*
nāpe ∅ nā e-wekaweka-ka-pnē-am
 that’s.why 3 FOCUS 2SG-bite²-VBZ-EVID:SG-ADV.FOC
 ‘That’s why it bit you over and over (NON-WITNESSED).’
 text: Iracema Taydyup Tupari, narrator

The mother begins in line (a) with an existential: *Te’anaē we’u’u non* ‘There are other night monkeys’. She then clarifies, in (b), that this other kind of *we’u’u* is vicious: it will kill people and will bite their noses. (This line contains two internally headed relative clauses of the sort discussed in Section 5.) The crucial data come in (c) and (d). In (c) the mother speculates that it is this other, violent variety of *we’u’u* that attacked her daughter. Here singular evidential *-pnē* does not appear. Then in (d) – which does not contain *nākop* – *-pnē* reappears. Lines (c) and (d) both refer to the same biting event, which the mother was not present to witness; but as (c) contains *nākop*, the evidential suffix must be omitted. The mutual exclusivity of *-pnē/-psira* and *nākop* is systematic in my corpus of texts and conversation.

Comparable neutralization takes place with *mākērō* ‘dunno’. This particle converts content questions into statements of ignorance; it must always cooccur with a [+wh] clause-initial constituent. The following near-minimal pair demonstrates this particle’s effect:

(16) Effect of *mākērō* ‘dunno’ on interpretation of content questions

- a. *Katkaere ke ’en eteronam ekuydyo?*
katkaere ke ’en e-tet-ronā-am e-kuy-o
 when POLITE.FUTURE 2SG 2SG-go:SG-again-ADV.FOC 2SG-land-INS
 ‘When are you going back to your land?’
 casual discourse: 2016-01-07

- b. *Katkaere mākērō ke* 'en warop ãam.
katkaere **mākērō** ke 'en w-arop om-am
when **dunno** POLITE.FUTURE 2SG 1SG-possession give-ADV.FOC
‘I don’t know when you are going to give me my gift.’
casual discourse: 2016-11-10

Content questions converted into statements of ignorance by *mākērō* lose the ability to combine with *-pnē/-psira*, just as statements of doubt hedged with *nākop* do. Consider the passage in (17), spoken by a mother after I pointed out a dead snake by the riverbank. She did not see the snake get killed, which is why the first and fourth lines are marked as non-witnessed.

- (17) a. *Yōpopsirae.*
y-ōpo-**psira**-a e
3-kill-EVID:PL-TH 3
‘They killed it (NON-WITNESSED).’
- b. *Tepapsāē.*
te-pap-sē-a e
3C-die-RSLT:SG:HZNTL-TH 3
‘It is dead, lying there.’
- c. *Apo mākērō nerō 'at.*
apo **mākērō** nerō 'e-a-t
who **dunno** do.it AUX:SG-TH-NUC
‘I don’t know who did it [=killed it].’
- d. *Ah! Omemsit a'usie nā nemnan.*
Ah! o-memsit a'usi e nā nē-**mnē**-a-n
INTERJECTION 1SG-child.of.woman wife 3 FOCUS do.it-EVID:SG-TH-NUC
‘[After her daughter whispers in her ear] Ah! It was my son’s wife who did it (NON-WITNESSED).’
casual discourse: 2018-08-04

Line (c), which contains *mākērō* ‘dunno’, refers to the same snake-killing event discussed in (a) and (d). Yet while (a) and (d) contain evidential *-pnē/-psira*, content questions transformed by *mākērō* into statements of ignorance cannot. This is why line (c) lacks *-pnē*.⁹

The neutralization of evidential morphology in clauses marked by *nākop* ‘maybe’ or *mākērō* ‘dunno’ helps to disentangle the categories of tense and evidentiality from one another. The ancient past particle *kut*, though somewhat archaic in the speech of younger Tuparí, remains ubiquitous in the speech of the elderly; it shows up without fail in myths and narratives about prehistory. As *kut*

⁹Line (17b) contains the horizontal singular resultative *-psē*. See Section 6 for discussion of the connection between the evidential and resultative suffixes, which are partially homophonous.

is used with events that took place no later than the speaker’s birth – events which, by definition, the speaker could not have witnessed – it is invariably accompanied by *-pně/-psira* in declarative clauses. (See the textual excerpt in 6, in Section 3.) Consider, however, the following pair of utterances, both spoken by the same elderly woman:

(18) Neutralization of evidential distinction with *mākērō* ‘dunno’

- a. *Tan’omnā kut osìt tet’epně.*
 tàn-’om-ně-a **kut** o-si-t tet’e-**pně**
 tall-NEG-VBZ-TH ANCIENT.PAST 1SG-mother-NUC AUX_{GO}:SG-EVID:SG
 ‘She wasn’t tall, my mother (NON-WITNESSED).’
 casual discourse: 2014-07-10
- b. *Pare mākērō kut yan osinā tet’e.*
 pare **mākērō kut** yã-n o-sině-a tet’e
 where **dunno** ANCIENT.PAST mother-NUC 1SG-give.birth.to-TH AUX_{GO}:SG
 ‘I don’t know where my mother gave birth to me.’
 casual discourse: 2017-08-30

The speaker’s mother died shortly after her birth, which is why evidential *-pně* is required in (a). While the speaker knows that her mother was a short woman, this piece of information is not something that she ever learned as a firsthand witness. This is a declarative utterance so the witnessed/non-witnessed contrast must be marked. In (b) the same speaker discusses how she does not know where she was born. As far as pieces of information go, the location of her birth should be just like her mother’s height: it is a fact that she could not have learned by witnessing but must have instead been told secondhand. Yet whereas evidential *-pně* is obligatory in (a), it is absent in (b). The crucial difference is that (a) is a declarative with no overt clause-typing particle, whereas (b) contains *mākērō* ‘dunno’. We see, then, that the obligatory cooccurrence of ancient past *kut* with *-pně/-psira* in declaratives can be overridden: in clauses marked with *nākop* ‘maybe’ or *mākērō* ‘dunno’, *kut* can and must appear without an evidential suffix.¹⁰

4.4 Summary: how evidentiality interacts with clause type

The interaction between the second position clause-typing particles and the non-witnessed evidential suffix *-pně/-psira* is summarized in Table 3. Per the argumentation for the existence of null complementizers in Singerman (2018a:265–268), Table 3 includes the interrogative complementizer head that I assume is present in superficially unmarked content interrogatives as well as

¹⁰A reviewer requests grammaticality judgments to show that *mākērō* ‘dunno’ and *nākop* ‘maybe’ can never cooccur with evidential *-pně/-psira*. Although such cooccurrences are systematically absent in natural speech, some consultants do approve them in elicitation – typically with a fair degree of hesitation. I believe that the marginal acceptability of these utterances for some speakers stems from the mismatch in question being semantic rather than morphosyntactic. As argued in Section 5, it is a presuppositional clash (rather than some morphosyntactic constraint) that prevents *mākērō* and *nākop* from occurring with *-pně/-psira*.

Table 3: Interaction between second position clause-typing particles and the witnessed/non-witnessed contrast

Particle	Gloss	Type of clause-initial constituent	How confident is the speaker in <i>p</i> ?	Is this particle compatible with <i>-pnē/-psira</i> ?	Who serves as the deictic origo of <i>-pnē/-psira</i> ?
<i>pa'alta'a</i>	assertive	- <i>wh</i>	maximally confident	yes	the speaker
∅	declarative	- <i>wh</i>	confident	yes	the speaker
<i>mākērō</i>	confirmative	- <i>wh</i>	relatively confident	yes	the speaker
<i>nē</i>	yes/no	- <i>wh</i>	low/zero confidence (speaker is requesting information)	yes	the addressee
∅	<i>wh</i> -question	+ <i>wh</i>	low/zero confidence (speaker is requesting information)	yes	the addressee
<i>nāpe</i>	emphatic	± <i>wh</i>	low/zero confidence (speaker is requesting information)	yes	the addressee
<i>nākop</i>	maybe	- <i>wh</i>	zero confidence (speaker cannot say whether <i>p</i> is true or not)	no	N/A
<i>mākērō</i>	dunno	+ <i>wh</i>	zero confidence (speaker is ignorant of a piece of information)	no	N/A

the non-interrogative complementizer head present in neutral declaratives. (It does not however include *'aet* ‘it’s a shame that not *p*’, discussed in greater length in Appendix A.)

In terms of their syntactic behaviors three natural classes of particles emerge. First, biased polar questions (with *mākērō* ‘confirmative’) and extra-assertive declaratives (with *pa’a/ta’a*) behave identically to superficially unmarked declaratives: evidential *-pnē/-psira* must be used whenever the speaker relates an action or occurrence that he or she did not personally witness. Interrogative Flip of the deictic origo of *-pnē/-psira* from speaker to addressee does not take place. What unites these clause types is that they all involve a high degree of commitment on the speaker’s part to *p*. Second, in non-biased polar questions – marked with *nē* ‘yes/no’ or *nāpe* ‘emphatic’ – and in content interrogatives without an overt clause-typing particle, the deictic orientation of *-pnē/-psira* undergoes Interrogative Flip. The different behavior seen in polar questions marked by *nē* or *nāpe* when compared to those that contain *mākērō* conforms to the typology of Bhadra (2018), who observes that Flip often fails to apply in biased questions. Third, *-pnē/-psira* cannot appear in clauses marked with *mākērō* ‘dunno’ or *nākop* ‘maybe’. This neutralization of the witnessed/non-witnessed contrast must be conditioned by semantic factors. All of these particles occupy the same position within the second position enclitic cluster and behave identically according to syntactic constituency diagnostics (Singerman 2018a:243–249). Given that *-pnē/-psira* can occur in unmarked declaratives, assertive declaratives, yes/no questions, and content questions that lack an overt clause-typing particle, syntactic restrictions cannot explain the neutralization that applies with *mākērō* ‘dunno’ and *nākop* ‘maybe’. The explanation must instead rest with the semantics, as argued further in Section 5.

While evidential marking is compatible with only a subset of clause types – that is, evidentiality is asymmetrically dependent on clause type – the same is not true for tense: the full range of tense morphology is compatible with all varieties of clause-typing particles. (19) shows three of the many possible combinations of tense and clause-typing morphology.

(19) Tense, unlike evidentiality, is not sensitive to clause type

- a. *Katkaere mākērō ke omākap.*
katkaere **mākērō ke** e o-māk-ap
when **dunno POLITE.FUTURE** 3 1SG-send-ADV.FOC
‘I don’t know when they will send me off.’
casual discourse: 2016-03-26
- b. *Kanā nāpe ko ’ote eōpo?*
kanā **nāpe ko** ’ote e-ōpo?
why **emphatic POLITE.FUTURE** 1PL:EXCL 2SG-kill
‘Why on earth should we-EXCL kill you?’
text: Marilza Kabatoá Tupari, narrator

- c. *Here ta* *õpore* *yõporo'omkap...*
 here **ta'a** **õpot** e y-õpo-ro-'om-ka-ap
 then **assertive.ø** **DISTANT.PAST** 3 3-kill-NMZ-NEG-VBZ-ADV.FOC
 'They really didn't kill it [the night monkey] (WITNESSED) ...'
 text: Iracema Taydyup Tupari, narrator

What is more, there are no asymmetrical dependencies between polarity and clause type. Although *'aet* 'it's a shame that not *p*' does not occur with the negative suffix *-'om* (see Appendix A), all of the other clause-typing particles may combine with *-'om*. Example (19c) shows assertive *ta'a* together with *-'om*; two further combinations are given in (20).

(20) Polarity, unlike evidentiality, is not sensitive to clause type

- a. *Ham nẽ* *tẽyto'omkap'a* *y'e?*
 ham **nẽ** te-s-to-'om-ka-a-p'a y-'e
 hither **yes/no** 3C-come:SG-NMZ-NEG-VBZ-TH-NEAR.FUTURE 3-AUX:SG
 'Is he not going to come here?'
 casual discourse: 2015-10-08
- b. *Otero'omkap'a* *nãkop o'e.*
 o-tet-ro-'om-ka-a-p'a **nãkop** o-'e
 1SG-go:SG-NMZ-NEG-VBZ-TH-NEAR.FUTURE **maybe** 1SG-AUX:SG
 'I may not go.' / 'Maybe I am not going to go.'
 casual discourse: 2015-12-12

These examples demonstrate that evidentiality is unique within the set of clausal-level categories in Tuparí: unlike tense and polarity, it is highly susceptible to changes in clause type.

5 Evidential *-pnẽ/-psira* presupposes commitment to *p*: evidence from embedded clauses

This section argues that evidential *-pnẽ/-psira* can be used only in contexts that presuppose commitment on the part of the deictic origo to the veracity, accuracy, or reliability of the proposition *p*. Key evidence comes from the behavior of the witnessed/non-witnessed contrast inside of embedded clauses. In addition to explaining why the particles *nãkop* 'maybe' and *mãkẽrõ* 'dunno' cannot cooccur with *-pnẽ/-psira*, the presuppositional analysis advanced here accounts for the availability of evidential marking in embedded existentials.

Although the closest relatives of Tuparí use non-finite nominalizations in lieu of finite embedded clauses (see Galucio 2011a,b for Sakurabiá), Tuparí has innovated an embedded clause construction in which the full range of second position tense particles, predicate-final tense suffixes, and post-verbal tense auxiliaries may occur (Singerman 2019 [to appear]). These embedded

clauses – frequently used as internally headed relatives – take the nominalizer *hè* at their right edge. This nominalizer is in turn capable of hosting the full range of case morphology. (21) shows an internally headed relative clause where the internal head is the third person pronominal proclitic *s-*, attached to the lexical verb *at* ‘grab, catch, get’.

- (21) *sara wat’otsirat wat hè*
s-at-a wat-ot-sira-a-t wat] hè
 [3-get-TH 2PL-go:PAUC-EVID:PL-TH-NEAR.PAST 2PL] NMZ_{hè}
 ‘the one(s) that you-PL went to get (NON-WITNESSED)’
 casual discourse: 2018-08-30

Section 3 argued that the TP is higher than the EvidP in the Tuparí clause (see also Singerman 2018a: chapter five). Because any portion of the Tuparí clause that contains a TP must contain an EvidP as well, we predict that the witnessed versus non-witnessed distinction ought to be maintained in all embedded environments where tense is realized. This prediction is correct. Just as finite embedded clauses may contain the full range of tense marking known from matrix clauses, they also maintain the witnessed/non-witnessed evidential distinction. (22) provides the witnessed counterpart to (21).

- (22) *sara wat’orat wat hè*
s-at-a wat-ot-a-t wat] hè
 [3-get-TH 2PL-go:PAUC-TH-NEAR.PAST 2PL] NMZ_{hè}
 ‘the one(s) that you-PL went to get (WITNESSED)’
 elicitation: 2018-09-01

Of crucial importance is the fact that witnessed/non-witnessed contrast projects out of finite embedded clauses in the fashion of a presupposition. This is clear from the full sentential context for the internally headed relative clause given in (21):

- (23) CONTEXT: I tell a friend in the village of Serrinha that I had gone to collect *kõãtek* ‘palm grubs’ with some residents of Nazaré, another village which I had visited several days before. I then show my friend in Serrinha a short video of the *kõãtek*. My friend asks whether these are the *kõãtek* that I’d gathered in Nazaré.

- Sara wat’otsirat wat hè nẽ?*
s-at-a wat-ot-sira-a-t wat] hè nẽ ∅
 [3-get-TH 2PL-go:PAUC-EVID:PL-TH-NEAR.PAST 2PL] NMZ_{hè} **yes/no** 3
 ‘Are those the ones that you-PL went to get (NON-WITNESSED)?’
 casual discourse: 2018-08-30

The internally headed relative in (23) is marked as non-witnessed: the verb *ot* ‘go:PAUC’ bears plural evidential *-psira*. The deictic orientation of the embedded evidential continues to be anchored to the speaker: she did not witness me go off to gather the *kōātek*, which is why she had to employ *-pnē/-psira*. Yet the matrix clause contains *nē* ‘yes/no’, independently known to trigger Interrogative Flip of the deictic origo of *-pnē/-psira* (Section 4.2). That matrix Interrogative Flip has no effect on the embedded *-pnē/-psira* shows that *-pnē/-psira* projects over the matrix particle *nē* ‘yes/no’. The kind of projection seen here is precisely what one expects from a presupposition (see Chierchia and McConnell-Ginet 1990 on the Family of Sentences diagnostic and, for work on projection in Tupían, Tonhauser et al. 2013).

To the best of my knowledge, (23) cannot be interpreted as asking about the source of evidence for the *kōātek*-getting event. Rather, both (a) that I, the addressee, went to gather *kōātek* and (b) that the speaker did not see me do so project out of the internally headed relative clause, thereby taking scope over the matrix particle *nē* ‘yes/no’.

The internally headed relative clause in (23) must host non-witnessed *-pnē/-psira* no matter what the matrix clause-typing particle is. So nothing changes in the embedded clause if *nē* ‘yes/no’ is replaced with *nākop* ‘maybe’:

- (24) *Sara wat’otsirat wat hè nākop.*
 s-at-a wat-ot-**sira**-a-t wat] hè **nākop** ∅
 [3-get-TH 2PL-go:PAUC-**EVID:PL**-TH-NEAR.PAST 2PL] NMZ_{hè} **maybe** 3
 ‘Maybe those the ones that you-PL went to get (NON-WITNESSED).’
 elicitation: 2018-09-01

As demonstrated in Section 4.3, *nākop* cannot cooccur with *-pnē/-psira* in the same clause. Yet the internally headed relative in (24) contains plural evidential *-psira* despite the presence of *nākop* in the matrix. In elicitation consultants confirm that removing *-psira* from the internally headed relative in (23) or (24) would work only if the speaker had seen me go off to gather the *kōātek*. In other words, it does not matter whether a matrix particle triggers Interrogative Flip of evidential *-pnē/-psira* (as *nē* ‘yes/no’ does) or whether it neutralizes the witnessed/non-witnessed contrast altogether (*nākop* ‘maybe’); the deictic orientation of *-pnē/-psira* inside of the embedded clause remains unaffected. This indifference to the matrix clause-typing particle makes sense if the evidential contrast projects in the fashion of a presupposition.

The presuppositional analysis advanced here provides an explanation for the incompatibility between evidential *-pnē/-psira*, on the one hand, and *nākop* ‘maybe’ and *mākērō* ‘dunno’, on the other. These two clause-typing particles indicate doubt or uncertainty on the speaker’s part – and a speaker cannot presuppose a proposition *p* when *p* leaves them doubtful or uncertain. The witnessed/non-witnessed contrast is however fully maintained and remains anchored to the speaker in unmarked declaratives, in assertive clauses with *pa’a/ta’a*, and in biased yes/no questions with

mākērō ‘confirmative’. These are all contexts in which the speaker’s commitment to or confidence in *p* is already high. The availability of *-pnē/-psira* therefore correlates with the speaker’s level of commitment to *p*.

A further advantage of this presuppositional analysis is that it can explain those rare cases where evidential *-pnē/-psira* occurs in a present existential. Such a case is shown in (25).

- (25) CONTEXT: My friend has fallen asleep in the afternoon at her home. A health worker wakes her, having come to pick her up for a medical appointment that is about to begin. Scrambling to get ready to leave, my friend says that she was unaware that she had an appointment that afternoon.

<i>Puop’omnā</i>	<i>’on otet’epnē,</i>	<i>okōsultat</i>
puop-’om-nē-a	’on o-tet’e- pnē	o-kōsulta-t
know-NEG-VBZ-TH 1SG	1SG-AUX _{GO} :SG-EVID:SG	[1SG-appointment-NUC
<i>te’epnā</i>	<i>here.</i>	
te-’e- pnē -a	here	
3C-AUX:SG-EVID:SG-TH] NMZ _{hè} .OBL	

‘I didn’t know (NON-WITNESSED) that I have an appointment (NON-WITNESSED) / that there is my appointment (NON-WITNESSED).’

casual discourse: 2017-08-04

Singular evidential *-pnē* occurs with the matrix verb *puop’omnā* ‘not know, be ignorant’ here. This is in of itself unsurprising: the speaker was unaware of her own ignorance of the appointment, and *-pnē/-psira* is always present when speakers express ignorance about the gaps in their knowledge (Appendix A). The evidential suffix also occurs inside of the embedded clause, which bears the oblique case *-ere* since *puop’omnā* ‘not know’ – like its counterpart *puop* ‘know, be knowledgeable about’ – can optionally take an oblique complement. If *puop’omnā* ‘not know’ presupposes the veracity of its oblique complement, then it makes sense for evidential marking to be licit in the embedded clause. Put slightly differently: because the embedded existential in (25) is presupposed – and because evidential marking in Tupaří requires a presupposition of commitment to *p* – here one can mark a present existential as non-witnessed, in violation of the language’s otherwise rigid restriction of the evidential contrast to past tense environments.

6 Resultative morphology as the historical source of *-pnē/-psira*

This section examines the resultative suffix *-psē/-pnē/-psira*, a verbal morpheme which agrees with the subject in both number and physical position. This suffix attaches to non-stative or change-of-state verbs. The two different singular forms, *-psē* and *-pnē*, reflect the physical position of the subject; this positional distinction is neutralized in the plural. The realization of the resultative is

subject to the same two phonological processes of coda nasalization and consonant cluster simplification that the evidential is (Section 3). I will argue here that the resultative served as the diachronic

Table 4: Allomorphy of the singular horizontal, singular vertical, and plural resultative suffixes

	After an oral vowel	After a nasal vowel	After a consonant
SINGULAR HORIZONTAL	<i>-psẽ</i>	<i>-msẽ</i>	<i>-sẽ</i>
SINGULAR VERTICAL	<i>-pnẽ</i>	<i>-mnẽ</i>	<i>-nẽ</i>
PLURAL	<i>-psira</i>	<i>-msira</i>	<i>-sira</i>

source of evidential *-pnẽ/-psira*, in keeping with our broader understanding of the development of evidential morphology (Friedman 2018).

I follow Nedjalkov and Jaxontov (1988:6) in treating resultative verb forms as those ‘that express a state implying a previous event’ (see also Nedjalkov 2001). Nedjalkov and Jaxontov make a further distinction between resultatives and statives, identical except that the stative ‘expresses a state of a thing without any implication of its origin’ (Nedjalkov and Jaxontov 1988:6). It is not clear at present whether Tuparí makes a distinction between stative and resultative verbal morphology in the sense that these authors use the two terms. Nearly all examples of *-psẽ/-pnẽ/-psira* in my corpus imply both a present state as well as the action that led to that state, such that calling this suffix a ‘resultative’ is justified.¹¹

6.1 Basic properties of resultative *-psẽ/-pnẽ/-psira*

As discussed in Section 2, previous work on Tuparí did not disentangle the singular evidential from the theme vowel; in addition, the plural evidential went undiscovered. In the same way, Caspar and Rodrigues (1957:§3.3.4.3) gave *-sã* and *-msã* as the allomorphs of the resultative, but the final /ã/ of these forms is actually the theme vowel. The underlying /ẽ/ of the singular resultative is deleted by the theme vowel, just as the /ẽ/ of the singular evidential is (Section 3).

Unlike the evidential, the resultative agrees with singular subjects in terms of physical position: horizontal *-psẽ* contrasts with vertical *-pnẽ*. (26a) is what one speaker said to me shortly after I shaved my beard. As I was sitting down at the time, she used horizontal *-psẽ*. During a subsequent interview, the same speaker confirmed that suffix would change to vertical *-pnẽ* if I had been standing up; this is shown in (b). She further confirmed that when speaking to an in-law – who must be treated in respectful speech as paucal/plural rather than singular – she would instead employ plural *-psira*. The respectful in-law form is given in (c).

¹¹The Tuparí suffix *-psẽ/-pnẽ/-psira* does not instantiate the kind of resultative construction discussed by Beavers (2012) (among others); those involve a secondary predicate in addition to a primary one.

Example (a) was how a speaker politely refused my offer of a chair, and (b) was how a speaker declined to get up from where she was already sitting down. The positional distinction encoded in the resultative is reflected in the verbal roots: *tomĕk* ‘stand up’ goes with vertical *-pnĕ*, *epsik* ‘sit down’ goes with horizontal *-psĕ*.¹² Consultants categorically reject swapping the two affixes:

(28) Speakers reject positional mismatches between lexical verb and the resultative

- a. * *Otomĕksā* *ko* *'on.*
 o-**tomĕk-sĕ**-a *ko* *'on*
 1SG-stand.up-RSLT:SG:HZNTL-TH POLITE.FUTURE 1SG
 (intended to mean the same as 27a)
 elicitation: 2018-07-29
- b. * *Hare ko* *'on wepsiknam.*
 hare ko *'on w-epsik-nĕ*-am
 here POLITE.FUTURE 1SG 1SG-sit.down-RSLT:SG:VRTCL-ADV.FOC
 (intended to mean the same as 27b)
 elicitation: 2018-07-29

That the plural resultative does not encode information about the subject’s physical position is clear from its ability to combine with *epsik* and *tomĕk* alike:

(29) Plural resultative is positionally invariant

- a. *Kiepsiksira* *kit.*
 ki-**epsik-sira**-a *kit*
 1PL:INCL-sit.down-RSLT:PL-TH POLITE.FUTURE:1DUAL:INCL
 ‘We-DUAL are going to remain sitting.’ [literally: ‘We-DUAL are going to be in the state of having sat down.’]
 elicitation: 2018-07-29
- b. *Kitomĕksira* *kit.*
 ki-**tomĕk-sira**-a *kit*
 1PL:INCL-stand.up-RSLT:PL-TH POLITE.FUTURE:1DUAL:INCL
 ‘Let us-DUAL remain standing.’ [literally: ‘We-DUAL are going to be in the state of having stood up.’]
 elicitation: 2018-07-29

¹²The roots *epsik* ‘sit down’ and *tomĕk* ‘stand up’ are used only as inceptives or inchoatives; they do not indicate an ongoing physical state (‘be sitting’, ‘be standing’) but rather a change in position. Similarly, the verbal root *anem* in (32a) and (33a) means ‘lie down’, not ‘be lying down.’ The language’s positional auxiliaries, on the other hand, do not encode any information about change of state and to my knowledge do not combine with resultative *-psĕ/-pnĕ/-psira*. (See 30b and 38 for examples of the positional auxiliary *yĕ* ‘AUX_{hzntl}.SG’.) Thank you to the reviewer who raised the question of how to best translate verbal roots such as *epsik* and *tomĕk*.

The neutralization of positional contrasts with plural subjects occurs elsewhere in Tuparí. For example, in the present progressive singular subjects trigger a horizontal/vertical distinction in the auxiliary; the auxiliaries used with plural subjects, however, have a single, positionally invariant form (Singerman 2018a:196–203).

6.2 Telling the evidential and the resultative apart: four diagnostics

Given the considerable homophony between evidential *-pně/-psira* and resultative *-psě/-pně/-psira*, we must ask how these morphemes can be distinguished from one another. When a speaker uses *-pně*, how does the listener know whether to interpret this morpheme as the singular vertical resultative or as the singular evidential? The same question applies in the case of *-psira*, which is ambiguous between the plural resultative and the plural evidential.

This subsection discusses four diagnostics that tell the evidential and resultative suffixes apart. First: the resultative can occur with non-past tense marking and in commands, whereas the evidential is restricted to past tense contexts only. Second: the resultative can occur with the full set of clause-typing particles, whereas the evidential is incompatible with *nākop* ‘maybe’ and *mākērō* ‘dunno’. Third: the resultative can occur inside of non-finite constructions. Fourth: the evidential frequently combines with the negative suffix *-’om*, but the resultative cannot do so.

6.2.1 Diagnostic #1: The resultative can occur in non-past contexts and commands.

Evidential *-pně/-psira* can only be used in past tense contexts, but resultative *-psě/-pně/-psira* is not restricted in the same way. The tense morphology is highlighted in (30):

(30) Resultative can combine with past, present, and future morphology

- a. *Here kòm kòm kia tepsiksārě.*
 here kòm kòm ki-a te-epsik-sě-a-n e
 then silence-VBZ-TH 3C-sit.down-RSLT:SG:HZNTL-TH-NEAR.PAST 3
 ‘And it [the baboon] sat, in silence.’
 text: Isaias Tarimã Tupari, author
- b. *Wapsikatsã oyã õ’apteka.*
 w-apsikat-sě-a o-yě-a o-’apteka
 1SG-think.about-RSLT:SG:HZNTL-TH 1SG-AUX_{hzntl}.SG-TH 1SG-AUX_{present}:SG
 ‘I regularly think about it, sitting down.’
 casual discourse: 2018-08-?9
- c. *Oteyare nã ètat’epsiksērō pe’ap.*
 oteyare nã e-etat-epsik-sě-ro pe’ap
 by.our.side FOCUS 2SG-just-sit.down-RSLT:SG:HZNTL-NMZ FUTURE.2SG
 ‘You will just sit / be in the state of having sat down by our-EXCL side.’
 casual discourse: 2018-07-27

As these utterances show, resultative *-psē/-pnē/-psira* can occur with past, present and future morphology. See also examples (27) and (29), above, for the cooccurrence of *-psē/-pnē/-psira* with the polite future particles located in second position.

The evidential never occurs in imperatives, but the resultative can do so without issue. The command in (31a) was how a mother instructed a noisy child to keep quiet. The child was sitting down at the time, which is why horizontal *-psē* rather than vertical *-pnē* was employed. The elicited variants in (b) and (c) complete the paradigm.

(31) Resultative can occur in imperatives

- a. *Kòm kòm kipsē!*
 kòm kòm -ki-**psē**
 silence-VBZ-RSLT:SG:HZNTL
 ‘Stay quiet!’ (singular addressee, SITTING)
 casual discourse: 2016-11-16
- b. *Kòm kòm kipnē!*
 kòm kòm -ki-**pnē**
 silence-VBZ-RSLT:SG:VRTCL
 ‘Stay quiet!’ (singular addressee, STANDING)
 elicitation: 2016-12-09
- c. *Kòm kòm kipsira wat!*
 kòm kòm -ki-**psira** wat
 silence-VBZ-RSLT:PL 2PL
 ‘Stay quiet!’ (multiple addressees, POSITION UNSPECIFIED)
 elicitation: 2016-12-09

Just as in (29), above, the plural resultative in (31c) encodes no positional information.

6.2.2 Diagnostic #2: The resultative can occur with all clause-typing particles.

Section 4 showed that *nākop* ‘maybe’ and *mākēřō* ‘dunno’ neutralize the witnessed/non-witnessed evidential contrast. Yet unlike evidential *-pnē/-psira*, resultative *-psē/-pnē/-psira* can combine with these two clause-typing particles. (32) demonstrates:

(32) Resultative occurring with clause-typing particles that neutralize evidential contrast

- a. CONTEXT: A speaker speculates that his elderly mother may be laying down at home.
- | | |
|------------------------------|----------------|
| <i>Teanemsā</i> | <i>nākop.</i> |
| te-anem- sē -a | nākop ∅ |
| 3C-lie.down-RSLT:SG:HZNTL-TH | maybe 3 |
- ‘She may be lying down / may be in the horizontal state of having lain down.’
 casual discourse: 2017-08-?20

- b. CONTEXT: A speaker is surprised by some bumps that have appeared on her leg.

Kat'at mākērō tey'aotsirat.

kat'at mākērō Ø te-ey'aot-**sira**-a-t

what dunno 3 3C-emerge.PL-**RSLT:PL-TH-NUC**

'I don't know what things have emerged / are in the state of having emerged.'

casual discourse: 2017-07-28

Unsurprisingly, *-psē/-pnē/-psira* can also occur with those clause-typing particles that do not trigger any evidential neutralization. Example (36a), in Section 6.2.4, shows the resultative suffix in combination with *nē* 'yes/no'.

6.2.3 Diagnostic #3: The resultative can occur in non-finite environments.

Resultative *-psē/-pnē/-psira* can occur in non-finite constructions that are incapable of containing evidential morphology. (33) shows the resultative inside of the deverbal nominalizer *-ap*:

(33) Resultative in within non-finite nominalizations with *-ap*

a. *Sayparet teanemsam* *hi'a.*

saypare-t te-anem-**sē-am** hi'a

deer-NUC [3C-lie.down-**RSLT:SG:HZNTL-NMZ**] like

'Deer like to be in the horizontal state of having lain down.'

casual discourse: 2016-11-29

b. *Irik'enammē yamsikia kitomēknaen.*

irik'enē-am e y-amsiki-a ki-tomēk-**nē-am-en**

work-NMZ 3 [3-untie-TH one-stand.up-**RSLT:SG:VRTCL-NMZ-NUC**]

'One must work to untie it [a hammock] when in the vertical state of having stood up.'

casual discourse: 2018-08-06

In (a), the nominalized VP *teanemsam* is the possessor of *hi'a* 'like, love, affection'; in (b), the nominalized VP *yamsikia kitomēknaen* serves as the sentential subject and thus bears the nuclear case.

(34) provides examples of the resultative in non-finite adverbial clauses. In (a) *-psē* occurs inside of the adverbial suffix *-ro'are* 'while, once'. The speaker of this utterance was referring to a house then under construction. Houses on the Rio Branco Reserve are one-story, so they are conceptualized as sitting rather than standing; this is why the speaker used horizontal *-psē*. In (b) *-psē* occurs inside of the purposive subordinator *-tenā*, which requires its complement to bear the same nominalizing suffix, *-ap*, that was seen in (33).

(34) Resultative in non-finite adverbial clauses

- a. *Èy pe'eronam ekget*
e-s pe'eronam ek-et
2SG-come:SG FUTURE.2SG+again [house-NUC
tepoatkatsērō'are.
te-poatkat-sē-ro'are
3C-be.finished-RSLT:SG:HZNTL-once]
'You will come back here again once the house is done / is in the horizontal state of having been finished.'
casual discourse: 2016-12-09
- b. *Waet āpea ko 'on o'era*
wap-et āpe-a ko 'on o-'et-a
hammock-NUC hang-TH POLITE.FUTURE 1SG [1SG-sleep-TH
omamsamtenā.
o-mã-msē-am-tenā
1SG-place-RSLT:SG:HZNTL-NMZ-PURP]
'Let me hang up my hammock in order for me to sleep, in the horizontal state of having placed myself [within the hammock].'
casual discourse: 2015-10-11

Evidential *-pnē/-psira* occurs in fully finite clauses only; it never appears in the kind of non-finite constructions given in (33) and (34).

6.2.4 Diagnostic #4: The resultative cannot combine with the negative suffix -'om.

The negative suffix -'om occupies a singularly low position in the Tuparí clause: it sits underneath all aspectual projections, the Evidential Phrase, and the Tense Phrase (Singerman 2018b). As a result -'om always scopes underneath evidential *-pnē/-psira*, as demonstrated by (35a) and (35b).

(35) Evidential *-pnē/-psira* scopes above negative -'om

- a. CONTEXT: A mother explains that her youngest son failed to go to school that morning: he slept in and missed the bus. Because the mother was herself asleep when her son missed the bus, she did not witness his failure to go to school.
- Omemsiret tero'omkapnā.*
o-memsit-et tet-ro-'om-ka-pnē-a
1SG-child.of.woman-NUC go:SG-NMZ-NEG-VBZ-EVID:SG-TH
'My child didn't go (NON-WITNESSED).'
casual discourse: 2017-08-17

- b. CONTEXT: My friend is waiting for me to arrive at his home in the town of Alta Floresta D'Oeste. I forget to ask the bus driver to let me off at an intersection near my friend's home; I only get off the bus at the somewhat distant bus terminal. My friend was not present to see the bus pass by his house.

Ek yare 'en ekopto'omkapnam.

ek yare 'en e-kop-to-'om-ka-pnẽ-am

house by 2SG 2SG-get.down-NMZ-NEG-VBZ-EVID:SG-ADV.FOC

'You didn't get down [from the bus] by the house (NON-WITNESSED).'

casual discourse: 2018-08-31

In both (a) and (b) negative -'om sits closer to the verbal root than does evidential -pnẽ/-psira. This difference in position matches how the evidential is interpreted above negation.

Interestingly, it is not possible to combine resultative -psẽ/-pnẽ/-psira with negative -'om. The only acceptable answer to the question in (36a), which contains singular horizontal -psẽ, is (36b) – without the resultative.

(36) Resultative -psẽ/-pnẽ/-psira cannot combine with -'om 'NEG'

a. *Emamsã nẽ 'en?*

e-mã-**msẽ**-a nẽ 'en

2SG-place-RSLT:SG:HZNTL-TH yes/no 2SG

'Have you placed yourself [in the hammock]?' / 'Are you in the horizontal state of having placed yourself [in the hammock]?'

casual discourse: 2018-08-?09

b. *Omarõ'om 'on.*

o-mã-ro-'**om** 'on

1SG-place-NMZ-NEG 1SG

'I have not placed myself.'

elicitation: 2018-08-16

c. * *Omamserõ'om 'on.*

o-mã-**msẽ**-ro-'**om** 'on

1SG-place-RSLT:SG:HZNTL-NMZ-NEG 1SG

(intended to mean the same as 36b)

elicitation: 2018-08-16

d. * *Omarõ'omkapsã 'on.*

o-mã-ro-'**om**-ka-**psẽ**-a 'on

1SG-place-NMZ-NEG-VBZ-RSLT:SG:HZNTL-TH 1SG

(intended to mean the same as 36b)

elicitation: 2018-08-28

There exists a semantic motivation for the incompatibility between *-psě/-pně/-psira* and *-’om*. Although resultative verbal forms ‘express a state implying a previous event’ (Nedjalkov and Jaxontov 1988:6), the negation of this meaning is not the negation of the state itself. Rather, it is the negation of the event that led to the state in the first place (Nedjalkov 2001:935; see also Givón 1978 and Horn 1989 for foundational work on semantic and pragmatic asymmetries related to negation). This fact explains why (36b) – which lacks the resultative suffix – is preferred over (36c) and (36d) as a negative answer to (36a).

6.3 Synchronic and diachronic connections between the resultative and evidential suffixes

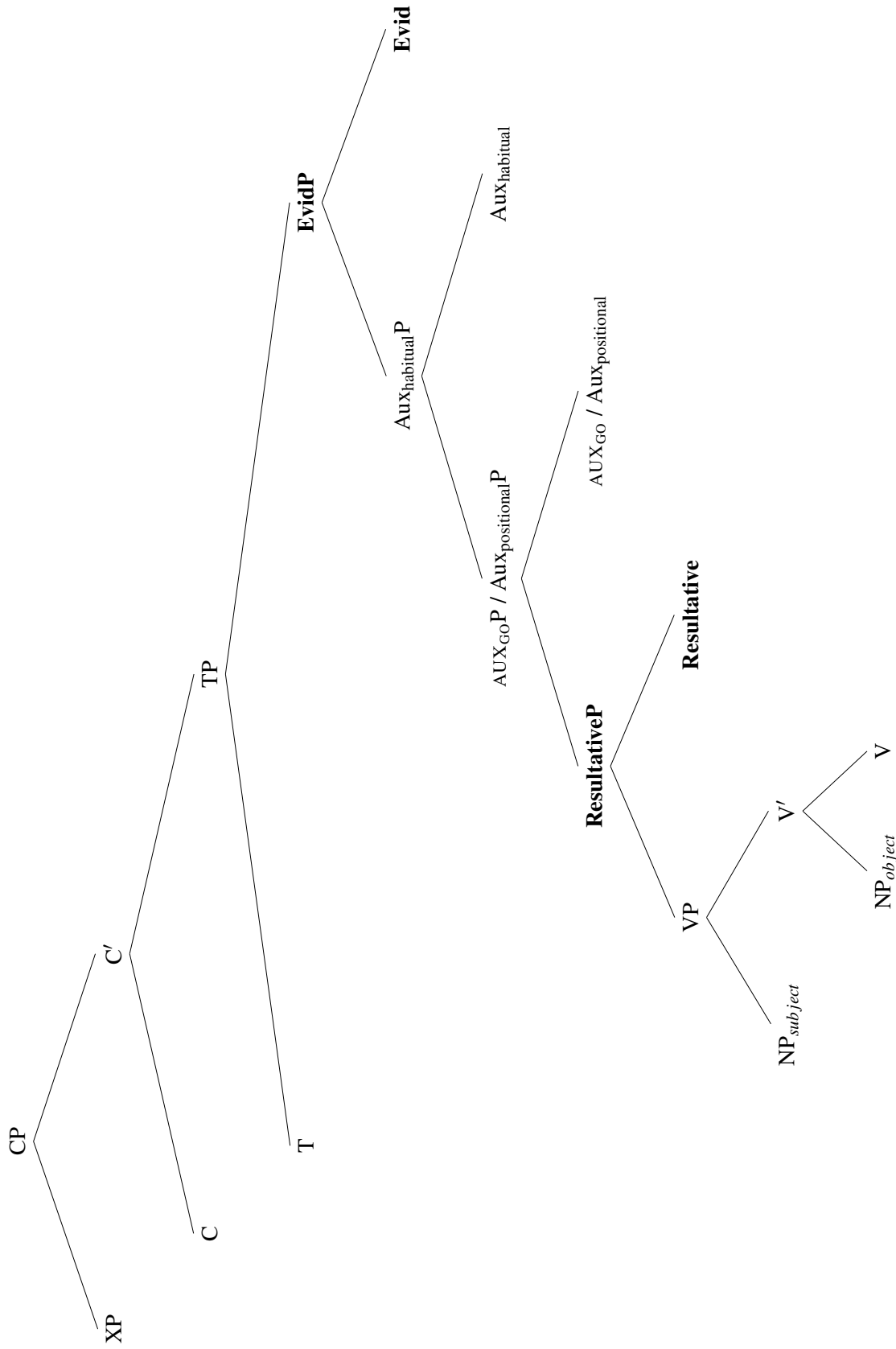
The four diagnostics in Section 6.2 prove that resultative *-psě/-pně/-psira* and evidential *-pně/-psira* behave very differently despite their partial homophony. Translating the findings of these diagnostics into phrase structure gives the tree in Figure 2. Here the Evidential Phrase occurs immediately underneath the Tense Phrase, in the inflectional layer of the clause, while the projection headed by *-psě/-pně/-psira* occurs just above the VP/vP, in the region where thematic roles are assigned and argument structure is manipulated. ResultativeP and EvidP are thus positioned on opposite ends of the auxiliary projections $AUX_{GO}P / Aux_{positional}P$ and $Aux_{habitual}P$. That a single utterance is unlikely to have all of this functional material overtly realized is not important; the crucial point is instead that the resultative surfaces on the lexical verb even when an auxiliary is present, whereas the evidential always sits on the highest verbal head (which may or may not be an auxiliary). The difference in height between the two bolded projections in Figure 2 captures the distinct linear positions of resultative *-psě/-pně/-psira*, on the one hand, and evidential *-pně/-psira*, on the other. What the Evidential and Resultative heads share despite their different heights is agreement in number with the subject, which I assume is base-generated within the VP (Koopman and Sportiche 1991 and much subsequent work).

The proposal in Figure 2 makes several correct predictions. First, it predicts that resultative *-psě/-pně/-psira* should sit closer to the verb than evidential *-pně/-psira* when both suffixes occur in a single clause. Such cooccurrences are attested in spontaneous discourse:

- (37) *Waptsitwatsemnā* ’on.
w-apsitwat-sě-mnē-a ’on
 1SG-forget-**RSLT:SG:HZNTL-EVID:SG-TH** 1SG
 ‘I am in the horizontal state of having forgotten (NON-WITNESSED).’
 casual discourse: 2017-08-02

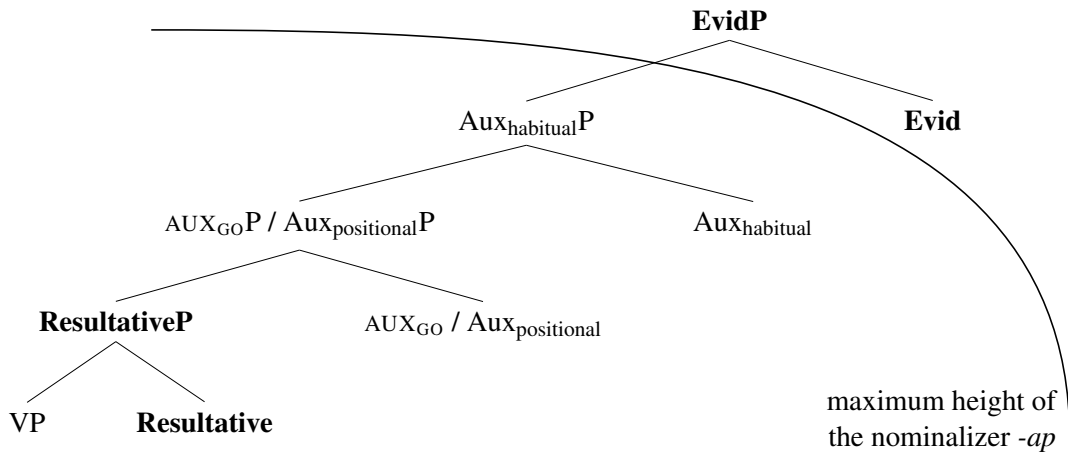
In frameworks where morphology and syntax work in tandem (Baker 1985), the fact that the resultative sits closer to the verbal root than the evidential does means that ResultativeP is lower than EvidP. This difference in syntactic height is also illustrated by the position of the two auxiliaries in

Figure 2: The respective positions of ResultativeP and EvidP in the Tupaři clause



(30b), above. In that example horizontal *-psē* attaches to the lexical verb *apsikat* ‘think about’, to the left of the horizontal auxiliary *yē* and the present habitual auxiliary *’apteka*. Yet as discussed in Section 3, the evidential suffix always attaches to the rightmost auxiliary. This difference indicates that the resultative and the evidential occupy distinct positions in the clause, as in Figure 2.

Figure 3: ResultativeP and EvidP differ with regards to non-finite subordination



That resultative *-psē/-pnē/-psira* can occur in non-finite environments is also predicted by the clause structure proposed here. Non-finite constructions in Tuparí may only include as much material as an $Aux_{habitual}$ Phrase, as shown in Figure 3. Since ResultativeP sits underneath the auxiliary projections, it follows that non-finite nominalizations that contain auxiliaries can include resultative morphology as well. (38) shows a purposive clause that contains auxiliaries known to occupy positions higher than ResultativeP but lower than EvidP: horizontal *yē* and habitual *’eka*.

(38) CONTEXT: A friend explains why he wants a recording of English words and phrases.

Wapsi’a oyā ō’ekaptenā.
 w-apsi’e-a o-yē-a o-’eka-ap-tenā
 1SG-listen-TH 1SG-AUX_{hzntl}.SG-TH 1SG-AUX_{habit}:SG-NMZ-PURP

‘In order for me to listen to it regularly, sitting down / lying down.’

casual discourse: 2018-08-06

Example 34b (Section 6.2.3) includes a purposive clause that contains the resultative: *o’era omamsamtenā* ‘in order for me to sleep, in the horizontal state of having placed myself [within the hammock]’. Since ResultativeP is lower than the auxiliary phrases – and since these in turn are lower than EvidP – the ability of resultative but not evidential morphology to appear in non-finite environments follows from Figures 2 and 3.

Note that it is not possible to conflate the projection headed by resultative *-psē/-pnē/-psira* with the projection headed by the positional auxiliary *yē*. This is because a single clause can contain

both the resultative and *yě* – see (30b), in Section 6.2.1. That utterance shows that ResultativeP is distinct from (and lower than) $Aux_{\text{positional}}P$, even though the heads of the two projections can contribute overlapping positional information.

To my knowledge no affixes comparable to evidential *-pně/-psira* or resultative *-psě/-pně/-psira* have been described for the other members of the Tuparían branch of Tupían. It could be that such affixes do exist but have not yet been discovered; alternatively, Tuparí may be truly unique in its genealogical context. Although we lack comparative data that could explain how evidential *-pně/-psira* and resultative *-psě/-pně/-psira* developed, the tool of internal reconstruction (see, among others, Givón 2000 and Campbell 2013: chapter eight) does permit us to hypothesize a process of change that led to the present state. It is likely that the evidential and the resultative share a common origin, given their homophony outside of *-psě*. More specifically, EvidP must have developed out of ResultativeP via syntactic reanalysis: what began as a low affix marking a non-obligatory category ascended within the language’s hierarchy of functional projections, ultimately coming to occupy a position in the inflectional rather than thematic layer of the clause.¹³ This reanalysis would have required information about the current state of an object (‘the snake is in the state of having died’) to be reinterpreted as information about the process or action that led to that state (‘the snake died [NON-WITNESSED]’). This is a straightforward reinterpretation given the nature of the language’s witnessed/non-witnessed contrast. For a speaker to treat a past tense occurrence as witnessed, it is not enough for her to have after-the-fact visual evidence that it took place; she needed to see it happen. This is why the speaker of (17) utilized *-pně/-psira* when referring to the dead snake by the riverbank. The snake’s body provided clear evidence that a killing event had transpired. Yet as the speaker had not seen that killing event take place, she had to mark her utterance as non-witnessed. That after-the-fact visual evidence does not license Tuparí speakers to treat past tense occurrences as witnessed provides language-internal support for the diachronic change proposed here.

The suffix *-psě/-pně/-psira* qualifies as a resultative in the sense of Nedjalkov and Jaxontov (1988) because it means that an action has taken place such that a new state now holds: hence *pap* ‘die’ becomes *papsě* ‘be in the horizontal state of having [already] died’, *toměk* ‘stand up’ becomes *toměkně* ‘be in the vertical state of having [already] stood up’, and so on. As a reviewer points out, such resultatives also mark perfect aspect in Klein’s (1994) framework: the action in question has necessarily been completed by Topic Time (see also Ritz 2012). The literature on the diachrony of evidentiality contains many examples of perfect or resultative morphology developing into non-witnessed/inferential evidentials. This development has taken place in multiple Balkan languages, in part due to the influence of Ottoman Turkish (Friedman 1986, 2000, 2003). It has also taken

¹³See Roberts and Roussou (1999, 2003) on the idea that grammaticalization involves this kind of syntactic ascension.

place in several non-Indo-European families of Eurasia: see Malchukov (2000) on the Tungusic family, Tatevosov (2001), Belyaev (2018) and Multatov (2018) on Nakh-Daghestanian languages, and Jalava (2014, 2017) on Tundra Nenets (of the Samoyedic branch of Uralic). My proposal that the positional resultative *-psē/-pnē/-psira* grammaticalized into the non-witnessed evidential *-pnē/-psira* thus enjoys crosslinguistic precedent: such a reanalysis is consistent with diachronic changes known to have taken place in many Eurasian families (Friedman 2018 and references therein).

One final question remains: if evidential *-pnē/-psira* developed out of resultative *-psē/-pnē/-psira*, why doesn't it express physical position as well? There are several possible answers. First, the resultative may not have drawn a positional distinction at the point in time when evidential *-pnē/-psira* grammaticalized. It is plausible that the ancestor of modern *-psē/-pnē/-psira* may have expressed only the core resultative meaning; the contrast between horizontal *-psē* and vertical *-pnē* would have arisen only after evidential *-pnē/-psira* developed into a synchronically distinct affix. Alternatively, since evidential *-pnē/-psira* is used only to describe events that one did not see – and since it is difficult to specify the physical position of participants in a non-witnessed event – the resultative's positional contrast may have been neutralized on semantic grounds when the evidential suffix grammaticalized.

There may also be a synchronic structural explanation for the lack of a positional contrast in evidential *-pnē/-psira*.¹⁴ This suffix combines with all kinds of predicates: telic and atelic, eventive and non-eventive. The grammatical category that it instantiates operates independently of the semantics of the lexical verb. Resultative *-psē/-pnē/-psira*, on the other hand, is exquisitely sensitive to the meaning of the lexical verb. It only attaches to inceptives or inchoatives; what is more, with singular subjects there must be concordance in terms of physical position. This difference between the evidential and resultative suffixes can be accounted for phrase structurally. On Figures 2 and 3 the Resultative head directly selects for the lexical verb, which is to say that it can impose idiosyncratic requirements – including physical position – on its complement. The Evidential head, on the other hand, is far higher in the structure; it cannot interact selectionally with the lexical verb. If the positional concordance between resultative *-pnē/-psira* and the lexical verb is accomplished via syntactic selection, then it follows that evidential *-pnē/-psira* is structurally too far away from the verb to mark position.

7 Conclusion

This article has shown that Tupaří makes a systematic witnessed versus non-witnessed evidential distinction, subject to certain restrictions of tense and clause type. Despite these restrictions, evidentiality is a pervasive aspect of Tupaří grammar and discourse. In stretches of speech that relate

¹⁴Thank you to Ksenia Ershova and Michelle Yuan for discussion of these ideas.

actions not witnessed by the speaker, *-pně/-psira* appears in each and every finite clause – see (6), above, for a representative textual example. Semantically, using *-pně/-psira* presupposes commitment on the part of the deictic origo to the veracity or reliability of the proposition *p*. This analysis explains the inability of *-pně/-psira* to occur with the clause-typing particles *nākop* ‘maybe’ and *mākērō* ‘dunno’, as well as its projective behavior in finite embedded clauses. It further accounts for the ability of *-pně/-psira* to appear in the presupposed complements of factives like *puop’omnā* ‘not know’. Finally, I have argued that that resultative *-psě/-pně/-psira* and evidential *-pně/-psira* share a common historical origin despite their synchronic structural differences. The diachronic development proposed here is that information originally expressed with the resultative was reinterpreted as a non-witnessed statement about a past occurrence. Given that the aspectual contribution of resultative *-psě/-pně/-psira* is that of a perfect, Tuparí conforms to the well-known tendency for markers of perfect aspect to diachronically change into non-witnessed or inferential evidentials.

Tuparí *-pně/-psira* meets the core criteria expected of evidentials on the approaches of Aikhenvald (2018) or Brugman and Macaulay (2015). It is a bound morpheme whose height in the syntactic spine is absolutely fixed. Semantically it indicates that the speaker did not personally witness the occurrence or action that they are relating; that is, it contributes a non-witnessed semantics. What is more, *-pně/-psira* possesses several characteristics which correspond to the grammatical rather than lexical end of the grammar-vocabulary spectrum. It instantiates a category that must be marked on the clausal level; partakes in nuanced relationships with tense and clause type; and occupies a position within the inflectional rather than thematic layer of the clause. It is worth emphasizing that if one were to adopt a definition of evidential morphology more restrictive than Aikhenvald’s or Brugman and Macaulay’s – for instance, if one were to consider obligatoriness and deictic orientation to be criterial – then *-pně/-psira* would still qualify. The witnessed/non-witnessed distinction marked by *-pně/-psira* is as obligatory as tense is in all past declaratives. Furthermore, the deictic orientation of this distinction is always determined by the kind of clause at hand: the origo remains anchored to the speaker in declaratives and biased polar questions, but flips to the addressee in polar questions containing *ně* ‘yes/no’ or *nāpe* ‘emphatic’ and in content questions that lack an overt clause-typing particle.

As mentioned in the introduction, most of the Tupían languages that mark evidentiality do so through predicate- or clause-peripheral particles; the obligatoriness of these particles varies from language to language. The synchronic analysis and diachronic proposal that I have put forth in this paper would benefit from information concerning evidentiality in Tuparí’s closest relatives within the Tupían family and in the non-Tupían languages with which Tuparí has historically been in contact. All of the other members of the Tuparían branch of Tupían – Makurap, Wayoro, Sakurabiá, Akuntsú – are endangered; none enjoy stable intergenerational transmission (Galucio 2001; Braga 2005; Galucio and Nogueira 2011; Moore 2011; Nogueira 2011; Aragon 2014). Several non-

Tuparián languages from the Rio Branco region are highly endangered, as well; the Macro-Jê language Arikapú, for instance, has only one fluent speaker left (Arikapú et al. 2010; Ribeiro and van der Voort 2010). Detailed documentation of how evidentiality works in these and other native languages of Rondônia is urgently needed.

A Evidentiality, negation, and first person effects

Combining evidential *-pnẽ/-psira* with first person subjects gives rise to an interpretation of unintentional or accidental behavior (see Curnow 2002, 2003 for a cross-linguistic typology). Such interpretations make intuitive sense given that first person subjects prototypically witness the events that they carry out, whereas evidential marking violates that expectation. (39) illustrates:

(39) Interpretations of accidental or non-volitional behavior with first person subjects

- a. CONTEXT: My friend is looking for *kõãtek* ‘palm larva’ in the trunk of a fallen tree, using a large knife to cut away the rotting pulp. She realizes that she has cut in half a *kõãtek* that was inside of the pulp. As she did not kill the *kõãtek* intentionally – indeed, she didn’t even know it was there – she uses *-pnẽ* ‘EVID:SG’.

Yõpopnã *'on.*
y-õpo-pnẽ-a *'on*
 3-kill-EVID:SG-TH 1SG
 ‘I killed it (BY ACCIDENT).’
 casual discourse: 2018-08-27

- b. CONTEXT: A friend of mine brews a pot of coffee. After serving the coffee, she tastes it and discovers that it has come out too sweet. Though she intentionally brewed the coffee, making the coffee excessively sweet was accidental; so she uses *-pnẽ*, too.

Hoy'aenã 'on nemnam.
hoy'aenã 'on Ø-nẽ-mnẽ-am
 too.sweet 1SG 3-make-EVID:SG-ADV.FOC
 ‘I made it too sweet (BY ACCIDENT).’
 casual discourse: 2017-08-?05

A clear example of first person effects with evidential morphology comes from the durative tense suffix *-pbi'a*, which never cooccurs with *-pnẽ/-psira*. In declaratives *-pbi'a* is felicitous only if the speaker personally witnessed (at least some iterations of) the past habitual action being described. In (40a) a woman asserts that a deceased non-indigenous man had learned the Tuparí language. Since she knew the man in question and had seen him speak Tuparí, she uses durative *-pbi'a*. Yet if she wished to comment on the linguistic competence of someone she had never met,

she would need to use the periphrastic alternative in (b): *-pbi'a* disappears, the distant past particle *ōpot* occurs in second position, and the habitual auxiliary *'eka* hosts *-pnē*.

(40) Durative *-pbi'a* equals WITNESSED in declaratives

- a. *Puopnambi'ae* *Tupari ema'erē*.
 puop-nē-a-**mbi'a** e Tupari ema'ē-re
 know-VBZ-TH-DUR 3 Tuparí language-OBL
 'He knew the Tuparí language (WITNESSED).'
 casual discourse: 2015-10-08
- b. *Puopnā* *ōpot* *i'ekapnē* *Tupari ema'erē*.
 puop-nē-a **ōpot** i-'**eka-pnē** Tupari ema'ē-re
 know-VBZ-TH **DISTANT.PAST** 3-AUX_{habit}:SG-EVID:SG Tuparí language-OBL
 'He knew the Tuparí language (NON-WITNESSED).'
 elicitation: 2015-10-10

Interestingly, durative *-pbi'a* cannot be used when speakers express their own ignorance. If a speaker says (41a) – where *-pbi'a* combines with *puop'omnā* 'not know' – this can only mean that she was aware of her ongoing failure to know something. (One possible context: if in her childhood the speaker frequently heard people speaking Makurap but could not understand them, then she 'saw' her own ignorance of their language.) The durative is however unacceptable if a speaker has just learned a new piece of information, for prior to learning that piece of information she cannot have been a witness to her own ignorance. In this context the kind of periphrasis shown in (40b) returns: the durative disappears and an auxiliary hosts evidential *-pnē*. Note that (41b) is identical in all relevant respects to the matrix clause in (25), discussed at the end of Section 5.

(41) Durative *-pbi'a* cannot be used to express ignorance on the speaker's part

- a. *Puop'omnambi'a* *'on*.
 puop-'om-nē-a-**mbi'a** 'on
 know-NEG-VBZ-TH-DUR 1SG
 'I was ignorant / I did not know (WITNESSED).'
 elicitation: 2015-10-10
- b. *Puop'omnā* *'on nā* *otet'epnē* *ōren*.
 puop-'om-nē-a 'on nā o-tet'e-**pnē** on-en
 know-NEG-VBZ-TH 1SG FOCUS 1SG-AUX_{G0}:SG-EVID:SG 1SG-NUC
 'I was ignorant / I did not know (NON-WITNESSED).'
 casual discourse: 2016-12-14

Example (b) must contain evidential *-pnē* because the speaker was ignorant of her own ignorance. In the same way, *-pnē* is required in (37) (Section 6.3) because the speaker of that utterance had

unintentionally forgotten the piece of information he wished to recall.¹⁵

We have now seen several examples in which a first person subject carried out or participated in an action without knowingly doing so. When negative morphology is added to the mix, the interpretation is that of accidentally neglecting to carry out an action:

- (42) a. CONTEXT: While walking through her *wirik* ‘field’, my friend realizes that she left her new pack of watermelon seeds back at her house.

Saromkapnã ’on!

s-at-ro-’om-ka-pnã-a ’on

3-grab-NMZ-NEG-VBZ-EVID:SG-TH 1SG

‘I didn’t grab it (BY ACCIDENT)!’

casual discourse: 2018-08-27

- b. CONTEXT: While waiting for a ride from the village of São Luís to the village of Serrinha, I run into a friend from Serrinha. He leaves his wheelbarrow in São Luís since he is going to return to his home via motorbike. When I see him later that night in Serrinha, he realizes that he missed the opportunity to ask me to bring his wheelbarrow with me: since I hitched a ride in a pickup truck, there would have been enough room for the wheelbarrow.

Adão, èsa *e’a* *ke* *’en okahiola*

Adão e-s-a e-’a ke ’en o-kahiola

Adam [2SG-come:SG-TH 2SG-if.SG POLITE.FUTURE 2SG 1SG-wheelbarrow

etèy *ke-ro’omkapnã* *’on.*

ete-s ke-ro-’om-ka-pnã-a ’on

COM-come:SG] say-NMZ-NEG-VBZ-EVID:SG-TH 1SG

‘Adam, I didn’t even say (BY ACCIDENT) for you to bring my wheelbarrow with you.’

/ ‘I didn’t even say (BY ACCIDENT) ‘please bring my wheelbarrow when you come.’’

casual discourse: 2018-08-22

Beyond the suffix -’om in (42) (see also Section 6.2.4), Tuparí has an alternative negation strategy in the clause-typing particle *’aet~et* ‘it’s a shame that not *p*’. This the only clause-typing particle not discussed in Section 4. Using *’aet* signals disappointment, frustration or annoyance on the speaker’s part (Singerman 2018b:445–47; see also Galucio 2014 and Overall 2017 on frustratives in Amazonia).

¹⁵The same-day past construction behaves identically to *-pbi’a* in terms of the evidential contrast: it cannot combine with *-pnẽ/-psira* and is therefore interpreted as WITNESSED in declarative clauses (Singerman 2018a:197–199).

(43) Examples with 'aet 'it's a shame that not p'

- a. CONTEXT: A friend and I are walking at night in Alta Floresta D'Oeste. It is dark and many cars are speeding by. I encourage her to walk quickly; this is how she replies.

Wararo oterope, kaho 'aet 'on.
wararo o-tet-rope kaho 'aet 'on
quickly 1SG-go:SG-PURP car **shame.that.not.p** 1SG

'I am not a car, so as to go quickly.' / 'It is a shame that I am not a car, so as to go quickly.'

casual discourse: 2017-09-02

- b. CONTEXT: When I tell a friend that I will be going back and forth between Alta Floresta and Ji-Paraná over the next two days, she laments the fact that I travel so much.

Eatāum'atāumka et nã etet'e.
e-atāum'atāum-ka-a ('a)et nã e-tet'e
2SG-stay²-VBZ-TH **shame.that.not.p** PROG 2SG-AUX_{GO}:SG

'You don't ever stay put.' / 'It's a shame that you don't ever stay put.'

casual discourse: 2016-12-17

It is possible for 'aet to combine with evidential *-pně/-psira*, too. In all such examples in my corpus, the subject is first person:

(44) Examples where 'aet combines with *-pně/-psira* and a first person subject

- a. CONTEXT: When I return to the village of Serrinha from a brief trip to Alta Floresta D'Oeste, my friend laments not having sent along cash for me to buy a chicken.

Korakora 'epsi māknan 'aet 'on Adão yope!
korakora 'epsi māk-ně-a-n 'aet 'on Adão yope
chicken money send-EVID:SG-TH-NEAR.PAST **shame.that.not.p** 1SG Adam with

'I didn't even send money for a chicken with Adam (BY ACCIDENT)!'

casual discourse: 2018-08-23

- b. CONTEXT: Some friends travel to the city to participate in a church event. Upon returning home, they realize that they forgot to purchase juice in town.

Kiapsitkarap ket'ekapsira 'aet 'okit
ki-apsitkat-ap ket'eka-psira-a 'aet 'okit
1PL:INCL-think-NMZ do.somewhat-EVID:PL-TH **shame.that.not.p** 1DUAL.INCL

herōwap suko pekaere!

herōwap suko pek-ap-ere
yesterday juice buy-NMZ-OBL

'We didn't even think to buy juice yesterday (BY ACCIDENT)!'

casual discourse: 2018-08-27

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