THE UNIVERSITY OF CHICAGO

THE MORPHOSYNTAX OF TUPARÍ, A TUPÍAN LANGUAGE OF THE BRAZILIAN AMAZON

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 $\mathbf{B}\mathbf{Y}$

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This dissertation is dedicated to the memory of my maternal grandmother, Anne Roth (1921–2012).

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Abstract

This dissertation provides the most extensive description and analysis yet available for Tuparí, an endangered Tupían language spoken by approximately 350 people in the Brazilian state of Rondônia. Previous work on Tuparí (Caspar and Rodrigues 1957; Seki 2001; Alves 2004) discussed basic phonology and morphology only; this dissertation, in contrast, addresses a wide range of grammatical questions with a special focus on the syntactic organization of the Tuparí clause. All the data presented and analyzed here were collected by the author over the course of over eight months of on-site field research in Rondônia. Following the best practices of documentary linguistics (Lehmann 2001; Good 2011; Epps et al. 2017), I prioritize naturally-occurring data over elicited examples throughout the dissertation. Much use is made of the texts included in the literacy workbook *Wan Tupari Ema'en Nīka!* (Tupari et al. 2016) as well as a separate text collection now in development.

Chapters Two, Three and Four describe the morphology of nouns, lexical verbs and auxiliaries, respectively. Apart from negation/privation (Singerman 2018), the nominal domain shows little evidence of elaborate functional structure: adjectival modification is sparse, number marking is optional, and there are no determiners. Lexical verbs, on the other hand, exhibit much more morphological complexity than was stated in previous scholarship; for example, a diverse set of adverbial prefixes demarcates a special morphological slot within the verb for incorporated objects. I further show that Tuparí uses auxiliaries to convey positional, aspectual, and temporal meanings. A striking property of these auxiliaries – as well as lexical verbs that express movement – is number agreement manifested through root-internal suppletion. This suppletion demonstrates that Tuparí grammar actively distinguishes between singular, paucal, and plural arguments, even though NPs and pronouns do not overtly realize this three-way contrast.

Chapter Five examines the syntactic organization of the language. The Tuparí clause consists of three distinct layers of headedness: head-final structure is found from the Verb Phrase up through the Evidential Phrase; head-initial structure obtains in the C domain, instantiated by SEC-OND POSITION (2P) clause-typing particles; and the Tense Phrase, sandwiched in between the CP and EvidP, exhibits a mixture of head-final and head-initial properties. The category of tense in Tuparí is elaborate and heterogenous: mutually exclusively post-verbal auxiliaries, 2P particles, and predicate-final suffixes collectively express a nuanced system of gradations in the past as well as various present- and future-marking strategies. Once this tense system is described, it becomes possible to make sense of those morphemes called 'subject pronouns' in prior descriptions (Alves 2004) and 'free pronouns' in comparative research on the Tuparían branch of Tupían (Galucio and Nogueira 2011). These morphemes occur only with a subset of Tense heads and are positionally attracted to those heads in the linear string. I argue that these 'pronouns' are not in fact arguments of the predicate but rather the realization of a functional head located in the inflectional layer of the clause. With this finding in place it becomes possible to demonstrate the existence of (at least) two different kinds of null tense marking operative in the language.

Chapter Six addresses the expression of evidentiality in Tuparí. Tuparí marks an obligatory witnessed/non-witnessed contrast through a bound verbal suffix that agrees in number with the subject. This suffix, *-pnē/-psira*, sits immediately underneath Tense within the clausal spine and participates in a nuanced set of interactions with the 2P clause-typing particles. I argue that *-pnē/-psira* can be used only in contexts where the speaker's commitment to the veracity or accuracy of p is presupposed. This presuppositional analysis correctly predicts the interaction between evidential marking and the 2P clause typers; the behavior of the witnessed/non-witnessed contrast within finite embedded clauses, a structural innovation unique to Tuparí among the Tuparían languages (Singerman 2018 [to appear]); and the incompatibility between *-pnē/-psira* and the counterfactual conditional suffix *-kot'oy*. The chapter concludes by addressing the origin of *-pnē/-psira*. I present evidence that this morpheme – which bears no resemblance to the freestanding particles that mark evidentiality in other Tupían languages (Gabas Jr. 1999; Galucio 2001; Ferreira 2017) – grammaticalized out of the still-productive resultative *-psē/-pnē/-psira*, a suffix which agrees with the subject not only in number but in physical position as well.

The appendix provides a description of language's major phonetic and phonological properties, building upon the study of nasal harmony presented in Singerman (2016).

Chapter 1

Introduction

The *Encyclopedia of the world's endangered languages* (Moseley 2007) contains the following entry for Tuparí, a Tupían language spoken in the Brazilian state of Rondônia:

Although the traditional culture of this group is one of the best documented of the Amazon River Basin through the work of Caspar (1975), a published description of the language is still lacking. With about 150 speakers out of an ethnic group of 200, the language is to be considered seriously endangered. (Crevels 2007:175–76)

These population estimates are out of date; the current speaker base of Tuparí is 350, with over 600 people belonging to the ethnic group (Hein van der Voort, p.c.). Yet the overall assessment that Crevels provides is sadly accurate. The language remains underdescribed, especially in comparison to other members of the Tupían family in Rondônia. Furthermore, shift is underway: many residents of majority-Tuparí villages on the Terra Indígena Rio Branco (TIRB) now use Portuguese as their main language, and shift to Portuguese is reportedly complete among the ethnic Tuparí who reside on the Terra Indígena do Rio Guaporé. While Tuparí remains vital in a core set of villages on the Terra Indígena Rio Branco, there is significant pressure from society at large – and from residents of the Reserve who have already shifted – to switch entirely to Portuguese.

This dissertation seeks to address the scholarly lacuna lamented by Crevels (2007): it provides the most extensive description and analysis of Tuparí grammar yet produced. The data analyzed here were gathered by the author over the course of several fieldwork trips to Rondônia, beginning in 2013 and totaling over eight months in villages on the TIRB. Several weeks of research were also conducted with speakers who reside in the town of Alta Floresta D'Oeste. The dissertation draws primarily on naturally occurring data; excerpts from native texts and everyday conversation are prioritized over elicited examples throughout.

In this introduction I describe the present-day linguistic situation in Rondônia (§1.1), discuss the kind of scholarship carried out on the Tuparí language before (§1.2), explain my fieldwork methodology and choice of data (§1.3), and justify the theoretical framework that I utilize (§1.4). I then review the overall organization of this dissertation (§1.5), and in §1.6 I explain the orthography and the system of glossing I have chosen to employ.

1.1 The linguistic situation in Rondônia

The Tuparí-speaking community resides in the southern strip of the Brazilian state of Rondônia, near to the Bolivian border. According to the Brazilian Institute of Geography and Statistics (IBGE; https://cidades.ibge.gov.br/brasil/ro) Rondônia has an estimated 1.8 million residents in a total area of 237,765.293 square kilometers. It is Brazil's 13th largest state in terms of territory but only its 23rd most populous state. Culturally and linguistically Rondônia is quite diverse; it is home to at least 25 extant native languages, including members of the Tupían, Macro-Jê, Arawak, Chapacuran and Nambikwaran families as well as multiple isolates (van der Voort 2005, 2016). New archaeological discoveries have revealed that rice – and probably manioc and the peanut, too – were independently domesticated in Rondônia, testifying to the importance of this region in South American prehistory (Hilbert et al. 2017). This region has also played a formative role in the historical development of Tupían, the language family to which Tuparí belongs: Proto-Tupían was spoken several millennia ago in or around Rondônia (Rodrigues 1999b; Vander Velden 2010; Rodrigues and Cabral 2012; Eriksen and Galucio 2014; Galucio et al. 2015).

Large-scale colonization of Rondônia by non-indigenous Brazilians began only in the second half of the twentieth century, during a period of what Hemming (2003:chapter 12) calls 'frontier frenzy.' This colonization has had disastrous environmental consequences, with at least thirty to forty percent of the state's forest cover now lost (Tucker et al. 1984; Fearnside 1986; Malingreau and Tucker 1988; Moran 1993; Mahar 2000; Pedlowski et al. 2005; Biggs et al. 2008; Rosa et al. 2012; Meirelles Filho 2014; Le Tourneau 2016, among others). The consequences for the native peoples of the region have been no less catastrophic: many ethnic groups have lost their languages or traditional cultural practices, and other groups are on the verge of disappearing altogether. The Akuntsú, for instance, were down to five elderly monolinguals as of 2014 – the only remaining



Figure 1.1: The Brazilian state of Rondônia (from Google Maps)

survivors of genocidal violence perpetrated by non-indigenous settlers in the late twentieth century (Aragon 2014). Of the 27 languages listed by van der Voort (2016) only nine or ten can be considered 'safe' in terms of the rate of intergenerational transmission. Van der Voort in fact lists only two languages – Surui-Paitér, of the Mondé branch of Tupían, and Warí (Pakaanova), of the Chapakuran family – as having at least 1000 speakers. If a sizable speaker base is taken as a necessity for long-term language safety (see Krauss 1992; Grenoble and Whaley 2006; Thomason 2015, among others), then few to no languages of Rondônia may qualify as non-endangered.

The arrival of non-indigenous settlers in Rondônia brought along a host of illnesses to which the native populations lacked immunity. The Tuparí were nearly eradicated by measles in the early

1950s. The survivors of those epidemics – numbering only 67, according to Caspar (1956) – were then forced to work for slave wages under non-indigenous overseers. Numerically, the Tuparí have since recovered: they now number over 600, and large family sizes ensure continued growth. Culturally, however, contact with Brazilian society has led to considerable changes, including increasing use of Portuguese. According to a recent linguistic survey conducted by Hein van der Voort, of the Museu Paraense Emílio Goeldi, the Tuparí language has approximately 350 speakers spread over two reserves: the Terra Indígena Rio Branco and the Terra Indígena do Rio Guaporé. On the Rio Branco the Tuparí constitute an overall numerical majority, and there are several villages where all children fluently speak Tuparí: Colorado, Trindade, Figueira, Nazaré. In other villages (Serrinha, Bom Jesus) most but not all children of Tuparí ancestry speak the language; and in the most downriver villages (Cajuí, Palhal), intergenerational transmission is minimal. In general, the vitality of Tuparí correlates inversely with the rate of interethnic marriage: the language remains strongest in those villages where all or nearly all of the residents are themselves ethnic Tuparí. In São Luis, the largest village, only a few residents have Tuparí ancestry, and the only fluent speaker of the language was born and raised downriver. (The rest of the São Luis population consists of ethnic Makurap, Kanoê, Djeoromitxí, and Aruá.)

Intergenerational transmission of Tuparí has reportedly ceased altogether on the Terra Indígena do Rio Guaporé, where the only remaining fluent speakers are elderly. For these reasons I have conducted my fieldwork up to this point on the Rio Branco (see §1.3, below).

Figure 1.2 provides a map of the Rio Branco Reserve, the shape of which is a rectangle rotated by 45 degrees. Toward the upper right corner of the image lies the urban center of Alta Floresta D'Oeste, which residents of the Rio Branco frequently visit for medical care and supplies. (There are several speakers of Tuparí who reside full-time in Alta Floresta D'Oeste for school or work.) As this map shows, most of the land to the immediate east, north, and west of the Reserve has been deforested. I can attest from personal experience just how shocking this environmental destruction is: as soon as one steps off of the Reserve, dense forest gives way to tree-depleted cattle ranches.

Although the Terra Indígena Rio Branco is a multiethnic reserve, Tuparí is the only native



Figure 1.2: Map of the Terra Indígena Rio Branco (from Google Maps)

language which remains vital among its population. There are at least 100 residents on the Rio Branco who qualify as ethnically Makurap – with ethnicity determined patrilineally – but I do not know of any competent younger speakers; to my knowledge all fluent speakers of Makurap are at least middle-aged, and most are elderly. The Aruá language, of the Mondé branch of Tupían, has only one elderly speaker on the Rio Branco; the same holds for Arikapu, a critically endangered Macro-Jê language discussed in Arikapú et al. (2010) and Ribeiro and van der Voort (2010) (see Rodrigues 1999a and Ribeiro 2006 on the Macro-Jê family). Overall, the linguistic picture on the Rio Branco is one of increasing shift to Portuguese. Although there are some residents who speak more than one indigenous language, almost all of them are elderly. The extensive multilingualism in indigenous languages that Caspar (1956, 1975) reported no longer exists.

1.2 Prior scholarship on the Tuparí language

Prior research into the lexicon and grammar of Tuparí has focused in large part on using description to advance diachronic and comparative understanding of the Tupían family. As a result many aspects of Tuparí phonology and morphology – and essentially all of its syntax – have remained undescribed until now.

Tuparí was among the first languages of Rondônia to be studied in any detail thanks to the copious fieldnotes taken by the Swiss ethnographer and explorer Franz Caspar. Caspar lived with the Tuparí for several months in the late 1940s and returned to them again in the 1950s. Major societal changes were already underway by the forties; the Tuparí told Caspar that they had recently experienced such massive losses to disease that their overall population had dropped from six *malocas* (traditional communal homes) to two. Nonetheless the lifestyle which Caspar experienced during his fieldwork, and which he documented in his publications (Caspar 1956, 1957, 1975), appears to have been relatively unaffected by the encroachment of the *tarupa* 'white man' into the region. Caspar is still treated with great reverence by much of the local population and is referred to in Tuparí as *Toto Amsi Tàn* 'the long-nosed grandfather'.

At some point in the mid-1950s Caspar handed over his notes on the Tuparí language to Aryon

Dall'Igna Rodrigues, a Brazilian linguist who would go on to complete his dissertation at Hamburg on the phonology of Tupinambá (Rodrigues 1958). In 1957 Rodrigues used the data in Caspar's notes to author an 80-page description, in German, of Tuparí phonology and morphology. This work (Caspar and Rodrigues 1957) was never published, though a scanned copy is available through the Bibloteca Digital Curt Nimuendajú (http://www.etnolinguistica.org/caspar: grammar) and a Portuguese translation has recently been produced by researchers from the University of Brasília (Caspar and Rodrigues 2017). More recent work on Tuparí includes Alves (2004), a bilingual dictionary with approximately 1400 entries; it includes a chapter on phonology and another on morphology. The late Lucy Seki (best known for her extensive work on the Tupi-Guaraní language Kamaiurá) worked with speakers of Tuparí in the late 1990s, producing a short conference paper on nominal morphology (Seki 2001) as well as a literacy workbook (Seki 2003). The anthropologist Betty Mindlin has included many Tuparí stories in her collections of indigenous myths from Rondônia (Mindlin 1993, 1997, 1999; see also Mindlin 2007 for myths from the Suruí). The Tuparí myths included in Mindlin's collections are given in Portuguese.

The description provided in Caspar and Rodrigues (1957) has played a large role in much subsequent scholarship on Tupían historical linguistics, including but not limited to the reconstructions and comparative work put forth in Rodrigues (1999b), Rodrigues et al. (2006), and Rodrigues and Cabral (2012). However, Rodrigues did not personally conduct any fieldwork with the Tuparí in Rondônia, which according to his student Poliana Alves is why he did not seek to have his grammatical sketch published:¹

There exists an unpublished grammar, written by Aryon D. Rodrigues, based upon the data recorded by Franz Caspar in the 1940s and 1950s. According to a personal communication from Rodrigues, the grammar was not published because it utilized data collected by an anthropologist who – although clearly an extraordinary observer

¹The original Portuguese reads as follows: 'Há uma gramática inédita escrita por Aryon D. Rodrigues com base nos dados registrados por Franz Caspar nas décadas de 40 e 50. Conforme comunicação pessoal de Rodrigues, a gramática não foi publicada, por terem sido utilizados dados coletados por um antropógo que, embora extraordinário observador, não pôde obter gravações magnetofônicas. Rodrigues acredita que o registro fonético dos dados tivesse algumas deficiências, para cuja superação seria necessária verificação junto aos índios tupari.'

could not obtain magnetophonic recordings. Rodrigues believes that the phonetic record of the data may include certain defects, overcoming which would have required fieldwork with the Tuparí Indians. (Alves 2004:5; my translation)

In addition, the description provided by Alves (2004) does not include any significant departures from the analysis that Rodrigues produced a half-century earlier. Her fourth chapter begins with a footnote acknowledging that 'the grammatical sketch presented here is based, in great part, on the analysis by Rodrigues in Caspar & Rodrigues 1957' ('O esboço de gramática aqui exposto está baseado, em grande parte, na análise de Rodrigues apresentada em Caspar & Rodrigues 1957') (Alves 2004:55). Comparing Alves's fourth chapter against Rodrigues's earlier work reveals that the two parallel one another very closely. The dictionary constitutes the major contribution of Alves's dissertation, with the grammatical description included mainly to facilitate the lexicographic material: 'The dictionary is preceded by a grammatical sketch of the Tuparí language, in order to complement the grammatical information provided in the dictionary entries' structure' ('Este dicionário vem precedido por um esboço da gramática da língua tupari, a fim de complementar as informações gramaticais fornecidas na microestrutura dos verbetes') (Alves 2004:2).

Since Rodrigues did not personally conduct fieldwork among the Tuparí – and since Alves incorporated his description into her own dissertation – many features of the language's morphology and syntax have gone unnoticed until now. One such feature is agreement. Caspar and Rodrigues (1957:§3.3.4.4.4) provide several examples of the helping verbs or auxiliaries *tet'e~tero'e*. In all of their examples with *tet'e~tero'e* the subject is first person singular or second person singular. This is not a coincidence: the roots *tet'e* and *tero'e* are explicitly [+SINGULAR] and as such they paradigmatically oppose paucal *oro'e* and plural ' $an\tilde{e}~'ean\tilde{e}$. Many other pieces of verbal morphology – the non-witnessed evidential suffix *-pnẽ/-psira*, the resultative suffix *-psẽ/-pnẽ/-psira*, various movement verbs, and all of the auxiliaries – also exhibit agreement in number. In addition, certain verbal morphemes agree in physical position as well. The resultative, for instance, makes an obligatory positional contrast with singular subjects: horizontal *-psē* opposes vertical *-pnẽ*. This agreement in number and position is rampant in everyday discourse and texts, yet none of it has appeared in previous descriptions. To the limited extent that descriptive materials on Tuparí have been made available to the academic community in the past, those materials have not represented the language accurately.

Tuparí has therefore come to occupy a somewhat contradictory position within the broader world of Tupían studies. Although its basic phonology and morphology were described in the 1950s – and although that description has gone on to influence much subsequent work on the Tupían family – it counts today as seriously underdocumented (Crevels 2007:175–76). Much more description and analysis based on original fieldwork is available for other members of the Tupían family, including but not limited to Apyãwa/Tapirapé (Praça 2007, 2013, 2014), Gavião (Moore 1984, 1985, 1989, 2014), Kamaiurá (Seki 1990, 2000a,b), Karitiana (Storto 1999, 2003, 2011, 2014; Everett 2006, 2011), Karo (Gabas Jr. 1998, 1999), Mundurukú (Picanço 2005, 2008, 2010; Gomes 2006, 2008, 2014, 2016) and Sakurabiát (Galucio 2001, 2011b,a, 2014a,b), as well as for non-Tupían languages of southern Rondônia such as the isolate Kwaza (van der Voort 2004, 2005, 2006, 2009). A major objective of this dissertation is to bring scholarly understanding of Tuparí grammar up to the standard attained for these other languages.

1.3 Fieldwork methodology and data

The phenomenon of language endangerment has reached a crisis point in linguistics over the past two and a half decades. Experts on endangerment (Hale et al. 1992; Nettle and Romaine 2000; Grenoble and Whaley 2006; Brenzinger 2007; Harrison 2007; Grenoble and Furbee 2010; Thomason 2015) have converged on the assessment that of the approximately 7000 languages spoken² in the world today, 50% to 90% will cease to be spoken by the end of the 21st century. In that the field's long-term success depends on the availability of data from as diverse a sample of languages as possible, widespread language death threatens to undermine the empirical foundation of linguistics. What is more, the languages that have the greatest potential to reshape our scientific conception of human language (Whalen 2004) are those most likely to disappear. The Americas

²To say nothing of the many endangered sign languages in need of documentation (Nonaka 2004; Fox Tree 2009; Schembri 2010; Davis 2010, 2013; Dikyuva et al. 2012; Haviland 2013; Zeshan and Dikyuva 2013).

face a higher proportion of endangered language families than any other continent (Whalen and Simons 2012; and see Swadesh 1948 for prescient discussion).

In response to the growing attention paid to the phenomenon of language endangerment, considerable literature concerning the methodology and purpose of fieldwork has appeared over the last quarter century. Though scholars continue to debate the proper role of theory in description and documentation (see §1.4), there is much agreement about the importance of long-term, intensive fieldwork for the purpose of arriving at accurate and insightful linguistic records (Dixon 1997; Crowley 2007; Chelliah and De Reuse 2011; Aikhenvald 2015, among others). Everett (2001) states that 'language learning ... is a vital part of all fieldwork', with monolingual field research the preferred method whenever possible. There are obviously circumstances where that method will not work: in cases of high endangerment, for instance, there may not be fluent speakers remaining with whom the researcher could converse. Yet there is a broad consensus within the literature about the key role of immersion in field research.

In this dissertation I aim to take seriously the best practices espoused by the above-mentioned scholars with the goal of producing the most comprehensive description and analysis yet available for the Tuparí language. The data in this dissertation have been gathered over the course of over eight months of on-site field research on the Terra Indígena Rio Branco, as well as several weeks of work with Tuparí speakers residing in the nearby town of Alta Floresta D'Oeste. In keeping with the broader practices of the burgeoning field of DOCUMENTARY LINGUISTICS (Lehmann 2001; Grenoble and Furbee 2010; Woodbury 2011; Jones and Ogilvie 2013; Epps et al. 2017) I prioritize naturally-occuring data drawn from native language texts and everyday conversation. Elicited examples are kept to a minimum and are used chiefly to illustrate grammaticality contrasts. Much use is made of the texts that were included in the literacy workbook *Wan Tupari Ema'en Nīka!* (Tupari et al. 2016), edited by myself in collaboration with the indigenous educators Isaias Tarimã Tupari, Raul Pat'awre Tupari, and Geovane Kamarom Tupari. I have also made use of narratives recorded after January 2016 (when *Wan Tupari Ema'en Nīka!* was completed), as well as excerpts from daily conversations that I observed or participated in while living with the Tuparí. Over fifty

speakers of Tuparí have done recordings with me since my first trip to the Terra Indígena Rio Branco, in August 2013, and many others have taught me their language through casual conversation in their villages. As my proficiency as a non-native learner of Tuparí has increased, my interviews with speakers have shifted away from elicitation in favor of reviewing texts and utterances from everyday conversation.

In addition to deferring to non-elicited data as much as possible, I often give the discourse context in which utterances were produced. These contexts are especially important for deictic elements such as the non-witnessed evidential suffix *-pnẽ/-psira*, the verbal prefix *tom'en-* 'without some discourse-salient entity being aware', the plural pronouns sensitive to clusivity, and so on. I have also endeavored to use culturally appropriate or sensitive examples whenever possible, in part by giving priority to excerpts from traditional myths and other narratives. In this way I have aimed to follow the recommendations of Jane. H Hill:

[L]inguists documenting indigenous languages, especially in a context when languages and cultures are threatened, should make every effort to include in that documentation a rich exemplification of actual usage about contexts that speakers do talk about, including the recitation of heritage texts that may constitute a very important cultural resource. These examples can do double duty. Example constructions in a grammar can simultaneously document the "habitual ways of speaking" of those speakers the community considers to exemplify appropriate usage, record textual resources such as histories, songs, and specialized vocabularies, and illustrate phonological and grammatical points as well. Typographic solutions like bolding...can help in making examples serve multiple functions. (Hill 2006:613–14)

Since the major purpose of this dissertation is to describe and analyze the major morphosyntactic phenomena of Tuparí, I do not have the space here to delve into traditional songs or to examine specialized lexical resources. Nonetheless I do hope that by prioritizing the usage of non-elicited data – and by providing explicit discourse contexts for a many examples – I can help realize at least some of Hill's recommendations for creating culturally insightful documentary records of

endangered languages.

As documentary linguistics emphasizes the importance of comprehensive corpora for understudied and endangered languages, the data I cite here are included in the Tuparí corpus that I am now developing. This corpus will be deposited at the University of Washington's Division of Archives and Manuscripts, per the terms of my two grants from the Jacobs Research Funds at the Whatcom Museum, and at the Archive of the Indigenous Languages of Latin America (AILLA), per the terms of my Doctoral Dissertation Research Improvement Grant from the National Science Foundation's Documenting Endangered Languages Program (award #1563228).

My fieldwork on the Terra Indígena Rio Branco has enjoyed the support of the Tuparí community's leadership since my first introduction to the population, in 2013. The original invitation to work on Tuparí was extended by Isaias Tarimã Tupari and Raul Pat'awre Tupari, two highly respected schoolteachers on the Rio Branco, and it reached me through the Linguistics Division at the Museu Paraense Emílio Goeldi. The schoolteachers' conditions were straightforward: I could conduct linguistic research on Tuparí if I agreed to work with the schoolteachers on questions of orthography and to produce educational materials that could be useful in the schools on the Rio Branco. It was this partnership that led to the production of *Wan Tupari Ema'en Nīka!*, over 540 copies of which were delivered to Isaias Tarimã Tupari, Raul Pat'awre Tupari and their colleagues in February 2016. (The printing costs for that workbook were covered by a Language Legacies grant from the Endangered Language Fund.) Support from the Tuparí community – and especially from the Tuparí leadership – has led to official authorization for my research from both FUNAI (the Fundação Nacional do Índio) and CNPq/MCTI (the National Research Council of the Brazilian Ministry of Science, Technology and Innovation).

1.4 Theoretical assumptions and the issue of abstractness

Fieldworkers disagree about the proper role of formal theory in description. LaPolla and Poa (2006) advocate a surface-oriented approach to describing word order, one which eschews any assumptions about universal categories or syntactic structure. Haspelmath (2015) goes even farther

when he advocates 'framework-free grammatical theory' – an approach claimed to be superior to a wide variety of alternative theories, including not only Generative models but also the Role and Reference Grammar of Van Valin Jr. (1993, 2005) and the Basic Linguistic Theory of Dixon (2009a,b, 2012) (see also Dryer 2006 and Nikolaeva 2015 for arguments for utilizing BLT in grammatical descriptions). To evaluate these competing proposals and frameworks would take me too far afield from the descriptive and analytic goals of this dissertation. I will say, however, that the closest view to my own in this debate is that of Rice (2006). Building on her extensive work on Athapaskan languages (Rice 1989, 2000), Rice observes that formal theories make testable predictions that can enhance the accuracy and specificity of descriptions of understudied languages. In this sense formal theory becomes an extremely useful tool for fieldworkers. What is more, it is possible to use those theories without committing oneself to their more contentious philosophical or psychological claims and without employing excessively esoteric terminology.

In this dissertation I aim to follow Rice's (2006) advice: I seek to use formal theory to make my description and analysis of Tuparí grammar as accurate and as detailed as possible. Chapter 5 ('Headedness, tense, and pronouns in the Tuparí clause') and Chapter 6 ('Evidentiality, clause typing, and physical position'), which are focused on questions of clausal organization, adopt a non-lexicalist version of contemporary Minimalist syntax. (See Bruening 2018b,a; Müller 2018 for recent discussion of Lexicalism in syntactic theory.) The choice of this particular framework has several motivations, including (*a*) the heterogenous realization of the category of Tense as bound predicate-final suffixes, second position particles, or postverbal auxiliaries; (*b*) the exquisite sensitivity of the language's second position effects to syntactic constituency; and (*c*) the close relationship between the second position clause typers and the $[\pm wh]$ status of the clause-initial constituent which they immediately follow. These phenomena are ones which current syntactic theory can help to describe and explain; indeed, they demand an analytic framework that assumes more structural nuance than LaPolla and Poa's (2006) or Haspelmath's (2015) do. While I of course will not claim that the framework chosen here is the only one capable of handling the Tuparí facts, I *am* convinced that an approach that denies the possibility of crosslinguistic universals in syntactic structure will not be able to make satisfactory sense of this language's grammar.

Fewer theoretical tools are employed in Chapter 2 ('The nominal domain'), Chapter 3 ('Verbal morphology') and Chapter 4 ('The auxiliary system') in comparison to Chapters 5 and 6, which focus on clausal organization. Questions of clausal organization are also addressed in other work I have published, in particular Singerman (2018), which interrogates the behavior and position of negation, and Singerman (2018 [to appear]), on the properties of the language's innovative finite embedded clauses. Work now in progress uses the descriptive and analytic claims made in this dissertation to investigate grammatical issues including the interaction between information structure and morphosyntax (Singerman In preparation a) and the realization of bound resumptive pronouns on verbs and auxiliaries (Singerman In preparation b). Although this dissertation utilizes analytic tools drawn from contemporary syntactic theory to make sense of the highly configurational nature of the Tuparí clause, it is my hope that the material contained here will lay the groundwork for an eventual reference grammar of Tuparí – one accessible to linguists of a wide range of theoretical persuasions (Mithun 2007; Noonan 2007; Rice 2007; Aikhenvald 2015; Nikolaeva 2015).

Before concluding this section I wish to comment on the degree of abstractness assumed in this dissertation. Much debate between different analytic frameworks turns on on different authors' assumptions of phonological/morphological/syntactic abstractness. How far should any analysis go beyond the surface facts? At what point do increasing levels of abstraction interfere with rather than enhance our understanding of the data at hand? (A particularly clear discussion of these issues is found in Mithun 1979, who builds upon the experiences of indigenous Iroquoian teachers to point out that not all phonemic analyses reflect knowledge accessible to speakers themselves.) My preference in this dissertation has been to stay as close to the surface facts as possible, in particular regarding morphophonemic alternations. As it so happens, the morphophonology of Tuparí is such that highly abstract underlying segments or morphs do not need to be posited: in all cases of allomorphic alternation, one of the attested surface forms can serve as the base from which all the other allomorphs derive. Allow me to illustrate with one of the many suffixes that begin in certain contexts with a C_1C_2 sequence. One such suffix means 'after doing X'; it derives adverbials from

VPs. Following an oral vowel this suffix is realized as *-ppe*: *isi* [i.si] 'spear it' \rightarrow *isippe* [i.sip'.pe] 'after spearing it'. After a nasal vowel it is realized as *-mpe*: *mo'ã morẽ* [mõ.?ã.mõ.řẽ] 'play ball' \rightarrow *mo'ã morempe* [mõ.?ã.mõ.řẽm'.pe] 'after playing ball'. And after a consonant the suffix loses its initial labial altogether: *itop* [i.top'] 'see it' \rightarrow *itoppe* [i.top'.pe] 'after seeing it'.

Between -*ppe*, -*mpe*, and -*pe*, which of these allomorphs (if any) should serve as the base form from which the other two derive? A wide range of facts show that (*a*) the nasalization of oral codas after nasal vowels and (*b*) the simplification of $C_1C_2C_3$ sequences to just C_1C_3 are highly general processes in Tuparí phonology (Appendix A; see also Singerman 2016). The generality of these two processes means that the allomorph which occurs after oral vowels, -*ppe*, can serve as the underlying form; the other two allomorphs are derived by the application of independently attested, phonotactically motivated processes. For these reasons I treat the suffixal allomorphs that occur after oral vowels as citation forms throughout the dissertation: -*ppe* 'after doing X', -*pbi'a* 'DURATIVE', -*t* 'NEAR PAST', -*pnẽ*/-*psira* 'EVIDENTIAL', -*psẽ*/-*pnẽ*/-*psira* 'RESULTATIVE', and so on.

1.5 Organization of the rest of the dissertation

Chapters 2, 3, and 4 describe the morphology of nouns, lexical verbs, and auxiliaries, respectively. Apart from negation/privation (Singerman 2018) the Tuparí nominal domain shows little evidence of elaborate functional structure: adjectival modification is sparse, number marking is optional, and there are no determiners. Lexical verbs, on the other hand, exhibit much more morphological complexity than was noted in previous scholarship; for example, a diverse set of adverbial prefixes demarcates a special morphological slot within the verb for incorporated direct objects. I further show that Tuparí uses special auxiliaries to convey positional, aspectual, and temporal meanings. A striking property of these auxiliaries – as well as of lexical verbs that express movement and of the evidential and resultative suffixes – is number agreement manifested through root-internal suppletion. This system of suppletive agreement demonstrates that Tuparí grammar actively distinguishes between singular, paucal, and plural arguments, even though NPs and pronouns do not overtly realize this three-way contrast.

Chapter 5 ('Headedness, tense, and pronouns in the Tuparí clause') examines the syntactic organization of the language. The Tuparí clause consists of three distinct layers of headedness: head-final structure is found from the VP up through the Evidential Phrase; head-initial structure obtains in the C domain, instantiated by SECOND POSITION (2P) clause-typing particles; and the Tense Phrase, sandwiched in between the CP and EvidP, exhibits a mixture of head-final and headinitial properties. I show further that the category of tense in Tuparí is elaborate and heterogenous: mutually exclusively post-verbal auxiliaries, 2P particles, and predicate-final suffixes collectively express a nuanced system of gradations in the past as well as various present- and future-marking strategies. Once the tense system is described, it becomes possible to make sense of those morphemes called 'free pronouns' in comparative research on the Tuparían branch of Tupían (Galucio and Nogueira 2011) and 'subject pronouns' in previous descriptions of Tuparí (Alves 2004). These morphemes occur only with a subset of Tense heads and are positionally attracted to those heads in the linear string. Although these morphemes are cognate to pronouns in other Tupían languages, they cannot be synchronically analyzed as arguments of the predicate in Tuparí; rather they realize a functional head located in the inflectional layer of the clause. With this finding it place it becomes possible to identify two different phonologically null tense morphemes in Tuparí, one restricted to superficially tenseless verbal predicates and the other restricted to nominal predicates. The appendices to Chapter 5 discuss additional enclitic placement facts and provide textual evidence that the 2P tense particles and predicate-final tense suffixes do in fact constitute a single grammatical category.

Chapter 6 ('Evidentiality, clause typing, and physical position') addresses the expression of evidentiality in Tuparí. The language marks an obligatory witnessed/non-witnessed contrast through a bound verbal suffix, *-pnẽ/-psira*, that agrees in number with the subject. This suffix sits immediately underneath T within the clausal spine and expresses a nuanced set of interactions with the set of 2P clause-typing particles. I argue that those interactions make sense only if *-pnẽ/-psira* is restricted to contexts where the speaker's commitment to p is presupposed. This presuppositional analysis correctly predicts the behavior of the witnessed/non-witnessed contrast within finite embedded clauses, a structural innovation unique to Tuparí among the Tuparían languages (Singerman 2018 [to appear]), as well the impossibility of combining *-pnē/-psira* with the counterfactual conditional suffix *-kot'oy*. The chapter concludes by addressing the origin of *-pnē/-psira*. I present evidence that *-pnē/-psira* – which bears no resemblance to the freestanding particles that mark evidentiality in other Tupían languages (Gabas Jr. 1999; Galucio 2001; Ferreira 2017) – grammaticalized out of the still-productive resultative suffix *-psē/-pnē/-psira*, a morpheme which agrees with the subject not only in number but in physical position as well. The use of the term RESULTATIVE in Chapter 6 follows the typological definition of Nedjalkov (1988, 2001).

Appendix A describes the major phonological properties of Tuparí, building upon (and in a few cases correcting) the analysis put forth in Singerman (2016). The appendix also addresses certain claims made about Tuparí phonetics and phonology in prior literature, including (*a*) that the language has at least one kind of tautosyllabic consonant cluster in the native lexicon and (*b*) that its phonemic inventory includes a glottalized labial stop. I provide new data to show that what previous researchers transcribed as the cluster [jt] is just a single segment, a glide realized as an unreleased palatal stop ([c[¬]]) in coda position, and that the glottalized labial stop mentioned in certain comparative work is in fact a heterosyllabic cluster of /p/ and /?/. The processes described in Appendix A are stated as rules, although one could presumably analyze Tuparí phonology in an Optimality Theoretic framework (as Picanço 2005, 2010 does for Mundurukú).

1.6 Orthography and glossing

This dissertation utilizes the standard orthography that the schoolteachers Isaias Tarimã Tupari, Raul Pat'awre Tupari, Geovane Kamarom Tupari and their colleagues agreed upon during the preparation of *Wan Tupari Ema'en Nĩka!* (Tupari et al. 2016). In this orthography almost all the letters match their IPA counterparts, as shown by Table 1.1. Long vowels are marked with a grave accent. For some words or morphemes (including the weak nominative enclitics 'on '1SG', 'en '2SG', and so on) I write the initial glottal stop, though the schoolteachers do not always do so.

Letter	IPA	Example	word		Comments
а	a	apap'a	[a.pap [¬] .?a]	'head'	
е	e, ε	èkget	[e:k].get]	'your house'	
i	i	epip	[e.pip [¬]]	'banana'	
0	0	ho'op	[ho.?op]]	'this'	
и	ŧ	kup	[kʉp]]	'leg, tree, flea'	Represents /u/ in Portuguese loans
à, ò	a:, o:	kò	[ko:]	'cold, flu'	
ã, ẽ	ã, ẽ	yã	[ɲã]	'mother'	
р	р	pop'e	[\$\p\$].?e]	'fear'	Realized as $[\phi]$ prior to the round vowels <i>a</i> and <i>u</i> .
t	t	tak	[tak]]	'tough, hard'	
k	k	kiakop	[ki.a.kop [¬]]	'sun'	Known to affricativize before /i/, especially in the speech of younger Tuparí and in fast speech.
,	?	we'u'u	[we.?ʉ.?ʉ]	'night monkey'	Banned from coda position.
b	b	akaba	[a.ka.ba]	'copaíba'	Banned from coda position; rare.
g	g	Kapsogo	[kap [¬] .so.go]	(proper name)	Attested only intervocalically; very rare.
т	m	merem'ã	[mẽ.r̃ēm.?ã]	ʻfly'	
п	n	nĩk	[nĩŋ]	'write'	
S	S	sarop	[sa.rop [¬]]	'her thing'	Realized as [c [¬]] in coda position, where it merges with the glide <i>y</i> .
x	ſ	xãy	[∫ãŋ`]	'cat'	Vanishingly rare: attested only in $x\tilde{a}y$ 'cat' (a possible indigenous loan) and in Portuguese loans.
h	h	hĩto	[hĩ.to]	'necklace'	Alternates with \emptyset in a small set of nom- inal and verbal roots; always limited to morpheme-initial position.
tx	t∫	txau	[t∫a.ʉ]	'manioc flour'	Vanishingly rare.
İ	dʒ		• -		Known to surface when a palatal glide and glottal stop immediately follow another con- sonant (i.e., <i>Tera nãkop je</i> [te.ra.nã.kop'.dʒe] 'Perhaps he has gone').
r	1	kurup'i	[kʉ.rʉp [¬] .ʔi]	'parakeet'	Nasalizes to $[\tilde{r}]$ when adjacent to a nasa vowel; restricted to intervocalic position and barred word-initially.
W	w, β	wì	[βi:]	'axe'	
У	j	yõkan	[nõ.kãn [¬]]	'toucan'	Nasalizes to [p] when adjacent to a nasal vowel; realized as [c] in coda position.

Table 1.1: Orthography

The standard Tuparí orthography does not have a consistent way to mark stress. This is not much of a problem in practice, given the low functional load that stress has in distinguishing lexical items from one another. There do however exist some minimal or near-minimal pairs, such as iambic *ma'ẽ* [mã.'?ẽ] 'speak' versus trochaic *ma'ẽ* ['mã.?ẽ] 'carry' and iambic *korakora* [ko.'ra.ko.'ra] 'chicken' versus trochaic *hurahura* ['hʉ.ra.'hʉ.ra] 'tucunaré'. Since lexical stress is only rarely contrastive in the fashion of these two pairs – and since functional morphology, such as auxiliaries, are generally deaccented – I have not altered the standard Tuparí orthography to indicate stress in this dissertation.

As detailed in Singerman (2016), nasal harmony is a pervasive aspect of Tuparí morphophonology. The orthographic intuition of Isaias Tarimã Tupari, Raul Pat'awre Tupari, and their colleagues has been to not mark nasality overtly when it can be predicted from the broader context. For instance, the word meaning 'speech' or 'language' is pronounced as [ẽ.mã.?ẽ] but is written as *ema'ẽ*. Here the initial /ẽ/ is automatically nasalized by virtue of preceding the nasal consonant /m/; similarly, the /ã/ is nasalized because it follows /m/. Only the final vowel of the word – which demarcates the right boundary of the nasal domain – is written with a tilde. If a suffix that is susceptible to nasalization attaches to this word and in so doing extends the nasal domain, the final /ẽ/ of the root is no longer written with a tilde: *ema'en* [ẽ.mã.?ẽn[¬]] 'language + NU-CLEAR case', *ema'erẽ* [ẽ.mã.?ẽ.ĩẽ] 'language + OBLIQUE case', *ema'em* [ẽ.mã.?ẽm[¬]] 'language + INSTRUMENTAL-LATIVE case'. The nasality in all of these cases is fully predictable; nonetheless, the reader should keep in mind that Tuparí words are often more nasal than the orthography overtly indicates.

When we sit down to review everyday utterances or texts, speakers often choose to replace Portuguese loanwords with Tuparí equivalents or near equivalents. Out of deference for local conceptions of linguistic purity I have tried to prioritize examples in this dissertation that contain few to no loanwords. I have not, however, excised loanwords from any examples without speakers' approval. I generally leave loans in the original Portuguese orthography, in part because they can retain phonemes and phonological contrasts not found in the Tuparí native lexicon (§A.5). In the interest of maximum transparency the data in this dissertation are accompanied by relevant metadata. Utterances from casual conversation are followed by the date on which they were spoken; data drawn from elicitation are followed by the date on which the interview took place. Excerpts from texts are accompanied by the name of the author/narrator. Very simple utterances which occur regularly in conversation or are uncontroversial in well-formedness are not dated.

Numbered and glossed examples mostly follow the Leipzig Glossing Rules (Comrie et al. 2015), a set of guidelines that builds upon the proposals of Lehmann (1982, 2004). My system of interlinear glossing differs from the Leipzig conventions in the following ways. First, since various morphophonological processes can interfere with otherwise tidy affixal concatenation in Tuparí, all examples show both the surface form (written in the indigenous educators' standard orthography) as well as a morpheme-by-morpheme gloss. Second, the morpheme-by-morpheme glosses show the underlying verb-final vowels deleted by the theme vowel -a and related affixes (actor nominalizer -at, adverbial focus -ap, etc.). For example, the verbal root meaning 'be afraid of, fear' is systematically presented in the morpheme-by-morpheme breakdown as *pop'e*, even though the final /e/ is deleted on the surface prior to the theme vowel and related affixes (§A.4). Third, in previous work (Singerman 2016, 2018) I gave all nasal-harmonizing affixes in the morpheme-bymorpheme glosses using their oral allomorphs, since these are arguably the underlying forms (see §1.4). That convention does not always assist the reader, however. I have therefore chosen in this dissertation to represent harmonizing affixes in the glosses as either oral or nasal depending on their surrounding context. That is, while the citation form of the near past suffix is -t, that same morpheme is glossed as -t following oral segments but as -n following nasal ones.

Figure 1.3 illustrates several aspects of how data are presented in this dissertation. Building upon the recommendations of Weber (2007), I have bolded morphemes which are essential to the descriptive generalization at hand. Discourse contexts are also included for many examples. While not all examples are accompanied by such a context, I have opted to include the context whenever highly deictic elements are present. In the pair of utterances given in Figure 1.3 the deictic element demanding contextual clarification is the bolded third person anaphor he^{h} 'that one, that thing'.

Figure 1.3: Examples of glossing practices (from §2.1.1)

- (4) Examples of the third person anaphor $h\dot{e} \sim he$
 - a. CONTEXT: I ask some friends whether they like the Ouroeste brand of coffee.

Hè nã otekafe kot'oaet.
hè e nã ote-kafe kot'oap-et
that.one 3 FOCUS 1PL.EXCL-coffee preferred/favorite-NUC
'That one [=Ouroeste] is our favorite kind of coffee.'
casual discourse: 2016-12-15
b. CONTEXT: I ask my friend whether he is his mother's eldest child.

Nerõ'om, Danieoe nã hèt.
nerõ'om, Danieo e nã hè-t
no Daniel 3 FOCUS that.thing-NUC
'No, it is Daniel who is that thing [=my mother's eldest child].'
casual discourse: 2017-08-12

Although relatively little morphophonology is at work in this pair of examples, the final labial of *kot'oap* 'preferred, favorite' (derived from the transitive verb *kot'oy* 'want') is deleted prior to the vowel-initial nuclear suffix in (a). This labial is retained in the morpheme-by-morpheme gloss.

The set of abbreviations used in the glosses are provided in Table 1.2, which also gives representative morphemes for each of the grammatical categories listed. Since the language makes use of multiple verbalizing and nominalizing morphemes, these are annotated with subscripts: the verbalizer *-kat* as VBZ_{kat} , the nominalizer *-ap* is glossed as NMZ_{ap} , and so on. Beyond the abbreviations listed in this table, reduplicated roots are glossed with square backets and a superscript 2. Hence the verb *tettetka* 'go about, walk about', composed of the lexical verb *tett* 'go.SG' and the verbalizing suffix *-ka*, is glossed as $[go.SG]^2-VBZ_{ka}$. The purpose of these square brackets is to precisely delimit which morphemes fall within the domain of reduplication.

Because the assertive particles pa'a and ta'a index the gender of the speaker, I gloss the former as ASSERTIVE. σ' and the latter as ASSERTIVE. φ .

Abbreviations used in contexts other than interlinear glosses include CIC (CLAUSE-INITIAL CONSTITUENT), 2P (SECOND POSITION), and V2 (VERB SECOND), as well as NP (Noun Phrase), VP (Verb Phrase), and CP (Complementizer Phrase).

Abbreviation	Category	Representative morphemes
1	first person	'on, 'ote, 'okit, 'okitwat
2	second person	'en, wat
3	third person	e
3c / 3coref	coreferential third person	te-
ADV.FOC	adverbial focus	-ap
AUX	auxiliary	'e, a
AUXgo	auxiliaries related to 'go'	tet'e \sim tero'e, oro'e, 'an $\tilde{e}\sim$ 'ean \tilde{e}
AUXhabit	temporally-unspecified habitual auxiliary	'eka, aka
AUX _{hzntl}	horizontal auxiliary; singular subjects only	уẽ
AUX _{moving}	auxiliary of movement/doubt	kop, 'i
CAUS	synthetic causative	m-/õ-
COND	counterfactual conditional	-kot'oy
СОМ	comitative-causative	ete-/ite-
DIMIN	diminutive	-kut'a
DUR	durative	-pbi'a
EPNTH	epenthetic vowel	<i>e</i> -
EV	evidential	-pnẽ/-psira
EXCL	exclusive	ote-
FUT	future	peap
HABIT	present habitual auxiliary	(')apteka
НÈ	nominalizer of finite embedded clauses	hè~he
HZNTL	horizontal	-psẽ, yẽ
INCL	inclusive	ki-
INS	instrumental-lative	-m/-o
INTRNS	intransitivizer	е-
LOC	locative	-pe
NEG	negation/privation	-' <i>om</i>
NMZ	nominalizer	-ap, -ro \sim -to
NUC	nuclear case	-et/-t
OBJ.FOC	object focus prefix	<i>y</i> -
OBJ.NMZ	object nominalizer	$y - \sim iy$ -
OBL	oblique case	-ere/-re
PASS	passive-like nominalizer	-psit
PAUC	paucal	1
PL	plural	
POSS	possessive suffix	-psiro
PROG	progressive particle	nẽ, nerõ
PURP	purposive subordinator	-tenã
RCP	reciprocal prefix	eue-
RSLT	resultative	-psẽ/-pnẽ/-psira
SG	singular	<u> </u>
ТН	theme vowel	- <i>a</i>
VBZ	verbalizer	- <i>nẽ</i> , -ka, -kat, -ki
	vertical	-pnẽ
VRTCL	vertical	-pne

Table 1.2: Abbreviations	used in	glosses
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Chapter 2

The nominal domain

The Tuparí nominal domain is morphosyntactically sparse, with many grammatical categories – especially number – more consistently marked on verbs than on nouns. Adjectival modification is relatively limited; nouns do not take any articles or markers of definiteness; there is little to no quantification within noun phrases; and so on. Most of the morphemes presented here appear in prior descriptive work on the language, but my analysis differs in key respects from what has been said about the Tuparí nominal domain in previous literature. For this reason I explicitly engage with prior descriptive claims at several points in this chapter.

The major claims I put forward here include the following:

- 1. The Tuparí morphemes cognate to free or subject pronouns in related languages fall into two different classes. A set of strong pronouns mark change of topic when marked with the nuclear case suffix -et/-t; they can also bear other case suffixes. The partially homophonous weak nominative enclitics, in contrast, never bear case. These enclitics have a highly restricted distribution: they are limited to a subset of TAM contexts and are positionally parasitic on tense morphology in the linear string. Here and in Chapter 5 I analyze the weak nominative enclitics as a species of agreement morphology generated in a high position in the clause.
- 2. While Alves (2004) transcribed an initial gottal stop for the third person subject pronoun only, consonant lenition processes show that the third person form is in fact vowel-initial. The first person weak nominative enclitics, however, do in fact begin with /?/, as does the second person singular.
- 3. There are null allomorphs of the third person weak nominative enclitic and of the third person pronominal proclitic. These allomorphs are limited to particular contexts. The null third person proclitic occurs prior to consonant-initial transitive verbs only; vowel-initial verbs require overt *i*- \sim *y*- \sim *s*-. The null third person weak nominative enclitic, meanwhile, is

obligatory after a subset of the 2P clause-typing particles and often occurs after clause-initial adverbs, as well.

- 4. Both nominal and verbal roots in Tuparí can exhibit a root-initial alternation between h and Ø. In previous literature this alternation has been argued to consist of separable RE-LATIONAL PREFIXES of the sort known from other Tupían languages (Rodrigues 1999b; Rodrigues and Cabral 2012). But there exist cases in Tuparí where the alternation between h- and Ø can be triggered on phonological grounds alone. What is more, wat- '2PL' triggers not only the h-~Ø alternation but also several other sandhi phenomena. These facts undermine the claim that wat- is a free rather than bound morph.
- 5. While previous research into Tuparí has claimed that the language's nouns divide into three classes (Alves 2004:§4.3.1), the data shown here demonstrate that class membership follows straightforwardly from phonological conditioning.
- 6. The nuclear case -et/-t (referred to as a *caso determinativo* by Caspar and Rodrigues 1957; Alves 2004; Cabral et al. 2017) exhibits the characteristics of a grammaticized topic marker. Obligatory on NP subjects and also present on a subset of direct objects, this morpheme never appears on focused NPs. The clear contrast between NP subjects (always marked with the nuclear case; never focal) and foci (never marked with the nuclear case) points toward GIVENNESS or TOPICALITY as the condition that determines this morpheme's non-categorical appearance on direct objects.
- 7. All apparent adjectives in Tuparí betray ambiguities of the 'tall/height', 'large/size' and 'beautiful/beauty' variety. They are also capable of being possessed like regular nouns. To-gether with the striking absence of any morphology restricted to adjectival bases, these facts lead to the conclusion that Tuparí does not have an independent lexical class of adjectives. Those lexemes which can provide adjective-like interpretations are simply nouns.
- 8. Number marking on nominals in Tuparí is underspecified. While the first person inclusive

weak nominative enclitics draw a dual/plural distinction, the language's pronouns do not overtly distinguish between singulars, paucals, and plurals – even though this three-way number contrast is pervasive in the verbal domain. The plural-like suffix -'*eat* 'MANY' is optional on NPs; it does not need to be present for a nominal to receive a plural interpretation. Overall, number is frequently covert in the nominal domain even as it is overt in the verbal morphology.

This chapter is organized as follows. \$2.1 presents the weak nominative enclitics (formerly known as free pronouns or subject pronouns) and \$2.2 discusses the pronominal proclitics which mark absolutive arguments on verbs as well as possessors on nouns. \$2.3 explores the expression of possession and interrogates the morphophonological alternation between *h* and \varnothing that occurs in a small set of nominal and verbal roots, with \$2.3.4 showing that the language does not have three noun classes. \$2.4 addresses the system of case marking and of postpositions. \$2.5 examines the behavior of apparent adjectives – here argued to not constitute a separate lexical class – and \$2.6 shows that number is very much underspecified in the nominal domain.

2.1 The strong pronouns and the weak nominative enclitics

This section discusses the strong pronouns as well as the weak nominative enclitics. These two classes of morphemes are treated together here because they are homophonous for several persons. That being said, they exhibit markedly different morphosyntactic behaviors. The weak nominative enclitics are unstressed morphemes that are positionally parasitic on a subset of tense morphology; their presence is never optional. The strong pronominal roots, in contrast, are used to indicate change in topic. They may also bear the instrumental, oblique, and locative cases.

2.1.1 The strong pronouns

The paradigm of the strong pronouns given in Table 2.1. There is a single first person inclusive form, the root *kit*. Consultants confirm that one can add -'*eat* 'MANY' to this root to give a non-paucal plural reading, as in the oblique-marked *kit*'*earere* [kit[¬].?e.'a.re.re]. It is also possible to

	Root	Root plus nuclear case	Root plus oblique case
1SG	on	õren	õrerẽ
2sg	en	ẽren	ẽrerẽ
1incl	kit	kiret	kirere
1excl	ote	otet	otère
2pl	wat	waret	warere

Table 2.1: Paradigm of strong pronouns

add -'*eat* to the second person plural root *wat*: *wat'earere* [wat'.?e.'a.re.re]. (It is not yet known whether -'*eat* can be added to the first person exclusive base *ote* as well.) That the roots of the strong pronouns can host -'*eat* makes sense given that the strong pronouns are true nominals, and -'*eat* is restricted to nominal bases (§2.6, below). As the next subsection will show, the first person inclusive weak nominative enclitics distinguish between dual '*okit* and non-dual plural '*okitwat*. This dual/non-dual distinction is not made within the strong pronouns, however.

Change in topic is signaled by strong pronouns bearing the nuclear case *-et/-t*. The multiclause response in (1) was how one speaker answered my question *Etero'om eman nẽ 'en Ricardo Frankom?* 'Have you still not gone to the Ricardo Franco?'. (Ricardo Franco is the name of a village on the Terra Indígena do Rio Guaporé, where a large part of the Tuparí population resides.) In the third line the topic switches from the speaker's own experiences to those of her husband, Tigui. When in the final line the topic switches back to the speaker, the strong pronoun *õren* appears.

- (1) Speaker uses strong pronoun *oren* '1SG' to mark change in topic
 - a. *Otero'om 'on*. o-tet-ro-'om **'on** 1SG-go.SG-NMZ_{ro}-NEG **1SG** 'I have not gone there.'
 - b. *Ricardo Frankot topto'om 'on*. Ricardo Franko-t top-to-'om 'on Ricardo Franco-NUC see/know-NMZ_{ro}-NEG 1SG 'I do not know/have not seen the Ricardo Franco.'
 - c. *Tigie itoat*.
 Tigi e i-top-a-t
 Tigui 3 3-know-TH-NUC
 'Tigui is the one who knows it.'

d. ... Ero'are õren topto'om 'on. ero'are on-en Ø-top-to-'om 'on but 1SG-NUC 3-know-NMZ_{ro}-NEG 1SG 'But as for me, I do not know it.' casual discourse: 2015-12-27

Observe that the weak nominative enclitic 'on '1SG' is required in line (d), just as in (a) and (b). In other words, the presence of the strong pronoun in (d) does not lift the requirement that the weak nominative enclitic be present as well.

The strong pronouns can take case markers other than nuclear -et/-t in accordance with a given predicate's argument structural requirements. (2) illustrates with the verb *apsitkat*~*apsikat* 'think, think about', which optionally takes an instrumental-marked argument. As these examples show, a strong pronoun can serve as an instrumental-marked argument just as well as a non-pronominal NP can.

- (2) Strong pronouns can bear other case suffixes, as well
 - a. *Kat'aro nãpe* nã wapsikatsã nã w-apsikat-sẽ-a kat'at-o nãpe nã nã what-INS REALLY ?! FOCUS 1SG-think-RSLT.SG.HZNTL-TH PROG õka? oyã o-ka o-yẽ-a 1SG-AUXhzntl-TH 1SG-AUX.SGhabit 'Just what am I thinking about, sitting here?' casual discourse: 2016-11-30 b. Osie teapsitkarat õrõ. nã
 - o-si e nã te-apsitkat-a-t on-o 1SG-mother 3 FOCUS 3C-think-TH-NUC 1SG-INS
 'It was my mother who thought of me.' casual discourse: 2016-11-30
 c. Wapsitkara 'on ẽrõ, ma'a 'en herõwap
 - c. Wapsitkara 'on ērõ, ma'a 'en herõwap hem. w-apsitkat-a 'on en-o, Ø-ma'ẽ-a 'en herõwap hem 1SG-think-TH 1SG 2SG-INS [3-speak-TH 2SG yesterday] HÈ.INS 'I thought about you, about the thing that you said yesterday.' casual discourse: 2017-08-14

In (a) the instrumental-marked argument of *apsikat* 'think' is the clause-initial wh-word kat'aro,

while in (b) the instrumental-marked argument is a strong pronoun: $\tilde{o}r\tilde{o}$ 'to me, about me'. Example (c) is especially instructive about the similarities between the strong pronouns and nonpronominal NPs, as the instrumental-lative case surfaces twice here: once on the second person singular pronoun $\tilde{e}r\tilde{o}$ and once on the nominalizer *hem*, which subordinates the entire finite embedded clause *ma'ã 'en herõwap hem* 'about the thing that you said yesterday'. (See Singerman 2018 [to appear] as well as §6.7 for more examples of finite embedded clauses.) In sum, the strong pronouns bear the same case marking that non-pronominal NP arguments do in identical syntactic positions.

We will see in the next subsection that the weak nominative enclitics are restricted to a subset of tense/aspectual contexts. But while the strong pronouns are homophonous with the weak nominative enclitics for several persons, they are not restricted by tense, aspect, or the like. That is, the strong pronouns are capable of appearing in all contexts. Second person forms are shown in (3):

- (3) Strong pronouns allowed in all contexts, even ones that ban weak nominative enclitics
 - a. Katke nã eyẽ ẽren?
 katke nã e-yẽ en-en
 how PROG 2SG-AUX_{hzntl} 2SG-NUC
 'As for you, how are you doing?'
 casual discourse: 2016-07-08
 - b. *Here eren ke ewakto pe'ap...* here en-en ke e-wak-to pe'ap and 2SG-NUC like.this 2SG-cry-NMZ_{ro} FUT.2SG 'And as for you, you will cry like this...' text: Miraci Aguissi Tupari, narrator
 - c. Kat'aro mãkērõ nã wat'oro'e waret. kat'aro mãkērõ nã wat-oro'e wat-et how.many DUNNO PROG 2PL-AUXgo.PAUC 2PL-NUC 'As for you-PL, I don't know how many you-PL are.' casual discourse: 2016-12-14
 - d. Waret poareman nẽ wat?
 wat-et poareman nẽ wat
 2PL-NUC well Y/N 2PL
 'As for you-PL, are you-PL well?'
 casual discourse: 2018-01-29

Of the four utterances shown here, only (d) contains a weak nominative enclitic in addition to the nuclear-marked strong pronoun. Indeed, the tense contexts shown in (a) through (c) are incapable of combining with weak nominative enclitics. This incompatibility is discussed in greater detail in Chapter 5.

The strong pronouns do not contain a dedicated third person form; rather, third person reference is accomplished via anaphors like $h\dot{e}\sim he$ 'that one [just mentioned], that thing [just mentioned]'. This anaphor is the diachronic source for the nominalizing head that occurs at the right edge of the language's finite embedded clauses (Singerman 2018 [to appear]).

- (4) Examples of the third person anaphor $h\dot{e} \sim he$
 - a. CONTEXT: I ask some friends whether they like the Ouroeste brand of coffee.

Hènãotekafekot'oaet.hèe nãote-kafekot'oap-etthat.one3 FOCUS1PL.EXCL-coffeepreferred/favorite-NUC'That one[=Ouroeste] is our favorite kind of coffee.'casual discourse:2016-12-15

b. CONTEXT: I ask my friend whether he is his mother's eldest child.

Nerõ'om, Danieoe nã hèt.
nerõ'om, Danieo e nã hè-t
no Daniel 3 FOCUS that.thing-NUC
'No, it is Daniel who is that thing [=my mother's eldest child].'
casual discourse: 2017-08-12

Observe that $h\dot{e} \sim he$ can serve a variety of information structural roles: in (a) it is the focused constituent at the clause's left edge, whereas in (b) it is backgrounded/non-focused.

2.1.2 The set of weak nominative enclitics

The weak nominative enclitics resemble the roots of the strong pronouns given in Table 2.1, but they are not identical. These enclitics are used only in the nominative function (A/S) and have a restricted distribution within the clause: they are compatible only with a subset of TAM morphology, on which they are positionally parasitic. Table 2.2 provides the full set.

Like the strong pronouns and the proclitics (to be discussed in §2.2, below), the weak nomi-

	SINGULAR	DUAL	PLURAL	
1 INCL	'on	'okit	'okitwat	
1EXCL	On	ote		
2	'en	۱	wat	
3		$e \sim \emptyset$		

Table 2.2: The set of weak nominative enclitics

native enclitics draw a clusivity distinction in the first person. The first person inclusive enclitics distinguish between dual and plural, but that contrast is not maintained in the first person exclusive or in the second person. The inclusive first person plural, *'okitwat*, transparently combines the inclusive paucal (*'okit*) with the second person plural (*wat*). The third person enclitic, which is null under specific circumstances (§2.1.3), does not overtly manifest any number distinctions.

(5) provides examples of the weak nominative enclitics in full sentential context.

(5) Examples of the weak nominative enclitics

a.		ko I POLITE.FUT	'on iri 1SG wa		
	casual discourse				
b.	<i>Oma`ã</i> o-ma`ẽ-a 1sG-speak.of-	<i>ke</i> ke -TH POLITE.FU	'en	<i>esi</i> e-si 2SG-mothe	<i>yam.</i> yam r to
	'Please speak casual discourse	of me [i.e., gi : 2016-01-04	ve my 1	regards] to y	our mother.'
c.		<i>huru</i> huru ' dgeable pair 1	'okit 1DUAL		
		-	ble. / ·	We-DUAL at	e a knowledgeable pair.'
	casual discourse (see also casual	: 2016-01-22 discourse on 201'	7-08-12)		
d.	now animal	yen'ã-msiro ' meat-POSS 1	'okitwa lPL.ING	ıt	
		L have animal	meat.'		
	casual discourse	: 2016-02-14			

- e. *Oteatoa* ko 'ote. ote-ato-a ko 'ote 1PL.EXCL-bathe-TH POLITE.FUT **1PL.EXCL** 'We-EXCL should bathe.' / 'Let us-EXCL bathe.' / 'We-EXCL ought to bathe.' casual discourse: 2015-11-06
- f. *Pare haret toat wat?* pare hat-et top-a-t **wat** where snake-NUC see-TH-NEAR.PAST **2PL** 'Where did you-PL see the snake?' casual discourse: 2016-01-01
- g. *Teop nẽkare, aramirã 'ero'are.*te-op nẽkat e aramirã 'ero'are
 3C-father resemblance 3 [woman while.SG]
 'She resembles her father, even though she's a girl.' casual discourse: 2015-10-26

The highlighted enclitics are obligatory in all these sentences, regardless of whether the predicate is formally a noun (*teop nẽkat* 'resembling her father' in 5g), an intransitive verb (*oteatoa* 'we-EXCL bathe' in 5e), or a transitive verb (*haret toat* 'saw the snake' in 5f). In this regard Tuparí diverges from the closely-related Sakurabiát, which requires subject pronouns with transitive verbal predicates but permits their omission with intransitives (Galucio 2001:39–41). More is said about this contrast in the conclusion of Chapter 5.

An important generalization about the weak nominative enclitics is that their placement within the clause depends on the realization of tense. When tense is realized as a 2P particle, the weak nominative enclitic will also occur in 2P; but when tense is realized as a predicate-final suffix, then the weak nominative enclitic will follow the predicate. (6) and (7) show these two possibilities.

(6) Examples of weak nominative enclitics following 2P tense particles

a. Here õpot 'on ètattoap. here õpot 'on e-etat-top-ap then DISTANT.PAST 1SG 2SG-just-see-ADV.FOC 'Then/at that time I just saw you.' casual discourse: 2017-08-14

- b. Otepẽan'atoa ko 'ote otewãram. ote-pẽan-ato-a ko 'ote ote-wan-am
 1PL.EXCL-first-bathe-TH POLITE.FUT 1PL.EXCL 1PL.EXCL-go.nearby-ADV.FOC
 'We-EXCL are first going to go a short distance to bathe.' / 'Let us-EXCL first go a short distance to bathe.'
 casual discourse: 2017-08-09
- c. 'Ùt tokoppe ke 'en eosire yõrõkap.
 'ù-t tokop-pe ke 'en e-osire y-õrõk-ap genipapo-NUC chew-after POLITE.FUT 2SG 2SG-beneath 3-place.flat-ADV.FOC 'After you have chewed the genipapo, you should place it underneath yourself.' text: Marilza Kabatoá Tupari, narrator
- (7) Examples of weak nominative enclitics following predicate-final tense suffixes

a.	Ham	nẽ	mõket	èsap	kot'oapbi'a	'en?		
	ham	nẽ	mõket	e-s-ap	kot'oy-a- pbi'a	'en		
	hither	Y/N	long.ago	2SG-come.SG-NMZap	want-TH-DUR	2 SG		
	'Did you want to come here already long ago?'							
	casual discourse: 2016-02-10							

b. Pam mãkērõ tera tero'are. pam mãkērõ tet-a tero'e-a-t e whither DUNNO go.SG-TH AUXgo.SG-TH-NEAR.PAST 3
'I don't know where it went.' text: Nilson Tupari, narrator

The placement of the weak nominative enclitics with superficially tenseless verbal predicates follows the pattern in (6), i.e. such clauses behave as if they contained a tense particle in 2P. In clauses headed by nominal predicates, in contrast, the weak nominative enclitics follow the scheme in (7): they attach to the predicate itself. See §5.5 for more discussion of the placement of these enclitics in clauses that lack phonologically contentful tense morphology.

The cognates of the Tuparí weak nominative enclitics in closely-related languages are not subject to equally strict positional restrictions. For Wayoró, Nogueira (2011:72–74) states that subject pronouns may occur before or after the verb phrase; the language thus allows for both SOV and OVS. And for Sakurabiát, Galucio (2001:41–43) observes that the first and second person singular and the first person plural exclusive may occur either clause-initially (the canonical position for subjects) or after the verb phrase, suggesting that they are undergoing a process of cliticization. It

is probable that Sakurabiát and Wayoró, which are less strict concerning the placement of subject pronouns, present a more conservative pattern than what is found in Tuparí.

In Chapter 5 I analyze the weak nominative enclitics not as true arguments of the predicate but rather as a species of tense-specific agreement morphology – the instantiation of a functional projection located in a high position in the inflectional layer of the clause.

2.1.3 Unique properties of the third person weak nominative enclitic

The third person is unique in several ways among the class of weak nominative enclitics. First, it is phonologically smaller than any of the other enclitics, which are all at least CVC in shape. Second, third person *e* shows no number distinctions. This means that *e* surfaces alongside all verbal roots – including ones that are explicitly singular, paucal, or plural. (8) illustrates with existential sentences. These are marked by the 'AUXgo' series of auxiliaries, whose label reflects their close relationship to the lexical verb 'go' (§4.2). Observe that while the auxiliaries make a singular-paucal-plural contrast, the third person weak nominative enclitic is invariant in shape:¹

(8) Number invariance of third person weak nominative enclitic e

- a. *Tero'aemmẽ*.
 tero'e-a-em e
 AUXgo.SG-TH-still 3
 'It still exists.' / 'It is still here.'
 common in everyday speech
- b. *Teoro'aemmẽ*.
 te-oro'e-a-em e
 3C-AUXgo.PAUC-TH-still 3
 'They-PAUC still exist.' / 'They-PAUC are still here.'
 common in everyday speech
- c. Te'anaemmē.
 te-'anē-a-em e
 3C-AUXgo.PL-TH-still 3
 'They-PL still exist.' / 'They-PL are still here.'
 common in everyday speech

¹The lack of *te*- '3COREF' on the singular auxiliary root *tero*'e in (8a) is due to haplology: **tetero*'e never occurs. Comparable haplology occurs with the root *tet* 'go.SG', which can take the first and second person proclitics but not *te*-. See §4.2.

When the subject changes from third person to first or second, the weak nominative enclitic overtly manifests at least some number distinctions. In (9) that distinction is two-way: singular verus non-singular. So whereas the verbal roots in this paradigm make a singular-paucal-plural contrast, the weak nominative enclitics collapse paucal and plural together:

- (9) Non-third person weak nominative enclitics do draw number distinctions
 - a. Otero'aem 'on. o-tero'e-a-em 'on $1SG-AUX_{go}.SG-TH-Still$ 1SG 'I am still here.' common in everyday speech
 - b. Oteoro'aem 'ote.
 ote-oro'e-a-em 'ote
 1PL.EXCL-AUXgo.PAUC-TH-still 1PL.EXCL
 'We-EXCL.PAUC are still here.'
 common in everyday speech
 - c. Ote'anaem 'ote.
 ote-'anẽ-a-em 'ote
 1PL.EXCL-AUXgo.PL-TH-still 1PL.EXCL
 'We-EXCL.PL are still here.'
 common in everyday speech

A third difference between the third person weak nominative enclitic and the rest of the enclitic paradigm is that the third person has a null allomorph. This null allomorph is frequent after clause-initial adverbs, as the essentially free alternation in (10a) demonstrates. This optionality is thanks to the presence of the 2P tense particle $\tilde{o}pot$ 'DISTANT PAST', which can combine with *e* without issue. But the null third person allomorph is the only option when a clause-initial adverb is not followed by a 2P tense particle. This is why there is no overt weak nominative enclitic in (10b).

(10) Third person weak nominative enclitic is null following clause-initial adverbials

a. Ham õpot/õpore omãykuret tèpatwatnam.
ham õpot (e) o-mãykut-et te-epatwat-nẽ-am
hither DISTANT.PAST (3) 1SG-cousin-NUC 3C-get.lost-EV.SG-ADV.FOC
'Here my cousin got lost, long ago (NON-WITNESSED).'
casual discourse: 2014-07-19
(see also elicitation on 2017-08-06)

b. Wararo kiakoet tekara teronam.
wararo Ø kiakop-et te-kat-a tet-ronã-am quickly 3 sun-NUC 3C-fall-TH go.SG-again-ADV.FOC 'The sun fell again very quickly.'
casual discourse: 2016-12-15

The null allomorph of the third person weak nominative enclitic is also obligatory following the 2P clause typers *nãkop* 'MAYBE' and *mãkẽrõ* 'DUNNO/RIGHT?'. (The properties of these and other clause typers are addressed at length in Chapters 5 and 6.)

- (11) Third person weak nominative enclitic must be null following *nãkop* 'MAYBE'
 - a. Okioe.
 okio e
 male 3
 'He's a male.'
 common in everyday speech
 - b. Okio nãkop pare aramirã nãkop. okio nãkop Ø pare aramirã nãkop Ø male MAYBE 3 DISJUNCTION female MAYBE 3
 'It [a pet parrot] may be a male, or it may be a female.' casual discourse: 2016-01-10
- (12) Third person weak nominative enclitic must be null following *mãkẽrõ* 'DUNNO/RIGHT?'
 - a. *Kat'are ieret?*kat'at e i-et-et
 what 3 3-name-NUC
 'What is his/her name?'
 common in everyday speech
 - b. Kat'at mãkẽrõ ieret. kat'at mãkẽrõ Ø i-et-et what DUNNO 3 3-name-NUC
 'I don't know what his/her name is.' casual discourse: 2016-02-16

The other weak nominative enclitics, meanwhile, remain overt after the full set of 2P clause-typing particles. (13) illustrates for the second person and *nãkop*.

- (13) Non-third person weak nominative enclitics are overt after nakop and makero
 - a. CONTEXT: A Tuparí woman learns that I am from the United States, not Germany.

Hè	nãkop	'en	kàpbi'a	'on	wan'om.	
hè	nãkop	'en	ke-a-pbi'a	'on	wan'om	
that.thing	g MAYBE	2 S G	think-TH-DUF	x 1se	WAN'OM	
'But I had been thinking that you might be that thing [=a native of Germany].'						
casual discourse: 2016-12-11						

b. *Txau* kat'om nãkop wat. txau ko-at-'om **nãkop wat** manioc.flour eat-ACTOR-NEG **MAYBE 2PL** 'Maybe you-PL aren't eaters of toasted manioc flour.' casual discourse: 2016-02-04

An additional phonological property unique to the third person weak nominative enclitic is that it will coalesce with a prior /e/: the enclitic becomes segmentally undetectable following an /e/-final syllable. This includes two more clause typers, $n\tilde{e}$ 'Y/N' and $n\tilde{a}pe$ 'REALLY?!'; the polite future *ke*; and many common nouns. The following pairs illustrate.

(14) Third person weak nominative enclitic is inaudible after /e/-final noun

a. Amẽkoe.
amẽko e
dog 3
'It's a dog.'
common in everyday speech
b. Arimẽ.

arimẽ **e**/∅ monkey **3** 'It's a monkey.' common in everyday speech

(15) Third person weak nominative enclitic is inaudible after $n\tilde{e}$ 'Y/N'

a. *Poare*.
poat e
good/ready 3
'It's good.' / 'It's ready.'
common in everyday speech

b. Poat nẽ? poat nẽ e/Ø good/ready Y/N 3
'Is it good?' / 'Is it ready?' common in everyday speech

- (16) Third person weak nominative enclitic is inaudible after ke 'POLITE FUTURE'
 - a. *Teanemsãẽ*.
 te-anẽ-msẽ-a e
 3C-lie.down-RSLT.SG.HZNTL-TH 3
 'She is lying down.'
 common in everyday speech
 - b. CONTEXT: When a young boy goes to pick up a baby girl who is lying on the floor, his grandmother orders him to let her be.

Teanemsãke!te-anẽ-msẽ-akee/∅3C-lie.down-RSLT.SG.HZNTL-THPOLITE.FUT3'Let her remain lying down!'casual discourse: 2016-01-23

In sum, there exist several important differences between third person e and the other weak nominative enclitics. It is phonologically more reduced than the other enclitics; it expresses no number distinctions; it has a special null allomorph that is obligatory following a subset of 2P clause-typing particles; and it will coalesce phonologically with a prior /e/ or /ẽ/.

2.1.4 Comparison with previous descriptions

My description and analysis differs from that of Alves (2004:§4.3.1.6) in certain important respects. Table 2.3 reproduces her pronominal inventory.

To begin, Alves does not draw a distinction between the strong pronouns and the weak nominative enclitics. As discussed above, however, the two sets of morphemes exhibit different morphosyntactic behaviors. They can also cooccur in a single utterance, as shown by example (1d): *Ero'are õren topto'om 'on* 'But as for me, I do not know it'. In this sentence the nuclear-marked strong pronoun *õren* signals a change in topic from Tigui (the speaker's husband) back to the

on	1sg
en	2sg
ote	1pl.excl
kit	1DUAL.INCL, with future reference
okit	1DUAL.INCL, with present or past reference
kitwat	1PL.INCL, with future reference
okitwat	1PL.INCL, with present or past reference
wat	2pl
?e	3

Table 2.3: Tuparí pronouns according to Alves (2004:§4.3.1.6)

speaker herself. The weak 'on, meanwhile, is a functional morpheme that is obligatory in this utterance because the predicate is a nominal.

Second, my analysis includes a null third person allomorph. This allomorph is obligatory to the immediate right of the 2P clause-typing particles *mãkẽrõ* 'DUNNO/RIGHT?' or *nãkop* 'MAYBE', and it is frequent in utterances that begin with adverbials like *wararo* 'quickly' (examples 10 through 12).

Third, the two analyses diverge with regards to the distribution of initial glottal stops. According to Alves, only the third person has an initial glottal stop; none of the other forms do. Yet phonological evidence shows that the actual distribution of the glottal stop among the weak nominative enclitics is the inverse of what has been described before. The stops /t/ and /n/ always turn into flaps prior to vowel-initial suffixes and enclitics, that is, there is a productive alveolar-to-flap process operative in the language's phonology (Appendix A). Such flapping always occurs prior to the third person weak nominative enclitic, but never takes place prior to the first or second person ones. (17) illustrates with the nominal predicate is *poat* 'good, well, ready':

- (17) Flapping of word-final /t/ occurs before third person weak nominative enclitic only
 - a. *Poat* 'on.
 [φwat'.?õn']
 'I am good.'
 - b. Poat 'en.
 [φwat'.?ēn']
 'You are good.'

- c. *Poat* 'okit.
 [φwat'.?o.kit']
 'We-DUAL.INCL are good.'
- d. *Poat* 'okitwat.
 [φwat'.?o.kit'.wat']
 'We-PL.INCL are good.'
- e. *Poat 'ote*. [φwat['].?o.te] 'We-EXCL are good.'
- f. *Poat wat*.
 [φwat['].wat[']]
 'You-PL are good.'
- g. Poar**e**.
 - [φwa.re] 'He/she/it is good.' / 'They are good.'

Only in (17g), where the weak nominative enclitic is third person e, does the final /t/ of the nominal predicate *poat* change to [r] – as it must before any vowel-initial suffix or enclitic. With the first and second person enclitics, in contrast, that same segment is realized as $[t^{-}]$ – the regular allomorph of phonemic /t/ prior to a subsequent consonant. In just the same way, a final /n/ changes to $[\tilde{r}]$ only before the third person weak nominative enclitic; this is shown for several persons in (18).

- (18) Flapping of word-final /n/ occurs before third person weak nominative enclitic only
 - a. Poareman 'on.
 [φwa.re.mãn[¬].?õn[¬]]
 'I am just fine.'
 - b. Poareman 'en.
 [φwa.re.mãn'.?ẽn']
 'You are good.'
 - c. *Poaremar*ẽ.
 [φwa.re.mã.r̃ẽ]
 'He/she is good.' / 'They are good.'

These facts show that third person e is the only vowel-initial weak nominative enclitic; the others are all consonant-initial. Probably for this reason the Tuparí schoolteachers' intuition has been to

write third person e as part of the previous word, whereas the other weak nominative enclitics are always written as separate words.

It is not clear at present whether comparable glottal stops exist at the start of the strong pronouns transcribed as vowel-initial in Table 2.1. This is because these strong pronouns can be stressed (unlike the weak nominative enclitics); there are no known contexts that could reveal whether they, too, will trigger the consonant lenition processes detailed in Appendix A. For this reason I transcribe the strong pronominal roots other than *wat* '2PL' as vowel-initial.

The fourth point of divergence between my analysis and Alves's concerns the 'future' forms *kit* and *kitwat*. According to her description, *kit* and *kitwat* have only future reference while *okit* and *okitwat* refer either to the present or to the past. It turns out that *kit* and *kitwat* are portmanteaux that contain the 2P tense particle *ko/ke* 'POLITE FUTURE'.² The polite future particle surfaces as a distinct morpheme prior to the the first person singular, first person exclusive, and second person weak nominative enclitics:

(19)	Polite future is distinct before	'on '1SG', 'ot	te '1PL.EXCL', 'en '2SG'	, and <i>wat</i> '2PL'
------	----------------------------------	----------------	--------------------------	------------------------

a.	<i>Wi`îk</i> wi`ĩk	<i>ara</i> at-a	ko ko	' <i>on</i> . 'on				
	leaf-cutter.an		-					
	'I am going to	o catch le	af-cutter ants	.' / 'Let me	catch leaf-cutter ants.'			
	text: Isaias Tarii	mã Tupari, a	author					
b.	Otepẽan'atoo	ı	ko	'ote	otewãram.			
	ote-pean-ato-	a	ko	'ote	ote-wan-am			
	1PL.EXCL-fir	st-bathe-1	TH POLITE.	UT 1PL.EX	CL 1PL.EXCL-go.nearby-ADV.FOC			
	'We-EXCL ar	e first go	ing to go a s	hort distanc	e to bathe.' / 'Let us-EXCL first go a			
	short distance	e to bathe.						
	casual discourse	e: 2017-08-0	09					
c.	Oma'ã	ke	'en	esi	yam.			
	o-ma'ẽ-a	ke	'en	e-si	yam			
	1SG-speak.of-TH POLITE.FUT 2SG 2SG-mother to							
	'Please speak	t of me [i.	e., give my r	egards] to yo	our mother.'			
	1	L						

casual discourse: 2016-01-04

²In Singerman (2018) *ko/ke* was glossed as OPTATIVE, following a suggestion from Victor Friedman.

d. *Ipẽuã ke wat!*i-pẽum-a ke wat
3-spy.on-TH POLITE.FUT 2PL
'You-PL are going to spy on them!' / 'You-PL ought to spy on them!' text: Rita Sisi Tupari, narrator

But with the first person inclusive – both dual and plural – special portmanteaux forms appear:

- (20) Portmanteaux combining polite future with first person inclusive, dual and plural
 - a. *Katke nãpe kit?* katke nãpe kit? what REALLY?! POLITE.FUT+1DUAL.INCL
 'Just what should we-DUAL do?' / 'What on earth should we-DUAL do?' text: Miraci Aguissi Tupari, narrator
 b. *Ipẽuã kitwat*!
 - i-pēum-a kitwai:
 i-pēum-a kitwai:
 3-spy.on-TH POLITE.FUT+1PL.INCL
 'We-PL are going to spy on them!' / 'We-PL ought to spy on them!'
 text: Rita Sisi Tupari, narrator

While one could list *kit* and *kitwat* as special future-referring pronouns, doing so entails that the weak nominative enclitics display sensitivity to temporal reference. Such a claim misrepresents what we are seeing here, which is simply haplology: the sequence /ko.?ok/ is simplified to /k/ when the polite future *ko* precedes '*okit* and '*okitwat*. Listing *kit* and *kitwat* as independent members of the set of pronouns misses the fact that these forms occur only when we would otherwise expect a segmentable *ko/ke*.

It is also important to note that classifying *ko* and *ke* as future forms does not fully capture their meaning. These particles are glossed here as POLITE FUTURE since they frequently behave like permissive or hortative modals. In first person contexts, they are used for future actions which the speaker is requesting authorization to carry out; with second and third persons, they encourage or suggest a particular course of action. Hence (20b), above, is not just a statement of future action ('we are going to spy on them') but also a request or collective command: 'we ought to spy on them', 'let us spy on them.' These modal interpretations differ from strict

future reference, which Tuparí expresses through separate morphology: the distant future auxiliary pe...ap in (21a), the near future suffix -p'a in conjunction with auxiliary 'e in (21b).

(21) Future reference is expressed by auxiliaries

a.	Omoram	ma'erõ	peo'ap	tete	Ivã	yam.	
	o-morẽ-am	ma'ẽ-ro	peo'ap	tete	Ivã	yam	
	1SG-drop.off-NMZap	, order-NMZ _{re}	o FUT.1SC	a materi	nal.uncle Ivan	i to	
	'I will order/ask Uno	cle Ivan to dro	op me off.	,			
	casual discourse: 2016-0	01-24					
b.	Watoap'a	o'e	ner	npe	o'erap'a		
	w-ato-a- p'a	0- e	nẽ-	mpe	o-'et-a- p'a		
	1SG-bathe-TH-NEAL	R.FUT 1SG-A	UX.SG do.	.so-after	r 1SG-sleep-T	H-NEAR.FUT	
	<i>o</i> ' <i>e</i> .						
	o-'e						
	1sg-aux.sg						
	'I'm going to take a bath, and after doing so I am going to sleep.'						
	casual discourse: 2015-1	12-23					

These future auxiliaries, unmentioned in previous research, are described in Chapter 4.

2.2 Proclitic pronouns

2.2.1 Proclitic pronouns

	SINGULAR	PLURAL	
1 INCL	o-/w-	ki-	
1EXCL	0-/w-	ote-	
2	е-	wat-	
3	i - \sim y- \sim s- \sim Ø-		
3coref	te-		

Table 2.4: The set of proclitic pronouns

The language's set of pronominal proclitics serve a wider range of functions than do the weak nominative enclitics: they mark nominal possessors, complements of postpositions, and arguments of verbs and auxiliaries. Note that the non-reflexive third person allomorph comes out as a glide prior to nasal vowels ($y \tilde{o} p \dot{a}$ [$p \tilde{o}.p a$:] 'hit him/her/it/them') and as an unreleased palatal stop ([c^{γ}])

	SINGULAR	PLURAL	
1 INCL	wek	kiek	
1EXCL	Wek	otèk	
2	èk	wat hek	
3	iek		
3coref	tèk		

Table 2.5: Possessive paradigm of ek 'house'

in coda position after oral vowels: *Te'era y'apteka* [te.?e.rac[¬].?ap[¬].te.ka] 'He/she regularly sleeps'. In both contexts the third person is written as *y*.

Table 2.5 illustrates the use of these proclitics as nominal possessors on ek 'house'. Note the predictable vowel coalescence with e- '2SG', te- '3COREF' and ote- '1PL.EXCL', which gives rise to derived long vowels. The second person plural proclitic, wat-, triggers an initial /h/ on 'house' as well as several other roots. In §2.3.3 I show that this is but one of several sandhi phenomena in which wat- participates. The unique behavior of wat- when compared to the other proclitics is probably best explained through phonotactics: it is the only proclitic to end in a consonant rather than a vowel.

On verbs, these proclitics mark absolutive arguments. On intransitives, this is the subject:

- (22) Proclitics mark the absolutive argument: intransitive subjects
 - a. O'ẽka 'on.
 o-'ẽk-a 'on
 1SG-dance-TH 1SG
 'I danced.'
 common in everyday speech
 - b. E'ẽka 'en.
 e-'ẽk-a 'en
 2SG-dance-TH 2SG
 'You danced.'

common in everyday speech

c. Ki'ẽka okit.
ki-'ẽk-a okit
1PL.INCL-dance-TH 1DUAL.INCL
'We-PAUC danced.'
common in everyday speech

On transitives, the proclitics mark the direct object:

- (23) Proclitics mark the absolutive argument: transitive objects
 - a. Eõpà 'on.
 e-õpo-a 'on
 2sG-hit-TH 1SG
 'I hit you-SG.'
 common in everyday speech
 - b. Yõpà 'en.
 y-õpo-a 'en
 3-hit-TH 2SG
 'You-SG hit him/her/it/them.'
 common in everyday speech

In the case of third person direct objects, the proclitics i - y - s- are in complementary distribution

with full noun phrases:

- (24) Complementary distribution between $i v_{-} \sim s_{-}$ and full NP direct objects
 - a. Sara 'on.
 s-at-a 'on
 3-catch-TH 1SG
 'I caught it.'
 common in everyday speech
 b. 'Ipot ara 'on.
 - 'ipot at-a 'on
 fish catch-TH 1SG
 'I caught fish.'
 common in everyday speech
 c. *'*Ipot sara 'on.*

The ungrammatical (24c) is categorically unattested and subject to correction by native speakers.

2.2.2 Evidence for a null third person proclitic

The complementary distribution between pronominal proclitics and noun phrases in the role of direct object, shown above in (24), appears to break down in certain cases. (25) illustrates with the imperative (though the same pattern obtains in all other TAM configurations, as well).

(25) Imperatives with what appear to be omitted/elided direct objects

a. *Mã*! mã place.in.container 'Place [it] in!' common in everyday speech
b. *Mẫk*! mằk send/deliver 'Hand [it] over!' common in everyday speech
c. *Ko*! ko eat 'Eat [it]!'

common in everyday speech

The transitive verbs in these examples have no (overt) proclitic and no NP direct object. At first blush, this appears to be a kind of object drop – a potential counterexample to the complementary distribution shown in (24), above. However, these 'dropped' direct objects are licit only when both of the following two conditions hold: first, the direct object must be third person; second, the verbal stem must be consonant-initial. That is, no 'object drop' can apply when the object is first or second person or when the verbal stem begins with a vowel:

(26) No 'object drop' is possible with vowel-initial verbs

- a. *Mã*!
 mã
 place.in.container
 'Place [it] in!'
 common in everyday speech
- b. Yõrõk!
 y-õrõk
 3-place.on.surface
 'Put it down!'
 common in everyday speech
- c. *Õrõk!

Although $m\tilde{a}$ 'place in a container' and $\tilde{o}r\tilde{o}k$ 'place on a surface' have comparable semantics, the omission of an overt pronominal proclitic or NP direct object is possible only with the former verb: is is impossible to say $\tilde{o}r\tilde{o}k!$. This fact indicates that the pattern in (25) does not consist of object drop but instead instantiates phonologically-conditioned allomorphy: $i - \sqrt{y} - \sqrt{s}$ - is the default third person pronoun, with \emptyset - possible only before consonant-initial stems.

This null allomorph is licit only as a direct object; my corpus contains no examples of a covert third person possessor. Furthermore, proclitics that refer to speech act participants are to my knowledge never omitted in either the direct object or the possessor function. So there are no null allomorphs of the second or first person proclitic pronouns.

2.2.3 Coreferent/disjoint distinction in third person proclitics

The third person proclitics draw a distinction between coreferent and disjoint readings. The proclitics $i - \sim y - \sim s - \sim \varnothing$ - mark nominal possessors/verbal arguments that are not co-referent with the subject of the clause; these are glossed here as '3'. The proclitic *te*-, meanwhile, marks nominal possessors/verbal arguments that are coreferent with the third person subject. This proclitic is glossed as 3C (short for 3COREF).

The following minimal pairs highlight the contrast between $i - v - s - \omega$, on the one hand, and coreferential *te*-, on the other.

- (27) Contrast between *i*- $\sim y$ - $\sim s$ - $\sim \varnothing$ and *te* on direct objects
 - a. Daltinan imemsiret toa. Daltina-n i-memsit-et top-a Daltina-NUC **3-**child.of.woman-NUC see-TH 'Daltina_i saw her_{*i/j} child.' elicitation: 2014-06-24 & 2015-10-15
 - b. Daltinan tememsiret toa. Daltina-n te-memsit-et top-a Daltina-NUC **3C**-child.of.woman-NUC see-TH 'Daltina_i saw her_{i/*j} child.' elicitation: 2014-06-24 & 2015-10-15

(28) Contrast between $i - v - s - \omega - and te$ - on adverbials

a.	Daltinan	otoa	te'a	tèkgere.				
	Daltina-n	o-top-a	te-'e-a	te-ek-ere				
	Daltina-NUC	1SG-see-TH	3C-AUX.SG-TH	3C-house-OBL				
	'Daltina _i saw me in her _{i/*j} home.'							
	elicitation: 2014-06-24 & 2015-10-15							
b.	Daltinan	otoa	te'a	iekgere.				
	Daltina-n	o-top-a	te-'e-a	i-ek-ere				
	Daltina-NUC 1SG-see-TH 3C-AUX.SG-TH 3- house-OBL 'Daltina _i saw me in her _{*i/j} home.' elicitation: 2014-06-24 & 2015-10-15							

In (27b), the *te*- on the direct object forces a coreferent reading between the subject and the possessor of the object: here Daltina saw her own child. Similarly in (28b): the *te*- on the oblique means that Daltina ate in her own house. Using *i*- \sim *y*- \sim *s*-, as in the (a) examples, forces a disjoint reading.

Crucially, *te*- must be bound by the subject. Other third person antecedents, even ones within the same clause, do not license *te*-.

- (29) Only third person subjects license *te*
 - a. Daltinan toa 'on iekgere. Daltina-n top-a 'on i-ek-ere Daltina-NUC see-TH 1SG **3-**house-OBL 'I saw Daltina_i in her_{i/j} house.' elicitation: 2014-06-24 & 2015-10-15
 - b. * Daltinan toa 'on tèkgere. Daltina-n top-a 'on te-ek-ere Daltina-NUC see-TH 1SG 3C-house-OBL intended: 'I saw Daltina_i in her_i house.' elicitation: 2014-06-24 & 2015-10-15

It is impossible to use *te*- in (29b) since the subject is not third person. When the subject is first or second person, third person possessors may be marked only with *i*- \sim *y*- \sim *s*-, such that the disjoint/coreferent distinction is neutralized. This neutralization is why the *i*- on *iekgere* 'in here house', in (29a), may be interpreted as coreferent with the direct object *Daltinan* or not, depending on discourse considerations.

Coreferential *te*- must be bound by the head of the subject NP, not with a possessor inside of the subject NP. (30) illustrates:

(30) CONTEXT: A speaker describes the dexterity of his family's pet parrot.

Isitot ipo. i-sito-t i-po 3-foot-NUC 3-hand 'Its foot is its hand.' casual discourse: 2016-11-20

Though the two possessors here are the same – the parrot_i uses its_i foot like a hand – this is not enough to license *te*-, which must be coreferent with the head of the subject NP.

The coreferential versus disjoint distinction drawn by the third person proclitics does not exist for speech act participants. The limitation of this distinction to the third person is attested elsewhere in Tupían – see, for example, Moore (1984:90–92) on Gavião and Aragon (2014:219–221) for Akuntsú – and it has ramifications for how reflexive interpretations are obtained with transitive verbs in Tuparí. The Tuparí verbal complex has no dedicated reflexivizing prefix, unlike its close relatives Sakurabiát and Wayoró (Galucio and Nogueira 2014). To achieve a reflexive reading on a transitive lexical verb, one must combine the same person and number specification on the weak nominative enclitic and on the absolutive proclitic. This is shown in (31). The combination of o- '1SG' with the weak nominative enclitic 'on '1SG' in (31a), and of e- '2SG' with 'en '2SG' in (31b), forces a reflexive interpretation.

(31) Reflexive interpretations with transitive verbs and SAP subjects

- a. Otoa 'on toaere.
 o-top-a 'on toap-ere
 1SG-see-TH 1SG mirror-OBL
 'I saw myself in the mirror.'
 elicitation: 2014-06-24 & 2015-10-15
- b. Etoa 'en toaere.
 e-top-a 'en toap-ere
 2SG-see-TH 2SG mirror-OBL
 'You-SG saw yourself in the mirror.'
 elicitation: 2014-06-24 & 2015-10-15

When the subject is third person, a transitive verb that bears *te*- is interpreted as reflexive:

- (32) Coreferent proclitic *te* provides reflexive interpretation with transitive verbs
 - a. *Silvana memsiret* tesìt toa. Silvana memsit-et te-si-t top-a Silvana child.of.woman-NUC 3C-mother-NUC 3-see-TH 'Silvana's child_i saw his_{i/*i} mother.' elicitation: 2014-06-24 & 2015-10-15 b. *Silvana memsiret* itoa. Silvana memsit-et i-top-a Silvana child.of.woman-NUC 3-see-TH 'Silvana's child_i saw him_{*i/i}.' elicitation: 2014-06-24 & 2015-10-15 c. Silvana memsiret tetoa. Silvana memsit-et **te-**top-a Silvana child.of.woman-NUC 3C-see-TH 'Silvana's child, saw himself,.'
 - elicitation: 2014-06-24 & 2015-10-15

The direct object of *top* 'see' can be a full NP (example 32a), the locally free *i*- \sim *y*- \sim *s*- (example 32b), or the locally bound *te*- (example 32c). That it is *te*- which provides a reflexive reading follows from the fact that this morpheme is always coreferent with the clausal subject (here, *Silvana memsiret* 'Silvana's child').

This restriction of the distinction between coreferential and non-coreferential pronominal morphology to the third person recalls the facts from Romance (Karlos Arregi and Jason Merchant, p.c.). In Spanish, for example, the third person pronominal clitics distinguish between direct objects (*lo/la/los/las*), indirect objects (*le/les*), and the reflexive (*se*). With the exception of the second person formal, which is syncretic with the third person, no overt distinction is made between direct objects, indirect objects, and reflexives for the first and second persons: the forms *me* '1SG', *te* '2SG', *nos* '1PL', and *os/as* '2PL' are invariant across the various grammatical functions. By deploying additional resources to encode distinctions in the third person, the Romance and Tupían patterns can be seen as instantiating a broader set of strategies that serve to disambiguate among referents in discourse. Two other strategies that perform a comparable function include obviation of the Algonquian variety (Dahlstrom 1991; Aissen 1997) and the switch reference systems prominent in much of South America (Nonato 2014; Overall 2016; Stenzel 2016; van Gijn 2016; Zariquiey 2016).

2.3 Possession

2.3.1 Normal possession

A nominal possessor must immediately precede the possessum in Tuparí; it takes no morphological marking. Possessors may be full nouns or noun phrases or pronominal proclitics:

- (33) NP possessors
 - aramirã men
 aramirã men
 woman husband
 'the woman's husband'
 - b. tarupa ema'ẽ
 tarupa ema'ẽ
 non.indigene language
 'the language of the white man [=Portuguese]'

(34) Pronominal possessors

- a. osi
 o-si
 1SG-mother
 'my mother'
- b. kiema'ẽ
 ki-ema'ẽ
 1PL.INCL-language
 'our-INCL language [=Tuparí]'

It is not uncommon for possessors to stack, giving rise to a consistently head-final structure:

(35) <u>Possessors stack in head-final fashion</u>

a. Rosivaldo hop het Rosivaldo hop het Rosivaldo [father [name]]
'Rosivaldo's father's name' casual discourse: 2016-01-04 b. Kat'are Toto Amsi Tàn ha'up a'usi heret? Kat'at e Toto Amsi Tàn ha'up a'usi het-et what 3 [long-nosed grandfather [son [wife [name-NUC]]]]
'What's the name of the wife of the son of the long-nosed grandfather (=Franz Caspar)?' elicitation: 2016-01-19

The possessive NPs shown in (33) through (35) contrast with an alternative possessive strategy realized by the suffix *-psiro*. This suffix derives new nominals meaning 'having X' or 'possessing X'. These derived nominals can serve as a nominal predicate, as in (36); they can also undergo verbalization so as to inflect morphologically as verbs, as in (37). (This kind of denominal verbalization is rampant in Tuparí. See Singerman 2018 as well as Chapter 3 for many more examples of this type.)

- (36) Nominal derived with *-psiro* serving as the predicate
 - a. Ea'usipsiro nẽ 'en?
 e-a'usi-psiro nẽ 'en
 2SG-wife-POSS Y/N 2SG
 'Do you have a wife?'
 casual discourse: 2016-11-14
 - b. Memsit kemsok'apsiro nẽ? memsit kemsok'a-psiro nẽ e child.of.woman beautiful-POSS Y/N 3 'Does she have beautiful daughters?' casual discourse: 2017-08-02
- (37) Nominals derived with *-psiro* undergo verbalization to combine with tense
 - a. Korakorapsironambi'a nẽ mõket? korakora-psiro-nẽ-a-mbi'a nẽ e mõket chicken-POSS-VBZ_{nẽ}-TH-DUR Y/N 3 long.ago
 'Did they have/own chickens in the old days?' casual discourse: 2016-01-13
 - b. Tambakipsironaerē 'on ipekkot'oy herõwap nõ. tambaki-psiro-nē-am-ere 'on i-pek-kot'oy herõwap nõ tambaqui-POSS-VBZ_{nē}-NMZ_{ap}-OBL 1SG 3-buy-COND yesterday other 'If there had been tambaqui I would have bought it the day before yesterday.' casual discourse: 2017-08-17

It is also possible for nouns derived with *-psiro* to serve as arguments:³

(38) CONTEXT: A speaker tells me the outcome of a soccer match in the village.

Kamizapsiroe	e gãyãnan,	kamiza'õen	perdenã.
kamiza- psiro	e gãyã-ne-a-n,	kamiza-'om-en	perde-nẽ-a
shirt-POSS	3 win-VBZ _{$n\tilde{e}$} -TH-NUC	, shirt-NEG-NUC	lose-VBZ _{ne} -TH

'The shirts were the ones who won; the skins lost.' casual discourse: 2014-06-30

In all of these contexts possessive *-psiro* contrasts paradigmatically with the negator/privative *-'om* (Singerman 2018). The questions in (39) were asked of me after I woke up from a nap and found bug bites on my torso. In each question the lexical verb '*et* 'sleep' is modified by a derived VP that contains possessive/privative morphology.

(39) Paradigmatic contrast between negative/privative -'om and -psiro 'have'

a.	Korok'apè'omka korok'apè- 'om -ka-a	nẽ	e-'et-a	<i>'eka?</i> 'eka	
	shirt-NEG-VBZ _{ka} -TH	1 Y/N	28G-sie	p-TH AUX.SGh	abit
	'Do you sleep without	ut a s	shirt on?'		
	casual discourse: 2016-1	2-13			
b.	1			apepsiroka	
	puop-'om r			1 4	1
	knowledgable-NEG	Y/N 2	2SG shirt-	POSS-VBZ _{ka} -TI	H 2SG-sleep-NMZ _{ap} -OBL
	'Do you not know he	ow to	o sleep wi	th a shirt on?'	-
	casual discourse: 2016-1	2-13			

2.3.2 Relational possession / intrusive h

Possessors in Tuparí do not bear agreement morphology; that is, possession in Tuparí is not a headmarking construction in Nichols's (1986) sense. However, a small set of vowel-initial nouns take an initial /h/ when possessed. Previous work on Tuparí has treated this h- as a separate prefix; the

³Example (38) contains multiple loanwords: the noun *kamiza* 'shirt' (Portuguese *camisa*), the verb $g\tilde{a}y\tilde{a}n\tilde{e}$ 'win' (Portuguese *ganhar*), and the verb *perden* \tilde{e} 'lost' (Portuguese *perder*). Although such loanwords are common in everyday speech, the speaker of this example may have used more loans than usual in order to accommodate my then-rudimentary knowledge of his language. During subsequent interviews it was confirmed that one could replace *kamiza* in this example with the Tuparı́ equivalent, *korok'apè* (literally, 'clothing for the ribs'). This word is present in example (39).

Tupíanist literature refers to this phenomenon as RELATIONAL PREFIXES (Rodrigues and Cabral 2012, Meira and Drude 2013, among others). In this dissertation I will instead speak of INTRUSIVE h, since there are circumstances in Tuparí where an alternation between /h/ and zero occurs but where evidence for a separate prefix is lacking.

(40) offers several examples of relational possession / intrusive h in possessive constructions.

(40) Intrusive h in possessive constructions

- a. wapap'a hap
 w-apap'a hap
 1SG-head hair
 'the hair of my head'
- b. *osi hekgo* o-si **h**ek-o 1SG-mother home-INS 'to my mother's home/house'
- c. *tarupa hak* tarupa **h**ak non.indigene daughter 'the white man's daughter'
- d. Rosivaldo hop het Rosivaldo hop het Rosivaldo father name
 'Rosivaldo's father's name'

As example (d) shows, *h*- can iterate with embedded possessors.

The nouns which take intrusive h form a small, closed class that includes certain body parts,

kinship terms, and more-or-less inalienable possessions. (41) provides a representative sample.

(41) Nouns which require intrusive h when possessed

- a. apap'a hap
 apap'a hap
 head hair
 'hair on a head'
- b. *kut* hop kut hop child father 'the child's father'

- c. aramirã hek aramirã hek woman house 'the woman's house'
- d. mãy hìt
 mãy hìt
 manioc mixture
 'the manioc's mixture' [i.e., that which is cooked together with manioc]

There is also at least one abstract noun – i'a 'like, love, affection' – which requires intrusive h.⁴

(42) *osi hi'a* o-si h**i'a** 1SG-mother **love** 'love of/for my mother'

The words which take intrusive h all belong to a small set of semantic categories (body parts, kinship terms, inalienable possessions). However, most of the words in these categories do not take h-; semantic criteria are insufficient to determine whether a noun requires intrusive h or not. The following triple illustrates how the class of nouns which exhibit intrusive h when possessed must be lexically specified.

- (43) The noun *a'usi* 'wife' does not take intrusive *h*, unlike *ak* 'daughter' and *a'up* 'son'
 - a. *okio a'usi* okio a'usi man wife 'the man's wife'
 b. *okio hak*
 - okio **h**ak man daughter 'the man's daughter'

⁴There is some stem suppletion following first and second person possessors with this root:

(i) a. weya 'love of/for me'

- b. *èya* 'love of/for me'
- c. *i'a* 'love of/for it'

okio ha'up
 okio ha'up
 man son
 'the man's son'

The fact that intrusive h is restricted to only a subset of kinship terms indicates that its principal function is not to mark inalienable possession.

Note that those nouns which do require intrusive *h* lift this requirement when the possessor is a pronominal proclitic other than second person plural *wat*-.

(44) Intrusive h does not appear following pronominal proclitics

- a. weret
 w-et-et
 1SG-name-NUC
 'my name'
 (unattested: *oheret)
- b. ea'uet
 e-a'up-et
 2SG-son-NUC
 'your son'
 (unattested: *eha'uet)
- c. *kiekgo* ki-ek-o

1PL.INCL-house-INS

'toward our house'

(unattested: *kihekgo)

- (45) Intrusive h does appear following wat- '2PL'
 - a. wathek
 wat-hek
 2PL-house
 'your-PL house'
 - b. wathop wat-hop
 2PL-father
 'your-PL father'

Some researchers have interpreted the contrast between (44) and (45) as evidence that wat- '2PL'

is not a bound prefix but instead a free pronoun. This line of argumentation runs into languageinternal problems, however. I provide an alternative explanation for this set of facts, one grounded in phonotactic considerations, in §2.3.3.

The nouns which require intrusive *h* only ever accept the third person pronominal proclitic *i*-; they never take the alternant allomorph of the disjoint third person, *s*-. This is shown in Table 2.6. For ease of presentation the third column gives the translation with 'his', but it is important to remember that there is no specification of gender in the Tuparí pronominal system. Hence *iek* can mean not only 'his house' but also 'her house', 'their house', or 'its house', depending on discourse context. Of the roots in Table 2.6, two -(h)a'up 'son of a man' and (h)ak 'daughter of a man' – require that their possessor be male.

Table 2.6: Nouns which require intrusive h take the third person proclitic i-, not s-

Root		With NP po	ossessor <i>Tigi</i>	With third person proclitic		
(h)a'up	'son of man'	Tigi h a'up	'Tigui's son'	i a'up	'his son'	(*sa'up)
(h)ak	'daughter of man'	Tigi h ak	'Tigui's daughter'	i ak	'his daughter'	(* s ak)
(h)ek	'home, house'	Tigi h ek	'Tigui's house'	i ek	'his house'	(* s ek)
(h)op	'father'	Tigi h op	'Tigui's father'	i op	'his father'	(* s op)
(h)et	'name'	Tigi h et	'Tigui's name'	i et	'his name'	(* s et)

2.3.3 Second person plural *wat*- and intrusive h

Observing that *wat*- '2PL' – unlike the other pronominal proclitics – triggers intrusive *h* in possessive contexts, Alves (2004:§4.1.2) states that *wat*- is a free pronoun rather than a bound morpheme. The problem with this analysis is that there are no other reasons to consider *wat*- distinct from the rest of the morphemes in Table 2.4. Consider the pair of non-elicited utterances given in (46). In (a) the first person singular *o*- appears on the noun *estudu* 'studies' (borrowed from Portuguese), on the embedded lexical verb *poatkat* 'finish', on the adverbial subordinator '*a* 'when.SG', on the matrix lexical verb *tet* 'go.SG', and within the future auxiliary *pe...ap*. In (b) second person plural *wat*- shows up in all the same positions: on the nominal (*y*)*kot*'oy 'desires/wants', on the embedded verb *epatwat* 'die', on the adverbial subordinator *a* 'when.PL', on the matrix verb *tãreman'epapokto'omka* 'never return again, never come back again', and inside the future auxil-

iary *pe...ap*.

- (46) Proclitics o- '1SG' and wat- '2PL' exhibit identical morphosyntactic behavior
 - a.O'estudureopoatkarao'a,oteropeo'ap.o-'estudu-reo-poatkat-ao-'ao-tet-ropeo'ap[1SG-studies-OBL 1SG-finish-TH 1SG-when.SG]1SG-go.SG-NMZ_{ro}FUT.1SG'I will go when I finish with my studies.'casual discourse: 2016-10-04
 - b. Watkot'oire, wat'epatwara wara kiepe
 wat-(y)-kot'oy-re wat-epatwat-a wat-a kiepe
 2PL-(OBJ.NMZ)-want-OBL [2PL-die-TH 2PL-when.PL] now
 wattãreman'epapokto'omkaro pewarap.
 wat-tãreman-epapok-to-'om-ka-ro pewarap
 2PL-not.again-return-NMZ_{ro}-NEG-VBZ_{ka}-NMZ_{ro} FUT.2PL
 'Because of your-PL wants [=because you-PL disobeyed], when you-PL die, you-PL will not return again.'

text: Miraci Aguissi Tupari, narrator

Except for the possessed nominal *watkot'oire*, it would be impossible to replace the occurrences of *wat*- in (b) with a non-pronominal NP or some kind of free pronoun. That is, *wat*- is morphosyntactically indistinguishable from *o*- '1SG' and the other proclitics; it does not behave like a non-pronominal NP. Examples like (46) show that calling *wat*- a free pronoun rather than a bound morpheme misrepresents the morphosyntactic properties shared by all members of the class of pronominal proclitics.

There exists an alternative explanation, one grounded in phonotactics, to explain why *wat*-triggers intrusive h. Recall the paradigm of pronominal proclitics given in Table 2.4. First person singular o-, second person singular e-, first person inclusive ki-, first person exclusive ote-, third person non-bound i- and third person bound te- all end in a vowel. The alternative overt allomorph for the non-bound third person, s-, is used only before short oral vowels, as will be discussed in §2.3.4. So second person plural *wat*- is phonotactically aberrant: it ends in a consonant. This fact may be why *wat*-, unlike the other proclitics, always triggers intrusive h.

There are other facts that support a phonotactic explanation for the unique behavior of *wat*-. Several transitive verb roots exhibit an alternation between h- and nothing; the h- surfaces following an NP direct object (Alves 2004:§4.4.2). My corpus contains several transitive verbs that exhibit this alternation, including (*h*)awa 'grate, scrape', (*h*)agatka 'cross a river/road', and (*h*)opka 'suck'.

(47) Alternation between h- and zero in the verb (h)agatka 'cross'

- a. *iut hagatka*iu-t hagatka-a
 river-NUC cross-TH
 'crossing the river'
 text: Tereza Miraká Tupari, narrator
- b. *iagatka*i-agatka-a
 3-cross-TH
 'crossing it'
 text: Tereza Miraká Tupari, narrator

What has not been described before is the fact that there are also *in*transitive verbal roots that show a similar pattern. The conditioning factor is purely phonological: intrusive h shows up on these verbs following a consonant-final morpheme. This consonant-final morpheme can be *wat-* '2PL', but it need not be; any prefix that ends in a consonant is sufficient to trigger h-. (48) illustrates with the adverbial prefixes *pẽan-* 'first' and *tãreman-* 'not again' (§3.5). Following these prefixes the lexical root (h)a'i 'end, conclude' takes an initial /h/.

- (48) An initial /h/ appears on (h)a'i 'end' following a consonant-final prefix
 - a. *Tepẽanha'ia ke*.
 te-**pẽan-h**a'i-a ke e
 3C-**first-end**-TH POLITE.FUT 3
 'It [the television program] ought to end first.'
 casual discourse: 2017-09-01
 - b. *Tetãremanha'iro'omkap'a* y'e. te-**tãreman-h**a'i-ro-'om-ka-a-p'a y-'e 3C-**not.again-end**-NMZ_{ro}-NEG-VBZ_{ka}-TH-NEAR.FUT 3-AUX.SG 'It is not going to end again.' elicitation: 2017-09-02

Yet intrusive *h* disappears when the same verbal root, (h)a'i 'end', follows a vowel-final morpheme such as *te*- '3COREF':

(49) Kiema'en ke tea'iromka.
ki-ema'ẽ-n ke te-a'i-ro-'om-ka-a
1PL.INCL-language-NUC POLITE.FUT 3C-end-NMZ_{ro}-NEG-VBZ_{ka}-TH
'Our language ought not to end.'
text: Nilson Tupari, narrator

What (48) and (49) show is that there are cases in Tuparí where an alternation between h- and \emptyset is triggered on purely phonological grounds, without any reference to broader morphological or syntactic context. These examples suggest that the peculiar behavior of *wat*- is because it ends in a consonant, as the Tuparí alternation between h- and \emptyset is independently known to be sensitive to whether the preceding segment is a consonant or a vowel.

It is important to point out that *wat-* '2PL' participates in certain other sandhi processes at morpheme boundaries. When *wat-* occurs immediately to the left of a vowel-initial morpheme an intrusive glottal stop may appear; however, this process is lexically conditioned. To illustrate with some examples from the language's rich set of auxiliaries (see Chapter 4), *wat-* is obligatorily followed by a glottal stop prior to the auxiliary root *oro'e* 'AUX_{go}.PAUC', but not prior to *a* 'AUX.PL' or *aka* 'AUX.PL_{habit}'. (50) contrasts the second person plural forms against the third person plural forms of these auxiliaries. Note that the third person forms never contain an initial glottal stop:

- (50) Whether *wat* '2PL' is followed by a glottal stop is morpheme-specific
 - a. *wat-* '2PL' + *oro'e* 'AUX_{go}.PAUC' \rightarrow *wat'oro'e* [wat'.?o.ro.?e] compare to third person plural *soro'e* (no initial glottal stop)
 - b. *wat-* '2PL' + *a* 'AUX.PL' \rightarrow *wara* [wa.ra] compare to third person plural *sa* (also no glottal)
 - c. *wat* '2PL' + *aka* 'AUX.PL_{habit}' \rightarrow *waraka* [wa.ra.ka] compare to third person plural *saka* (also no glottal)

In at least one circumstance *wat*- can trigger a change in the auxiliary root itself. The plural member of the AUX_{go} series (§4.2) switches from '*ane* [?ã.nẽ] to '*eane* [?ẽ.ã.nẽ] following *wat*-: compare first person plural inclusive *ki*'*ane* [ki.?ã.nẽ] and first person plural exclusive *ote* '*anẽ* [o.te.?ã.nẽ] against second person plural *wat*'*eanẽ* [wat'.?ẽ.ã.nẽ].

In short, wat- exhibits unique behavior at morpheme junctures in multiple contexts, and this

behavior cannot be accounted for by reclassifying *wat*- as a free rather than bound morpheme. As *wat*- occurs in the same morphosyntactic positions as the other pronominal proclitics do, there is no distributional evidence to support reclassifying it as a free morpheme, either. Analytically the best option is to attribute the unique morphophonological behavior exhibited by *wat*-, including the fact that it triggers intrusive h, to its phonotactic peculiarity: it is the only pronominal proclitic of the shape CVC.

2.3.4 Tuparí does not have three noun classes

Previous literature on Tuparí has stated that the language's nouns divide into three distinct noun classes. Building upon the facts presented in §2.3.2, above, this subsection argues that straightforward phonological conditioning is what explains the behaviors of the language's nouns.

According to the tripartite division in Alves (2004:§4.3.1) and Rodrigues and Cabral (2012:511– 17), nouns belonging to Class I take *s*- when possessed by a third person referent and are never marked with the relational possessive prefix *h*-. (Examples include *epa* 'eye', *arop* 'thing, food, possession', and *a'usi* 'wife'.) Nouns belonging to Class II take *i*- rather than *s*-; like Class I nouns, these never take intrusive *h*. (Examples include *amẽko* 'dog, jaguar' and *wirik* 'field'.) Finally, nouns belonging to Class III take *h*- when possessed by a full NP and *i*- rather than *s*- with a third person pronominal possessor. Class III contains all and only those nominal roots discussed in §2.3.2: *a'up* 'son of a man', *ak* 'daughter of a man', *ek* 'house', etc.

A closer examination of the data reveals that the distinction between Class I and Class II is not arbitrary. Rather, it falls out from a phonological criterion: third person *s*- is used only prior to short oral vowels, while third person *i*- is used in all other cases. Tables 2.7 and 2.8 illustrate.⁵ Especially telling is the minimal pair formed by *ope* 'thigh' and *õpe* 'tongue': *ope* takes *s*- because it starts with a short oral vowel, while *õpe* takes *y*- because its first segment is nasal.

Additional evidence for treating Classes I and II as phonologically determined comes from

⁵The initial /e/ of a small set of roots including *eri'at* 'owner' will change to /i/ following the third person proclitic *s*-. The same change applies in the verbal domain: comitative-causative *ete-* and quantificational *erote-* become *ite-* and *irote-*, respectively, after *s*-.

Nominal ro	ot	Root + third person proclitic		
a'usi	[a.?ʉ.si]	'wife'	s a'usi	[sa.?ʉ.si]
arop	[a.rop [¬]]	'thing'	sarop	[sa.rop [¬]]
eri'at	[e.ri.?at]	'owner'	siri'at	[si.ri.?at]
apap'a	[a.pap [¬] .?a]	'head'	sapap'a	[sa.pap [¬] .?a]
apsikum'ẽ	[ap].si.kʉm.?ẽ]	'inner ear'	sapsikum'ẽ	[sap [¬] .si.kʉ̃m.?ẽ]
ope	[o.pe]	'thigh'	sope	[so.pe]

Table 2.7: Third person *s*- occurs before short oral vowels

Table 2.8: Third person *i*- occurs in all other contexts

Nomin	al root		Root + third person proclitic		
'àpe	[?a:.pe]	'path'	i 'àpe	[i.?a:.pe]	
patak	[pa.tak [¬]]	'tummy'	i patak	[i.pa.tak]	
si	[si]	'mother'	i si	[i.si]	
'am	[?ãm]	'cord'	i 'am	[i.?ãm]	
ema'ẽ	[ẽ.mã.?ẽ]	'language'	yema'ẽ	[ɲẽ.mã.?ẽ]	
õpe	[õ.pe]	'tongue'	уõpe	[ɲõ.pe]	

verbs and auxiliaries. As noted in \$2.2 - and as discussed at greater length in \$4.1 - the same set of pronominal proclitics that mark possessors on nouns also mark absolutive arguments on verbs and auxiliaries. If Tuparí really did divide its nominals into three arbitrary classes, we would not expect the same division between *i*- and *s*- found in the nominal domain to apply within the verbal domain as well. But the phonological conditioning shown on nouns in Tables 2.7 and 2.8 accounts for which verbs/auxiliaries will take *i*- and which will take *s*-. Again, *s*- occurs only before short oral vowels; *i*- is the elsewhere form. This is shown in Tables 2.9 and 2.10.

Table 2.9: Third person s- occurs before short oral vowels on verbs/auxiliaries

Verb/au	xiliary root		Root + third person proclitic	
oro'e	[o.ro.?e]	'AUXgo.PAUC'	soro'e	[so.ro.?e]
apteka	[ap].te.ka]	'HABIT.PL'	s apteka	[sap].te.ka]
aka	[a.ka]	'AUX.PL _{habit} '	saka	[sa.ka]
esu	[e.su]	'summon, call'	sesu	[se.su]
at	[at [¬]]	'catch, grab'	sat	[sat]
o'e	[o.?e]	'wash'	so'e	[so.?e]
orowa	[o.ro.wa]	'search for'	sorowa	[so.ro.wa]

Verb/auxiliary root			Root + third person proclitic		
'anẽ	[?ã.nẽ]	'AUXgo.PL'	i 'anẽ	[i.?ã.nẽ]	
'apteka	[?ap [¬] .te.ka]	'HABIT.SG'	i 'apteka	[i.?ap [`] .te.ka]	
'eka	[?e.ka]	'AUX.SG _{habit} '	i 'eka	[i.?e.ka]	
õpo	[õ.�o]	'kill, hit, strike'	уõpo	[ɲõ.�o]	
ma'ẽ	[mã.?ẽ]	'speak, command'	i ma'ẽ	[i.mã.?ẽ]	
tektekka	[tek].te.ka]	'grip'	i tektekka	[i.tek [¬] .te.ka]	
ako	[a.ko]	'have sex with'	sako	[sa.ko]	

Table 2.10: Third person *i*- occurs in all other contexts on verbs/auxiliaries

One verbal root shirks this pattern: *apepsi* 'wait for something/someone' may take either *i*- or *s*- when the direct object is third person. Both *iapepsi* and *sapepsi* are attested in my corpus. I know of no other verbs which behave in this fashion, however; aside from *apepsi* the distribution of *i*- and *s*- can be predicted from the phonology alone.

In sum, to posit three noun classes in Tuparí misses the key generalization that the distribution of *i*- and *s*- is always predictable on phonological grounds. Positing three noun classes also fails to explain why the same phonologically-conditioned distribution between *i*- and *s*- found on nouns applies with verbs and auxiliaries as well. I therefore conclude that the claimed distinction between Class I (no intrusive *h*; takes third person *s*-) and Class II (no intrusive *h*; takes third person *i*-) is just phonological; there is no need to posit distinct noun classes. The only nouns in Tuparí which must be lexically specified for class membership are those which exhibit intrusive *h* following an NP possessor or *wat*- '2PL'.

2.4 Case marking and postpositions

Tuparí has four case suffixes: nuclear -et/-t, locative -pe, instrumental-lative -m/-o, and oblique -ere/-re. It is possible to combine or stack these cases in a circumscribed set of contexts; for instance, the nuclear and locative cases surface together on right-dislocated direct objects. Table 2.11 summarizes the language's set of case suffixes and lists their major functions.

The various case suffixes do not overlap in function or distribution with the exception of words that refer to time. Locative *-pe* is used on most or all Portuguese loanwords: *segundape* 'on

Citation form of case suffix	Case suffix in nasal contexts	Gloss	Section	Major functions
-et/-t	-en/-n	NUC(LEAR)	2.4.1	Appears on all NP subjects, on strong pronouns (used for topic shift), and on a subset of non-pronominal direct ob- jects; prohibited from occuring on incorporated objects or clause-initial foci.
əd-	əd-	LOC(ATIVE)	2.4.2	Indicates position inside of a place or object; used also on Portuguese loanwords referring to temporal relations.
0-/ m -	-m-õ	INS(TRUMENTAL- LATIVE)	2.4.3	Indicates the instrument with which an action is per- formed, the place toward which movement happens, or the direction of attention; also occurs on a set of native words indicating time of day.
-ere/-re	-ẽrẽ/-rẽ	OBL(IQUE)	2.4.4	Marks general location at or from a place; can mark the recipient of an action; occurs on a small set of na- tive words indicating time; also occurs on the protasis of counterfactual conditionals and on optional comple- ments of certain predicates.
-etpe/-tpe	-enpe/-npe	NUC(LEAR) +LOC(ATIVE)	2.4.5	Appears on right-dislocated direct objects that are doubled in the canonical preverbal position by a pronominal proclitic or an NP; restricted to the speech of the middle-aged and elderly.

Table 2.11: Case suffixes and their major functions

Monday', *novembrope* 'in November'. Instrumental-lative *-m/-o* occurs on most native temporal expressions, such as *pu'um* 'in the afternoon', *erero* 'early in the morning', and *sim'em* 'in the evening'. Oblique *-ere/-re*, meanwhile, occurs on a different set of native words (*okurere* 'in my childhood', *kiakoere* 'at noon/midday') as well as on finite embedded clauses that mark time: *èynã* '*en here* 'when you came here (NON-WITNESSED)' (see §6.7 for discussion of this last example).

There are only three contexts where a non-pronominal NP can surface without an overt case suffix in Tuparí. First, direct objects that are discourse-new or non-topical are often bare. Second, genitive possessors are never marked with a case ending (§2.3.1). Finally, nominal predicates do not take case marking under any circumstances.

2.4.1 The nuclear case *-et/-t*

The nuclear case -et/-t – referred to as a determinative case by Alves (2004) and Cabral et al. (2017), following Caspar and Rodrigues (1957:§3.2.4.2.1) – has a very specific distribution: it is obligatory on subjects (including strong pronouns serving as contrastive topics) but is optional on non-pronominal direct objects and cannot appear on clause-initial foci. Its presence/absence on objects is sensitive to the discourse distinction between given and new.

The nuclear case must occur on all non-pronominal subjects. This is true for animate, specific, and/or definite subjects and for inanimate, non-specific, indefinite ones alike.

(51) Nuclear case occurs on NP subjects

ke tewakto a. *Eowet* pete'a. e-op-et ke te-wak-to pete'a 2SG-father-NUC like.this 3C-cry-NMZro FUT.3SG+TH 'Your father will cry like this.' text: Miraci Aguissi Tupari, narrator b. *Kisaup'ap* kot'oaet teksit'om. tek-sit-'om ki-saup'e-ap kot'ov-ap-et **1PL.INCL-burp-NMZ***ap* **want-NMZ***ap*-NUC hold/contain-PASS-NEG 'One's wanting to burp is not to be held in.' casual discourse: 2017-08-28

As discussed at greater length in §5.4.3, a set of STRONG PRONOUNS mark change in topic in

Tuparí discourse. When serving as subjects, they bear the nuclear case as well.

- (52) Strong pronouns also bear the nuclear case
 - a. Katke nã eyẽ *ẽren?* katke nã e-yẽ en-en how PROG 2SG-AUX_{hzntl} 2SG-NUC 'As for you, how are you doing (sitting)?' casual discourse: 2016-07-08 b. Waret poareman ne wat? wat-et poareman ne wat **2PL-NUC** well Y/N 2PL 'As for you-PL, are you-PL well?' casual discourse: 2018-01-29 c. ... Ero'are õren topto'om 'on. Ø-top-to-'om 'on ero'are on-en but **1SG-NUC** 3-know-NMZ_{ro}-NEG 1SG 'But as for me, I do not know it.'

casual discourse: 2015-12-27

Note that the weak nominative enclitics discussed in §2.1, above, do not bear any case morphology.

The nuclear case also shows up on non-pronominal direct objects, though in this function its presence is not always obligatory. It is often omitted on direct objects in negated sentences. The textual excerpt in (53) illustrates.

(53) Direct objects without the nuclear case in negative contexts

a.	Okurere	õpore	òwet	isot'aynam			
	o-kut-ere	õpot	e o-op-et	i-sot'as-nē-am			
	1SG-childhood-OBL DISTANT.PAST 3 1SG-father-NUC 3-die-EV.SG-ADV.FOC						
	hèporet,						
	hèporet						
	also						
	'My father die	d (NON-WITNESS	SED) in my childh	ood, too,'			
b.	òp to	pto'om	'on.				
	o-op to	p-to-'om	'on				
	1SG-father see/know-NMZ _{ro} -NEG 1SG						
	'I didn't see/k	now my father.'					

text: Iracema Taydyup Tupari, narrator

Observe that *òwet* 'my father' bears the nuclear case in (a), where it serves as the subject, but does not do so in (b), where it is the object. Non-specific, inanimate direct objects may be best interpreted or translated as negative indefinites when they lie underneath -'*om* 'NEG'. (See Haspelmath 1997 for typological discussion.)

- (54) Unmarked direct objects as negative indefinites
 - a. CONTEXT: A Tuparí man describes the difficulty of find a ripe custard-apple among the many green ones.

Teppeyto'om'on.teppes-to-'om'onmaturefind-NMZ_{ro}-NEG1SG'I didn't find any mature[ones].'casual discourse:2016-02-15

b. CONTEXT: A common response to the questions *Katke nã eyẽ*? 'What are you up to (sitting)?', *Katke nã 'e*? 'What are you up to (standing/not sitting)?', *Katke nã etet'e*? 'What are you up to?'

Neman nerõ'om'on.neman nẽ-ro-'om'onthingdo-NMZ $_{ro}$ -NEG'I'm not doing anything.'common in everyday speech

A line of analysis that remains to be explored is the possibility that Tuparí in fact manifests the GENITIVE OF NEGATION, famous from Russian and other languages (see Harves 2013 and references therein). As discussed in §2.3, above, possessors are always unmarked in Tuparí; the language has no overt genitive case. So it could be that the superficially bare direct objects in (53b) and (54) do not suffer from a total absence of case marking; they may in fact exhibit a change from nuclear (overtly marked) to genitive (phonologically null). The broader viability of this analysis requires future research.

In §3.5.5 I show that Tuparí manifests incipient incorporation of direct objects. This incorporation is visible in the surface strong only when $p\tilde{e}an$ - 'first' or $t\tilde{a}reman$ - 'not again' are present, since these two adverbial prefixes sit outside of the morphological slot occupied by incorporated objects. (55) offers examples where $p\tilde{e}$ 'clothing' and *arop* 'food, stuff, thing' have incorporated.

- (55) Incorporated direct objects do not bear the nuclear case
 - ko a. *Opẽanpè'aepatka* 'on õwan. o-**pẽan-pè**-aepatka-a ko 'on o-wan 1SG-first-clothing-change-TH POLITE.FUT 1SG 1SG-go.nearby 'Let me go a short distance to change my clothing first [before I join all of you].' casual discourse: 2016-02-11 b. *Opẽan'aropmã* ko 'on. o-pean-arop-ma-a ko 'on 1SG-first-food-put-TH POLITE.FUT 1SG 'Let me put my food [on my plate] first.' casual discourse: 2016-02-06 c. Tetāreman'aropkoro'omkap'a v'e. te-tāreman-arop-ko-ro-'om-ka-a-p'a y-'e 3C-not.again-food-eat-NMZ_{ro}-NEG-VBZ_{ka}-TH-NEAR.FUT 3-AUX.SG 'He will not eat his food again.' elicitation: 2016-11-10

Incorporated objects like $p\dot{e}$ 'clothing' in (a) or *arop* 'food, stuff, thing' in (b) and (c) never bear the nuclear case. But it is not that case that non-incorporated objects are always case-marked; that is, objects that have not undergone incorporation into the verbal word may also surface without the nuclear case. (56) provides examples of direct objects which occur outside of *pẽan*- 'first' – one of the two prefixes that demarcate the far left edge of the Tuparí verbal word – but which still lack any overt case marking. That the objects here have not incorporated is clear from their position outside of *pẽan*-.

- (56) Non-incorporated direct objects may still lack the nuclear case
 - a. *Tea'usi pẽanpara ke*.
 te-a'usi pẽan-pat-a ke e
 3C-wife first-marry-TH POLITE.FUT 3
 'He ought to take a wife first.'
 elicitation: 2016-11-17
 - b. Uoka pẽankà ko 'on. uoka pẽan-ko-a ko 'on water first-drink-TH POLITE.FUT 1SG 'Let me drink water first.' casual discourse: 2016-11-09

While all incorporated objects are caseless, a non-incorporated direct object may or may not bear the nuclear case. So there is not a one-to-one correlation between the presence of the nuclear case and the incorporation of the object.

The nuclear case cannot be simply dismissed as a kind of determiner or article, as it forms part of the same paradigm as the other cases discussed below: locative *-pe*, instrumental-lative *-m/-o*, and oblique *-ere/-re*. Except for the stacking of locative *-pe* on top of the nuclear case – which is limited to right-dislocated direct objects (\$2.4.5) – the nuclear case is mutually incompatible with all of the other case markers. Note also that the nuclear case cannot surface on possessors, which may be argued to bear a phonologically null genitive suffix. Given the paradigmatic relationship that holds between all of these cases, it would be difficult, if not impossible, to analyze nuclear *-et/-t* as a morpheme fundamentally different from the locative, instrumental-lative, or oblique. It belongs to the same grammatical class that those cases do.

Overall, the most important factor determining whether or not the nuclear case appears on a direct object may be GIVENNESS or TOPICALITY (Chafe 1976 and much subsequent work; see Lambrecht 1994; Krifka 2008; Krifka and Musan 2012b as well as the chapters in Krifka and Musan 2012a and Féry and Ishihara 2016). Consider (57), the opening lines of a narrative told by Rita Sisi Tupari. In the first line, *takara* 'tapir' – the object of *etewak* 'cry for, mourn for, miss' – is morphologically bare. In the next line, however, *takarat* surfaces with the nuclear case. We can analyze this alternation in terms of givenness: the nuclear case is missing on *takara* when it is first introduced into the discourse, but it surfaces on that same referent in subsequent mentions.

(57) Alternation of nuclear case on *takara* 'tapir'

a. *Kiapsio'iaet* ma'ã ko 'on. aramiran kut takara ki-apsio'iap-et ma'ẽ-a ko 'on aramirã-n kut takara 1PL.INCL-story-NUC tell-TH POLITE.FUT 1SG [woman-NUC ANCIENT.PAST tapir etewaka teirigoapsira hètpe. ete-wak-a te-irigoa-psira-a hè-t-pe COM-cry-TH 3C-go.away.PL-EV.PL-TH] HÈ-NUC-LOC 'Let me tell our story, the one of the women who went off, crying for the tapir (NON-WITNESSED).'

b. Aramirã'earet kut takarat meop aramirã-'eat-et kut takara-t meop woman-MANY-NUC ANCIENT.PAST tapir-NUC fool.around.with 'eanemsira. 'eanẽ-msira-a AUXgo.PL-EV.PL-TH
'The women were fooling around with the tapir (NON-WITNESSED).' text: Rita Sisi Tupari, narrator

If givenness/topicality is in fact what determines the distribution of the nuclear case, we arrive at an explanation for the absence of this suffix on focused NPs.⁶ All subject/object foci – even ones that refer to definite, specific individuals – are morphologically bare; they can never bear nuclear *-et/-t*. Compare (58a), an information structurally neutral utterance, against (58b):

(58) <u>No nuclear case on focused NPs</u>

- a. *Òwet* Tupari.
 o-op-et Tupari(*-t)
 1SG-father-NUC Tuparí(*-NUC)
 'My father is Tuparí.'
 common in everyday speech
- b. *Opbe* Tuparit.
 o-op(*-et) e Tupari-t
 1SG-father(*-NUC) 3 Tuparí-NUC
 'It is my father who is Tuparí.' / 'My father is the one who is Tuparí.'
 casual discourse: 2016-11-21

The distribution of the nuclear case suffix is absolutely rigid in such minimal pairs. Now, utterances with focused speech act participants always look like (58b): the nuclear case may not appear on the focused pronoun itself but must instead surface on the presupposed or backgrounded verbal core. This is shown in (59) for the first and second person singular.

 $^{^{6}}$ Aissen (2017, Forthcoming) emphasizes that TOPICS and FOCI belong to orthogonal information structural dimensions: it is not the case that topics are necessarily non-focal, nor that foci are necessarily non-topical. As far as the distribution of the Tuparí nuclear case is concerned, however, there does obtain an important contrast between topics and foci. Focused nominals may not bear the nuclear case, but subject NPs – which do not serve as clause-initial foci – must bear the nuclear case.

- (59) Focused pronouns cannot bear the nuclear case
 - a. Õrē ikot'oa nerõ yan.
 on e i-kot'oy-a nerõ yē-a-n
 1SG 3 3-want-TH PROG AUX_{hzntl}-TH-NUC
 'I'm the one who is wanting it [coffee], seated.'
 casual discourse: 2016-02-15
 - b. *Ērē wiwaro'at*.
 en e w-iwat-ro 'e-a-t
 2SG 3 1SG-leave.behind-NMZ_{ro} AUX.SG-TH-NUC
 'You were the one who left me behind.'
 text: Rita Sisi Tupari, narrator

These examples demonstrate that the distribution of the nuclear case is sensitive to information structural considerations. A focused NP or pronoun may never bear the nuclear case.⁷ In much the same fashion, a subject NP marked with the nuclear case can never receive a focal reading; to my knowledge it is impossible for utterances like (58a), above, to be interpreted with focus on the subject itself. The same is true for the nuclear-marked strong pronouns illustrated in (52): the subject is topical in such utterances but never focused. Modulo the possible loss of the nuclear case in the scope of negation (examples 53 and 54, above), it is givenness versus newness which best predicts the distribution of this case ending. The obligatory absence of the nuclear case on clause-initial focused nominals follows from the fact that these foci constitute new information.

Before moving on to the other case suffixes, I wish to mention a similar (but not identical) analysis of the nuclear case put forth by Cabral et al. (2017). According to that paper, the nuclear case (in their terminology, the *caso determinativo*) serves to identify a referent as specific and definite. However, there are at least three ways that an account stated in terms of specificity or definiteness is unlikely to capture the full range of facts. First, nuclear *-et/-t* is categorically required on subjects; this requirement (rather than topicality and related notions) accounts for the

⁷Alves (2004:§4.3.1.6) gives two examples in which the nuclear case appears on a focused speech act participant: *eren ikot'okat* 'you are the one who broke it', *oren itoat* 'it was I who saw it' (my highlighting). These utterances are not well-formed. It is not possible for any clause-initial focused nominal to bear the nuclear case. The grammatical forms of these two examples would be $\tilde{E}r\tilde{e}$ *ikot'okat* and $\tilde{O}r\tilde{e}$ *itoat*, respectively, with the third person weak nominative enclitic e following the focused pronoun.

suffix's occurrence on several of the examples that they give.⁸ Second, direct objects that have incorporated – as shown above in (55) – never bear the nuclear case. Several of the examples given by Cabral and her coauthors rely on *arop* 'food' as the unmarked direct object of *ko* 'eat, drink' or ∂ko 'feed, give food to', but it is independently known that *arop* frequently incorporates (§3.5.5). Although incorporation may itself be sensitive to indefiniteness or genericity (Mithun 1984 and much subsequent literature), the absence of the nuclear case on *arop* 'food' in the examples that Cabral et al. provide is probably because incorporated objects like *arop* must be caseless. Finally, clause-initial focused arguments cannot bear the nuclear case. Such foci can be definite and specific, as in ∂p 'my father' (58b), *on* '1SG' (59a), or *en* '2SG' (59b); but they cannot host any case morphology. I conclude, then, that the distribution of the nuclear case is subject to rigid grammatical constraints: it is required on all NP subjects but is barred from occurring on clause-initial foci

2.4.2 Locative -pe

Tuparí has several non-core cases, mostly used for oblique and locative functions. The locative *-pe* is used to designate location, in particular inside of a structure or object.

(60) Examples of locative -pe

a.	Het'aere	nẽ	èkpe		kiret	haytoe?	
	het'aere	nẽ	e-ek-pe		kire-t	hayto	e
	where.you.	are Y/N	2SG-hous	e-LOC	person-NUC	a.lot	3
	'Are there a	a lot of	people whe	ere you	are, in your	house?'	
	casual discou	irse: 2017	7-10-08				
b.	Kat'atpe	ke	'en	nã	eterap?		
	kat'at-pe	ke	'en	nã	e-tet-ap		
	what-LOC POLITE.FUT 2SG FOCUS 2SG-go.SG-ADV.FOC					2	
	'In what [=in what kind of vehicle] do you wish to go?'						
	casual discou	urse: 2010	5-12-12				

⁸One such example is their 4d, where the NP *korakora kuret* 'the young chicken' is said to take the nuclear case because it is 'the element around which the discourse will temporarily develop' ('se trata do elemento em torno do qual o discourse vai temporariamente se desenvolver') (Cabral et al. 2017:24). But the presence of the nuclear case on *korakora kuret* 'the young chicken' is due to grammatical function, not discourse topicality: this NP serves as the subject of its clause, an existential whose main verb is *tet'e* 'AUX_{go}.SG' (marked with evidential *-pnẽ* and the adverbial focus *-ap*). See §4.2.1 for further examples of the AUX_{go} series in existentials.

c. Onibuspe nẽ ke 'en nã etet?
onibus-pe nẽ ke 'en nã e-tet
bus-LOC Y/N POLITE.FUT 2SG FOCUS 2SG-go.SG
'Do you plan on going on the bus?'
casual discourse: 2016-11-22

Locative *-pe* often attaches to Portuguese loanwords for days of the week, months, and years. As discussed further in Appendix A, these loanwords can retain Portuguese phonemic categories and phonological contrasts.

- (61) Locative -pe attaches to loanwords referring to time
 - a. *Here sopsi'at tesi'omka teuapekapbi'ae novembrope* here s-opsi'a-t te-si-'om-ka-a te-uapek(a)-a-pbi'a e novembro-pe then 3-eggs-NUC 3C-mother-NEG-VBZ_{ka}-TH 3C-hatch-TH-DUR 3 November-LOC *kuyõpo'ut sipe*.
 kuyõpo'ut sipe sand in 'Then in November, their eggs hatch in their sand, without their mother.' text: Isaias Tarimã Tupari, author
 - b. Dois mil e oitope õpot Franz Kapa ha'uet ìap.
 Dois mil e oito-pe õpot Franz Kapa ha'up-et ip-ap
 2008-LOC DISTANT.PAST Franz Caspar son-NUC come.SG-ADV.FOC
 'Franz Caspar's son came in 2008.'

casual discourse: 2014-07-27

c. *Sábadope* nãkop Nilson tèsap'a *y*'*e*, pasto te-s-a-p'a sábado-pe nãkop Nilson v-'e pasto Saturday-LOC MAYBE Nilson.NUC 3C-come.SG-TH-NEAR.FUT 3-AUX.SG pastor yope. yope along.with 'On Saturday Nilson may come, in the pastor's vehicle.' casual discourse: 2016-02-18

There is a sometimes homophonous morpheme, *-ppe/-mpe/-pe*, in the verbal domain. This suffix attaches to whole VPs, transforming them into adverbials meaning 'after doing X' or 'upon doing X'. Per the language's regular processes of coda nasalization and consonant cluster simplification (see Appendix A), this suffix is realized as *-ppe* after oral vowels, as *-mpe* after nasal vowels,

and as *-pe* after consonants. So *-ppe/-mpe/-pe* 'after doing X' and the locative case ending *-pe* are homophonous only after consonants. (62) offers textual examples of all three allomorphs.

(62) Examples of *-ppe/-mpe/-pe* 'after doing X'

- a. Wan'om, hurunõ'om wepu'uppe, wepap'etekap'a wan'om hurunõ'om w-epu'u-ppe w-epap'eteka-a-p'a WAN'OM three 1SG-pass.day-after 1SG-revive-TH-NEAR.FUT o'eronã.
 o-'e-ronã 1SG-AUX.SG-again
 But after spending three days, I am going to be revived / to live again.' text: Miraci Aguissi Tupari, narrator
- b. Patõampe kit ikap. patõã-mpe kit i-ko-ap roast-after POLITE.FUT+1DUAL.INCL 3-eat-ADV.FOC
 'Let us-INCL.DUAL eat it after roasting it.' / 'We-INCL.DUAL ought to eat it after roasting it.' text: Paulina Tomīka Tupari, narrator
- c. *Here õpot* 'ote otepoatkatpe here õpot 'ote ote-poatkat-pe then DISTANT.PAST 1PL.EXCL 1PL.EXCL-finish-after oteã'am. ote-ã'ẽ-am 1PL.EXCL-come.PAUC-ADV.FOC 'So then, after we finished, we came back.' text: Rita Sisi Tupari, narrator

2.4.3 Instrumental-lative -m/-o

The instrumental-lative case -m/-o expresses two different meanings. First, it may be used to indicate the instrument with which an action is performed – or, more broadly, an object or person physically implicated in the action.

- (63) Instrumental uses of -m/-o
 - a. Kat'aro 'en èurap?
 kat'at-o 'en e-eut-ap
 what-INS 2SG 2SG-get.full-ADV.FOC
 'What did you fill up on?'
 casual discourse: 2016-02-16 & 2016-11-15

b. Weut'eutkia 'on arom, *iporo*. w-eut'eut-ki-a 'on aro(p)-m 'ipot-o 1SG-[fill]²-VBZ_{ki}-TH 1SG food-INS fish-INS 'I filled up on food, on fish.' casual discourse: 2016-11-21 c. *Here õpot* 'on osim oteka opoap. here õpot 'on o-si-m o-tek-a o-po-ap then DISTANT.PAST 1SG 1SG-mother-INS 1SG-grab-TH 1SG-hold.on-ADV.FOC 'So I held on tight to my mother.' text: Rita Sisi Tupari, narrator akaba'am wapirika d. *Here õpore* hèt tet'e. e hèt akaba'ap-m w-apiri-ka-a tet'e, here õpot then DISTANT.PAST 3 HÈ.NUC copaíba.oil-INS 1SG-medicine-VBZka-TH AUXgo.SG akaba'aet тã tet'e. akaba'ap-et mã-a tet'e

copaíba.oil-NUC place-TH AUX $_{go}$.SG 'Then he treated my wound with copaíba oil, he applied the copaíba oil.' text: Rita Sisi Tupari, narrator

Into this category also fall languages, as they serve as instruments of communication:

(64) Languages often bear instrumental case

a.	Kiema'em,		Tupari ema'em	
	ki-ema'ẽ-m	I	Tupari ema'ẽ-m	
	1PL.INCL-la	inguage-INS	Tuparí language	e-INS
	iyma'ẽkto'or	nkat		'en.
	i-yma'ẽk-to-	'om-ka-a-t		'en
	3-speak.with	I-NMZ _{ro} -NEG	-VBZ _{ka} -TH-NEAB	r.past 2sg
	'In our langu	age, in the T	uparí language, y	ou didn't speak to him.'
	casual discours	-		-
b.	Tarupa	ema'em	'on nam,	wema'em
	tarupa	ema'ẽ-m	'on nẽ-am,	w-ema'ẽ-m
	non.indigen	e language-I	NS 1SG do.so-AD	V.FOC 1SG-language-INS
	nerõ'om	'on.		
	nẽ-ro-'om	'on		
	do.so-NMZ _{ro}	-NEG 1SG		
	'I did so [pra	wed] in the la	inguage of the wh	ite man; I didn't do so in my language.'
	casual discours	e: 2017-08-15		

The other major use of -m/-o is to express the place toward which movement happens:

- (65) Lative uses of -m/-o
 - a. Here kut nã sim'em teaoroytonã ekgo. here kut sim'ẽ-m te-aoros-tonã nã ek-o then ANCIENT.PAST FOCUS night-INS 3C-arrive.SG-again house-INS 'Then he arrived again at home, at night.' text: Isaias Tarimã Tupari, author b. *Wan opap ara* kiora wirikgo! wirik-o wan opap at-a ki-ot-a

let's corn get-TH 1PL.INCL-go.PAUC-TH field-INS

'Let's go to the field to get corn!'

text: Iracema Taydyup Tupari, narrator

This movement may be rather abstract, indictating the direction of attention:

- (66) <u>Instrumental-lative can also indicate the direction of attention</u>
 - a. *Oteapsitkara oteapteka ẽrõ ote eporet.* ote-apsitkat-a ote-apteka **en-o** ote eporet 1PL.EXCL-think-TH 1PL.EXCL-HABIT **2SG-INS** 1PL.EXCL also 'We-EXCL think about you, too.' casual discourse: 2016-11-15
 - b. Wapsikara 'on ērõ, ma'a 'en herõwap hem. w-apsikat-a 'on en-o, Ø-ma'ē-a 'en herõwap hem 1SG-think-TH 1SG 2SG-INS [3-speak-TH 2SG yesterday] HÈ.INS 'I thought about you, about the thing that you said yesterday.' casual discourse: 2017-08-14

In example (66b) the instrumental-lative suffix shows up twice: first on the second person singular pronoun and then for a second time on the nominalizer of the internally-headed relative clause $ma'\tilde{a}$ 'en herõwap hè 'what/the thing that you said yesterday' (see Singerman 2018 [to appear]).

Although locative -pe 'LOC' is typically used for expressing time on Portuguese loanwords (see example 61), instrumental-lative -m/-o appears in certain native temporal expressions. Examples attested in my corpus include: sim'em 'in the evening' (from sim'ẽ 'night, darkness'), erero 'early in the morning' (from eret 'tomorrow'), pu'um 'in the afternoon' (from pu'u 'afternoon'), pu'ukut'am 'in the late afternoon' (with diminutive -kut'a on pu'u 'afternoon').

The instrumental-lative case exhibits more allomorphy than do the other case suffixes, as was

already pointed out by Seki (2001) and Alves (2004). The allomorph -m attaches to vowel-final words, whereas -o attaches to consonant-final ones:

- (67) Instrumental-lative allomorph -m attaches to vowel-final words
 - a. osi 'my mother' + -m/- $o \rightarrow osim$
 - b. $sim'\tilde{e}$ 'night' + -m/-o \rightarrow sim'em
 - c. $h\hat{e} \sim he$ 'that one, that thing' + -*m*/-*o* \rightarrow *hem*
- (68) Instrumental-lative allomorph -o attaches to consonant-final words
 - a. wirik 'field' + -m/- $o \rightarrow wirikgo$
 - b. en '2sG' + -m/- $o \rightarrow \tilde{e}r\tilde{o}$
 - c. Guarani ypet 'Guarani woman' + -m/- $o \rightarrow$ Guarani ypero

The intrumental-lative triggers a unique change when it follows the glide y, realized in coda position as [c[']]. When the instrumental-lative immediately follows the glide, gemination and voicing apply: kuy [kuc[']] 'land' $\rightarrow kuydyo$ [kuc['].jo] 'to the land'. I know of no other context in the language where the voiced palatal [J] can surface, so it likely lacks independent phonemic status.

A final /p/ will nasalize when the instrumental-lative is suffixed:

- (69) Instrumental-lative nasalizes final /p/
 - a. *kup* 'wood/tree' + $-m/-o \rightarrow kum$
 - b. akaba'ap 'copaíba oil' + -m/- $o \rightarrow akaba'am$
 - c. *tewap* 'his/her/their hammock' + $-m/-o \rightarrow tewam$

If a stem already ends in /m/, there is no phonological effect of suffixing the instrumental-lative suffix. So *yam* 'bench' is realized as [nam] not only in its unmarked citation form but also when it bears the instrumental-lative case.

The textual example in (70) illustrates several of the instrumental-lative's allomorphs.

(70) Here kut kire'earet ipokapsiriksirap: wa'im, kum, here kut kire-'eat-et i-pokapsirik-sira-ap: wa'i-m ku(p)-m then ANCIENT.PAST person-MANY-NUC 3-cover-EV.PL-ADV.FOC stone-INS wood-INS kũyom, kàp'earo.
kũyô-m kàp'eat-o sand-INS stuff-INS

'Then the people covered it: with stone, rock, sand, and other stuff (NON-WITNESSED).' text: Raul Pat'awre Tupari, author

2.4.4 Oblique -ere/-re

The oblique case -ere/-re marks location at a place or movement from a place; this usage contrasts

with that of -pe, which indicates being inside of a location or object.

- (71) Oblique case marks general location
 - a. *Here Koloradore* otero'apbi'a 'on Pedro yare. here Kolorado-re o-tero'a-pbi'a 'on Pedro yare then Colorado-OBL 1SG-AUXgo.SG.TH-NMZap-DUR 1SG Pedro alongside/with 'Back then, I was living in Colorado, with Pedro.' text: Rita Sisi Tupari, narrator b. *Here õpore* 'apère, 'àpe enkuere takarat here õpot e 'àpe-re 'àpe enkup-ere takara-t then DISTANT.PAST 3 path-OBL path edge-OBL tapir-NUC tet'epnam. tet'e-pnẽ-am AUXgo.SG-EV.SG-ADV.FOC 'Then there on the path, on the side of the path, there was a tapir (NON-WITNESSED).' text: Rita Sisi Tupari, narrator c. Estaleirore nẽ èmo'ãka 'e?
 - **Estaleiro-re** nẽ e-emo'ãk-a 'e **Estaleiro-OBL** Y/N 2SG-pass.through-TH AUX.SG 'Did you pass through Estaleiro?' casual discourse: 2015-11-03

More abstractly, it may mark the recipient of an action:

- (72) Oblique case marks recipient of an action
 - a. *Tèopnaẽ ẽrerẽ*.
 te-eop-nẽ-a e en-ere
 3C-grow.accustomed.to-EV.SG-TH 3 2SG-OBL
 'It [a pet parakeet] has gotten used to you (NON-WITNESSED).'
 - b. *Kiakoet õrerẽ erop'a te'ero'ekat*. kiakop-et on-ere erop'a te-'ero'ekat sun-NUC 1SG-OBL bad 3C-always/regularly 'The sun is bad for me.' casual discourse: 2015-12-26

Oblique *-ere/-re* is also used for temporal relations, though it is not attested on Portuguese loans such as *segunda* 'Monday' or *dezembro* 'December' (these take locative *-pe* instead; see 61).

- (73) Oblique case marks temporal relations
 - 'e a. *Kat'are* eykoro kiakoere earopnã? kat'at e e-y'-ko-ro 'e kiakop-ere e-aropnã what 3 2SG-OBJ.FOC-eat-NMZ_{ro} AUX.SG sun/noon-OBL 2SG-for 'What did you eat today at lunchtime?' casual discourse: 2015-11-09 b. *Ekurere* nẽ eapsin'õam hi'anambi'a 'en? në e-apsin'om-am hi'a-në-a-mbi'a e-kut-ere 'en **2SG-childhood-OBL** Y/N 2SG-play-NMZ_{ap} like-VBZ_{ne}-TH-DUR 2SG 'In your childhood, did you like to play?' casual discourse: 2016-02-10 c. Kemsok'anã tekemsok'are. õpore *i'ekapnẽ* kemsok'a-nẽ-a õpot e i-'eka-pnẽ te-kemsok'a-re beautiful-VBZ_{ne}-TH DISTANT.PAST 3 3-AUX.SG-EV.SG 3C-youth-OBL 'She was beautiful in her youth (NON-WITNESSED).'

elicitation: 2017-08-06

(based on casual discourse: 2016-12-12)

As a marker of temporal relations, -ere/-re can attach to nouns marked with the privative/negative -

'om. This yields a negative existential adverbial: 'when there was no X'. (For more information on

the relationship between negation and privation in Tuparí, see the appendix of Singerman 2018.)

- (74) Oblique case attaches on top of negated/privative nouns
 - a. *Mõket* kire'õerẽ, kut kiakoet koepa eanã mõket kut kire-'om-ere kiakop-et koepa eanã long.ago ANCIENT.PAST person-NEG-OBL sun-NUC moon together.with kirenã soro'epsira. kire-nẽ-a s-oro'e-psira person-do-TH 3-AUXgo.PAUC-EV.PL 'Long ago, when there were no people, the sun and moon were people (NON-WITNESSED).' text: Isaias Tarimã Tupari, author b. Estrada'õerẽ moem Guajaram herop õpot iu tet'anã saka,
 - estrada-'om-ere õpot iu moem Guajara-m tet'anẽ-a s-aka, herop road-NEG-OBL DISTANT.PAST river by Guajara-INS go.PL-TH 3-AUX.PL rubber *vendeka, herop, arao'a ke.* vende-ka-a herop arao'a ke sell-VBZ $_{ka}$ -TH rubber Brazil.nut also 'When there wasn't a road, they went by river to Guajará, to sell rubber and nuts.' casual discourse: 2016-01-07

Many intransitive verbs can take an optional argument marked with *-ere/-re*. This class of verbs includes *pop'a* 'be afraid of', *puop'ot* 'learn', *apsitwat* 'forget', *poatkat* 'finish', and *apsi'e* 'hear, listen'.

- (75) Intransitives that take an oblique-marked optional argument
 - a. 'Oneporet opop'ero'omkaro peo'ap *ẽrerẽ*. 'oneporet o-pop'e-ro-'om-ka-ro peo'ap en-ere 1SG.too 1SG-fear-NMZ_{ro}-NEG-VBZ_{ka}-NMZ_{ro} FUT.1SG 2SG-OBL 'I too won't be afraid of you.' text: Tereza Miraká Tupari, narrator b. *Here õpot* 'on opuop'ora otet'e, herop nã 'on o-puop'ot-a nã o-tet'e here õpot herop DISTANT.PAST 1SG 1SG-learn-TH ?PROG 1SG-AUXgo.SG rubber SO poraere. pore-ap-ere cut-NMZap-OBL 'So I learned how to tap rubber.' text: Pedro Kup'eoyt Tupari, narrator c. *Kiema'erẽ* kitwat kitwat ki-ema'ẽ-re **1PL.INCL-language-OBL** POLITE.FUT+1PL.INCL kiapsitwàromkap. ki-apsitwat-ro-'om-ka-ap 1PL.INCL-**forget**-NMZ_{ro}-NEG-VBZ_{ka}-ADV.FOC 'Let's not forget our language.' / 'We ought not to forget our language.' text: Nilson Tupari, narrator d. *Otepoatkara* 'ote mo'ã moraerẽ. ote-**poatkat**-a 'ote mo'ã morẽ-am-ere 1PL.EXCL-finish-TH 1PL.EXCL ball throw-NMZap-OBL 'We-EXCL have finished playing ball.' casual discourse: 2016-02-09
 - e. Eapsi'a nẽ nã eyẽ wema'erẽ poatkia?
 e-apsi'e-a nẽ nã e-yẽ w-ema'ẽ-re poatkia
 2SG-hear-TH Y/N PROG 2SG-AUX_{hzntl} 1SG-voice-OBL well
 'Are you hearing my voice well?'
 casual discourse: 2016-11-16

In addition to the intransitive verbs shown in (75), the nominal predicate *puop* 'knowledge, smart, intelligence' and the transitive verb $\tilde{o}puopma'\tilde{e}$ 'teach' may also take an oblique argument:

- (76) Nominal predicates and transitive verbs which select an optional oblique argument
 - a. *Puop'om 'ote otewakaere*.
 puop-'om 'ote ote-wak-ap-ere
 know-NEG 1PL.EXCL 1PL.EXCL-cry-NMZ_{ap}-OBL
 'We-EXCL do not know how to cry.'
 text: Miraci Aguissi Tupari, narrator
 - b. *Mõket*, okurerem, òwet irik'enaerẽ mõket o-kut-ere-m irik'e-nẽ-am-ere o-op-et long.ago 1SG-childhood-OBL-INS 1SG-father-NUC work-VBZ_{ne}-NMZ_{ap}-OBL õpuopma'ambi'ae kutnã otero'a *o*'*a*. o-**õpuopma'ẽ**-ambi'a e kut-nẽ-a o-tero'e-a o-'a 1SG-**teach**-TH-DUR 3 [child-VBZ_{$n\tilde{e}$}-TH 1SG-AUX_{go}.SG-TH 1SG-when.SG] 'Long ago, in my childhood, my father taught me how to work [=to cut rubber], while I was a child.'

text: Pedro Kup'eoyt Tupari, narrator

The oblique case frequently attaches on top of the deverbal nominalizer -ap, as in (75b), (75d), (76a) and (76b). Per the language's regular process of consonant lenition prior to vowel-initial suffixes (see Appendix A), the labial of the nominalizer -ap is deleted in all such examples.

A final function of the oblique is to mark the protases of counterfactual conditionals, also built from nominalized verb phrases. The apodosis in such utterances bears the conditional suffix *-kot'oy* (see §3.6.2).

(77) Oblique case marks protasis of conditionals

a.	Tigit	tero'aere,	herem sikot'oy.			
	Tigi-t	tero'e-ap-ere	Ø herem si-kot'oy			
	Tigui-NUC AUXgo.SG-NMZap-OBL 3 thither shoot-COND					
	'If Tigui had been there, he would have shot at it [a wild boar].'					
	casual disco	urse: 2016-02-07				
b.	Mãkinams	sironaerẽ	irowakot'oat	'on		

mãkinā-msiro-nē-am-ere irowa-kot'oy-a-t 'on camera-POSS-do-NMZ_{ap}-OBL take.picture-COND-TH-NEAR.PAST 1SG *kipotoapnã*.
ki-potop-ap-nē-a 1PL.INCL-view-NMZ_{ap}-VBZ_{nẽ}-TH
'If I had had a camera, I would have taken a picture for us to view.' text: Isaias Tarimã Tupari, author

c. Nam'erop'anaerē 'en epuop'oro'omkakot'oy.
nam'erop'a-nē-am-ere 'en e-puop'ot-ro-'om-ka-kot'oy difficult-VBZ_{nē}-NMZ_{ap}-OBL 2SG 2SG-learn-NMZ_{ro}-NEG-VBZ_{ka}-COND 'If it were difficult, you wouldn't learn.'
casual discourse: 2016-11-27

Oblique *-ere/-re* has different phonological effects than do locative *-pe* or instrumental-lative *-m/-o*. In addition to the loss of the first vowel of the oblique case following another vowel (such that *aodeya* 'village' becomes *aodeyare*), the oblique can lengthen the final vowel on loans from Portuguese: *Koloradòre* 'in the village of Colorado'.

2.4.5 Case stacking

There are certain environments in which two cases may stack on top of one another on a single nominal base. One rather prominent kind of case stacking involves locative *-pe* attaching on top of the nuclear case *-et/-t*. The NPs that bear the nuclear and locative cases occur right-peripherally.

- (78) Locative -pe on top of the nuclear case
 - a. *Iyma'ẽka ko 'on hètpe!*i-yma'ẽk-a ko 'on hè-t-pe
 3-speak.with-TH POLITE.FUT 1SG that.thing-NUC-LOC
 'I want to talk to him, to that one!'
 casual discourse: 2015-12-21
 - b. Yõpuopma'erõ peo'ap wa'uetpe Tupari ema'erẽ.
 y-õpuopma'ẽ-ro peo'ap w-a'up-et-pe Tupari ema'ẽ-re
 3-teach-NMZ_{ro} FUT.1SG 1SG-son-NUC-LOC Tupari language-OBL
 'I will teach him, my son, the Tupari language.'
 casual discourse: 2015-10-27
 - c. Sara 'on otet ouoka iaetpe.
 s-at-a 'on o-tet o-uoka iap-et-pe
 3-get-TH 1SG 1SG-go.SG 1SG-water container-NUC-LOC
 'I went to get it, my water container.'
 casual discourse: 2016-02-13

d. ... 'àpere ipẽuã te'anamtenã, tea'usi'earetpe.
'àpe-re i-pẽum-a te-'anẽ-am-tenã te-a'usi-'eat-et-pe road-OBL 3-spy.on-TH 3C-AUXgo.PL-NMZap-PURP 3C-wife-MANY-NUC-LOC
'... in order to spy on them by the road, on their wives.'
text: Rita Sisi Tupari, narrator

Caspar and Rodrigues (1957:§3.2.4.2.5) and Alves (2004:§4.3.1.3.2) refer to this combination of nuclear *-et/-t* and locative *-pe* as an accusative case form, since it only ever shows up on direct objects. But right-dislocated objects that bear *-et/-t* plus *-pe* are doubled in the canonical position for direct objects – that is, immediately prior to the transitive verb – by a third person pronominal proclitic: $i-\sim y-\sim s$ -. This is why we see *i*- before the transitive verb in (78a) and (78d), *y*- in (78b), and *s*- in (78c). Right-dislocated objects that bear *-et* and *-pe* can even be doubled by whole NPs in preverbal position:

ma'ã ko (79) *Kiapsio'iaet* takara 'on, aramiran kut ki-apsio'iap-et ma'ẽ-a ko 'on aramirã-n takara kut **1PL.INCL-story-NUC** tell-TH POLITE.FUT 1SG [woman-NUC ANCIENT.PAST tapir etewaka teirigoapsira hètpe. ete-wak-a te-irigoa-psira-a hè-t-pe COM-cry-TH 3C-go.away-EV.PL-TH] HÈ-NUC-LOC 'Let me tell our story, the one of the women who went off, crying for the tapir.' text: Rita Sisi Tupari, narrator

In this example the preverbal object is the NP *kiapsio'iaet* 'our story'; the constituent that bears -et/-t 'NUC' and -pe 'LOC' is an entire finite embedded clause, nominalized with the subordinator $h\dot{e}$. (See Singerman 2018 [to appear] for more discussion of finite embedded clauses in Tuparí.) Examples like (79) suggest that what Caspar and Rodrigues called 'accusative' case ought not to be viewed as a case proper – on par with the oblique, the nuclear, the instrumental-lative, and the locative – but rather as a discourse mechanism for asserting coreference between an NP in a non-canonical, right-peripheral position and the direct object situated immediately prior to the transitive verb.

The usage of *-pe* on demoted direct objects occurs only in the speech of speakers who are middle-aged or older. Younger Tuparí invariably omit *-pe*. This is why the right-peripheral object

in (80a) (spoken by an eighteen year-old) bears only nuclear -et/-t. The variant of this utterance corresponding to the speech of older speakers would contain -pe, as in (80b).⁹

- (80) Stacking of locative -pe on top of nuclear -et/-t is infrequent among younger Tuparí
 - mầknan 'on irowaet 'en Silvana a. Toat irowap-et mak-ne-a-n 'en Silvana Ø**-**top-a-t 'on **3-**see-TH-NEAR.PAST 1SG [photo-NUC send-EV.SG-TH-NEAR.PAST 2SG Silvana vam hèt. yam hè-t] HÈ-NUC to 'I saw it, the photo that you sent to Silvana (NON-WITNESSED).' casual discourse: 2017-08-03
 - mầknan b. Toat 'on irowaet 'en Silvana irowap-et mak-ne-a-t 'en Silvana 'on Ø**-**top-a-t 3-see-TH-NEAR.PAST 1SG [photo-NUC send-EV.SG-TH-NEAR.PAST 2SG Silvana *yam hètpe.* yam hè-t-pe] HÈ-NUC-LOC to 'I saw it, the photo that you sent to Silvana (NON-WITNESSED).' elicitation: 2017-08-05 (based on casual discourse: 2017-08-03)

The stacking of *-et* and *-pe* on direct objects that are not found in the canonical preverbal position may be related to the broader tendency in Tuparí grammar to build new cases by concatenating already existing ones. For instance, *-ere/-re* 'OBL' and *-m* 'INS' combine to give *-erem*:

- (81) Stacking of instrumental-lative -*m/-o* on top of oblique -*ere/-re*
 - a. CONTEXT: I remark that I do not know how to catch fish, prompting this joke from my interlocutor.

Ikaerem	nẽ	риор	'en?
i-ko-ap-erem	nẽ	puop	'en
3-eat-NMZ _{ap} -only.with	n y/N	know	2sg
'Do you only know how to eat it?'			
casual discourse: 2015-12-2	26		

⁹When a doubled preverbal object appears to be missing – as in (80) – then the verb must be consonant-initial. This is because the null third person proclitic is licensed only prior to C-initial verbal roots. The overt third person proclitics *y*- in (78b) and *s*- in (78c) could not be replaced by the null allomorph, since the verbs $\delta puopma' \tilde{e}$ 'teach' and *at* 'get' are vowel-initial. See §2.2.2, above.

b. *Here kut* pakgere wi'ĩk ke sotsira ara here kut pakgere wi'ĩk ke s-ot-sira at-a then ANCIENT.PAST early leaf-cutter.ant get-TH also 3-go.PAUC-EV.PL tea'usìrem sim'em. te-a'usi-rem sim'ẽ-m **3C-wife-only.with** night-INS 'Then early the next day, he went together with his wife to gather leaf-cutter ants.' text: Isaias Tarimã Tupari, author

It is not clear at this point what semantic differences obtain between *-erem* in examples such as (81b) and the postposition *eanã* 'together with', discussed in the next section.

2.4.6 Postpositions

In addition to nuclear -et/-t, locative -pe, instrumental-lative -m/-o and oblique -ere/-re, Tuparí makes use of several postpositions which express spatial relations and accompaniment. The dividing line between case endings and postpositions can be fuzzy, though certain criteria serve to delineate the two classes from one another. First, the case suffixes are relatively short and subject to allomorphy conditioned by the phonological shape of the host. The nuclear case is *-et* after consonants but -t after a vowel; the instrumental-lative is -m after vowels but -o after consonants (abstracting away from the case of a word-final labial); and the oblique -ere loses its initial /e/ following a vowel. By virtue of being phonologically small, the cases are subject to progressive nasal spreading and rhyme-internal coda nasalization – processes limited to the phonological word (see Appendix A). So *-et/-t* nasalizes to $[\tilde{e}n]$ or [n] after nasal material, i.e., *okiot* '(the) man' but aramiran '(the) woman'. This nasalization also takes places with the instrumental-lative and oblique: wekge 'to/toward my home' but $\tilde{e}r\tilde{o}$ 'to/toward you', wekgere 'in/from my home' but $p\tilde{e}oir\tilde{e}$ 'in/from the cold'. (Locative -pe does not undergo any nasalization but this is due to the fact that it starts with the oral stop /p/, and oral stops in onset position block progressive nasal spreading in all environments in Tuparí; see Singerman 2016.) The cases are used not only for spatial/temporal meanings, but also for grammatical functions - i.e., oblique -ere/-re marks optional arguments of certain predicates as well as the protases of counterfactual conditionals.

Postpositions, meanwhile, exhibit none of these characteristics. They are typically two or three

syllables in length; do not have reduced forms; do not undergo nasal harmony; and do not exhibit any special grammaticalized functions. (82) provides examples of postpositions from texts.

- (82) Postpositions expressing spatial relations and accompaniment
 - a. Amẽkòt tero'a kiyope.
 amẽko-t tero'e-a ki-yope
 dog-NUC AUXgo.SG-TH 1PL.INCL-along.with
 'There's a dog here with us / by our side.'
 text: Nilson Tupari, narrator
 - b. Mõket, José Carlos eanã, e'awa oteora mõket José Carlos eanã e'awa ote-ot-a long.ago José Carlos together.with hunt.TH 1PL.EXCL-go.PAUC-TH oteoro'at 'ote. ote-oro'e-a-t 'ote 1PL.EXCL-AUXgo.PAUC-TH-NEAR.PAST 1PL.EXCL 'Long ago, José Carlos and I went hunting.' text: Nilson Tupari, narrator
 - c. Kup tere teopsi'at õambi'ae iupsipe.
 kup tere te-opsi'a-t om-a-mbi'a e iu-psipe wood on 3C-egg-NUC give-TH-DUR 3 river-within 'It [the tucunaré] lays its egg on wood in the river.' text: Raul Pat'awre Tupari, author

A very common postposition is *aropnã* 'for, to', transparently grammaticized from the noun *arop* 'thing, stuff, food, possession' and the verbalizing affix $-n\tilde{e}$. It has acquired benefactive-like uses; I have heard it used with loanwords in a manner comparable to the Portuguese preposition *para*.

(83) Examples of *aropnã* 'for, to'

a.	Here	herop	pora	nã	terapbi'ae	òwet,	tarupa'eat
	here	herop	pore-a	nã	tet-a-pbi'a	e o-op-et,	tarupa-'eat
	so	rubber	cut-TH	FOCUS	go.SG-TH-DUR	3 1SG-father-NUC	non.indigene-MANY
	arop	nã.					
	arop	nã					
	for						
	'So r	ny fathe	er would	d go off	to tap rubber fo	or the white people.	,

text: Pedro Kup'eoyt Tupari, narrator

b. *l'epsi õam'a* 0'e, e'awa oterap'a i-'epsi om-a-m'a o-'e, e'awa-a o-tet-a-p'a 3-value give-TH-NEAR.FUT 1SG-AUX.SG hunt-TH 1SG-go.SG-TH-NEAR.FUT o'e, paroro earopnã. õpà, o-'e, paroro õpo-a e-aropnã 1SG-AUX.SG armadillo kill-TH 2SG-for 'I will give you its value/price; I will go hunt, to kill armadillos for you.' text: Isaias Tarimã Tupari, author c. Yõã õpot 'ote saropnã.

y-om-a õpot 'ote **s-aropnã** 3-give-TH DISTANT.PAST 1PL.EXCL **3-for** 'We gave it [a pet bird] to her.' casual discourse: 2016-11-24

This postposition's origin as the noun *arop* plus the verbalizer $-n\tilde{e}$ remains synchronically transparent. An example of this transparency comes from (98b), below, where the collective suffix *-eat* 'MANY' intervenes in between *arop* and *nã*: *kiarop'eatnã* 'to all of us, for all of us'.

Postpositions in Tuparí can trigger changes in the expression of number on verbal heads. The postposition *yope* is compatible with a singular subject. Hence in (84a) 'go' appears in its singular form, *tet*, and the auxiliary is singular as well ('e). But when the postposition *eanã* is used, non-singular morphology is required. (84b) shows the change: 'go' enters into its paucal form, *ot*, and the auxiliary switches from singular 'e to plural a.

- (84) Postpositions can trigger changes in the expression of number
 - a. *Tera* y'e cidadzim tesi yope.
 tet-a y-'e cidadzi-m te-si yope
 go.SG-TH 3-AUX.SG city-INS 3C-mother along.with
 'She went to the city with her mother [i.e., hitching a ride with her mother].'
 elicitation: 2015-10-15
 - b. *Teora* sa cidadzim tesi eanã. te-ot-a s-a cidadzi-m te-si eanã 3C-go.PAUC-TH 3-AUX.PL city-INS 3C-mother together.with 'She went [lit: they-PAUC went] to the city with her mother.' elicitation: 2015-10-15

For further examples of the associative plural in this chapter, see (74a), where *koepa eanã* 'together with the moon' triggers the paucal auxiliary root *oro'e* and plural evidential *-psira*; (81b), where

tea'usìrem 'along with his wife' requires paucal *ot* 'go.PAUC' as well as the plural evidential *-psira*; and (82b), where the inclusion of the postpositional phrase *José Carlos eanã* 'together with José Carlos' forces the lexical verb 'go' and the auxiliary into their paucal forms.

2.5 NP-internal modification and the question of 'adjectives'

This section discusses the morphosyntactic and semantic properties of nominal modifiers in Tuparí. Although adjectives were treated as an independent word class in Caspar and Rodrigues (1957:§3.4) and Alves (2004), they are best analyzed as a subset of nouns.

All apparent 'adjectives' must follow the head noun regardless of the particular syntactic function of the modified noun. That is, an NP-internal modifier will follow the head noun inside of a nominal predicate (*aramirã kemsok'a* 'beautiful women' in 85a), inside of an NP serving as a core argument (*akurap erop'àt* 'the bad monkey' in 85b, *iu siren* 'a small body of water' in 85c), and inside of an NP that possesses another NP (*iu sin enkup* 'the bank of a small river' in 85d).

(85) Adjectival modifiers follow the head noun in all contexts

a. Aramirã kemsok'a wat.
 aramirã kemsok'a wat
 woman beautiful 2PL

'You-PL are beautiful women.'

casual discourse: 2016-02-?

b. Akurap erop'àt nẽ eweka te'a?
akurap erop'a-t nẽ e-wek-a te-'e-a
monkey bad-NUC Y/N 2SG-bite-TH 3C-AUX.SG-TH
'Did a bad monkey bite you?'
text: Iracema Taydyup Tupari, narrator

õrõka c. *Here kut* iut i'ekapnẽ, iu here kut iu-t õrõk-a i-'eka-pnẽ, iu then ANCIENT.PAST water-NUC place.flat-TH 3-AUX.SGhabit-EV.SG water siren õrõka i'ekapnẽ. i-'eka-pnẽ sìn-en õrõk-a small-NUC place.flat-TH 3-AUX.SGhabit-EV.SG 'So then he placed down a body of water, he placed down a small river (NON-WITNESSED).' text: Miraci Aguissi Tupari, narrator

d. Here kut tepapsìt kòykòyka hop perom, tetnẽ, iu here kut te-epapsi-t kòykòyka-a tet-nẽ, hop pero(p)-m iu then ANCIENT.PAST 3C-face-NUC scrub-TH go.SG-EV.SG mud-INS water sìn enkum. sim'em. sìn enku(p)-m, sim'ẽ-m small bank-INS, night-INS 'Then he went to scrub his face with mud, by the bank of a small river, in the dark (NON-WITNESSED).' text: Isaias Tarimã Tupari, author

There is some curious semantic ambiguity on the part of apparent adjectives. Many words that denote property concepts (to use the terminology of Dixon 1982) can occur not only as adjective-like modifiers but also as independent nouns. That is, these words can modify the head of an NP or head an NP on their own. (See Meira and Gildea 2009 for comparable facts from Carib.)

- (86) Nominal kut can modify another noun but can also stand alone
 - a. kut 'child, boy, youth'
 - b. amēko kut 'young dog' (from amēko 'dog')
- (87) Nominal okio can modify another noun but can also stand alone
 - a. okio 'man'
 - b. korakora okio 'male chicken, rooster' (from korakora 'chicken')

Furthermore, all property concept-denoting words can be possessed and take case endings just like regular nouns. Such examples exhibit a systematic ambiguity between attributive readings (tall, big, heavy) and the corresponding abstract qualities (height, size, weight).

- (88) tàn: 'tall' and also 'height'
 - a. *Tàn 'en*.
 tàn 'en
 tall 2SG
 'You are tall.'
 common in everyday speech
 - b. Etầrerẽ nẽ puop 'en?
 e-tàn-ere nẽ puop 'en
 2SG-height-OBL Y/N know 2SG
 'Do you know your height?'
 casual discourse: 2015-10-26

(89) erat: 'fat/large' and also 'size'

a. Erare.
erat e
fat/large 3
'It's fat/large.'
common in everyday speech
b. Kat'at nẽkare i'eraret?
kat'at nẽkat e i-'erat-et
what kind 3 3-size-NUC

'What sort are their size [=how big are they]?' casual discourse: 2015-10-26

The ability of property concept words to refer both to adjective-like nominal modifiers and to abstract qualities obtains regardless of morphological complexity. So whereas *tàn* 'tall/height' and *erat* 'large/size' are morphologically indivisible wholes, the property concept in (90) is multimorphemic: *poatpoatkut'a* 'cute, beautiful, pleasant to the eye' is formed from a reduplication of *poat* 'good' plus the diminuitive suffix *-kut'a*.

(90) *poatpoatkut'a*: 'beautiful' and also 'beauty'

- a. Poatpoatkut'ae.
 poatpoatkut'a e
 beautiful 3
 'It is beautiful.'
 common in everyday speech
- b. CONTEXT: A speaker jokingly compares himself to a photo of a handsome housecat.

Ipoatpoatkut'at onẽkat. **i-poatpoatkut'a-t** o-nẽkat **3-beauty-NUC** 1SG-resemblance 'Its beauty [Portuguese: *boniteza*] resembles my own.' casual discourse: 2016-08-16

The same kind of semantic flexibility obtains even with property concepts that contain negative or privative morphology. This is shown by *kuray'om* 'ugly, not handsome' in (91):

- (91) kuray'om: 'ugly' and also 'ugliness'
 - a. *Kuray'ommẽ*.
 kuray-'om e
 handsome-NEG 3
 'He is ugly / not handsome.'
 common in everyday speech
 b. *Tepop'a nã tet'e ekuray'õerẽ*.
 - te-pop a na tel e ekuray bere.
 te-pop'e-a nã tel'e e-kuray-'om-ere
 3C-fear-TH PROG AUXgo.SG 2SG-handsomeness-NEG-OBL
 'It is afraid of your ugliness / your non-handsomeness.'
 casual discourse: 2018-04-22

Hence all property concept nominals – even ones that contain derivational or negative/privative morphology – exhibit the same 'tall/height' ambiguity.

The ambiguity seen in (88) through (91) becomes especially clear in comparative constructions, which are transitive predications formed with the verb *otetka*. Outside of comparative contexts this verb means 'be taller than':

(92) Teowet otetkap'a y'e. te-op-et otetka-a-p'a y-'e 3C-father-NUC be.taller-TH-NEAR.FUT 3-AUX.SG 'He_i is going to be taller than his_i father.' casual discourse: 2016-02-19

In the comparative construction the direct object of *otetka* serves as the standard of comparison. The following (a) examples show an attributive/predicative use of a property concept word while the (b) examples show the same words, now possessed, serving as the direct object of *otetka*.

(93) awe: 'tasty' and also 'tastiness'

a. Awe pa'ae arao'àt. **awe** pa'a e arao'a-t **tasty** ASSERTIVE. of 3 Brazil.nut-NUC 'It really is tasty, the Brazil nut.' casual discourse: 2016-02-15 b. Kõãtekget wi'ĩk awet otetka. kõãtek-et wi'ĩk awe-t otetka-a palm.weevil.larva-NUC leaf-cutter.ant tastiness-NUC exceed-TH 'The palm weevil larva is tastier than the leaf-cutter ant.' lit.: 'The palm weevil larva exceeds the tastiness of the leaf-cutter ant.' casual discourse: 2016-01-11

(94) *puop*: 'smart, clever, knowledgeable' and also 'knowledge, intelligence'

- a. *Puop* 'en. **puop** 'en **smart/clever** 2SG 'You are smart.' common in everyday speech
- b. Otepuowet otetka 'en. ote-puop-et otetka-a 'en 1PL.EXCL-knowledge-NUC exceed-TH 2SG 'You know more than we do.' lit.: 'You exceed our knowledge/intelligence.' casual discourse: 2015-12-25

For more discussion of property concepts and comparative constructions, see Dixon (1982); Stassen (1985); Bochnak (2013); Koontz-Garboden and Francez (2015) and Francez and Koontz-Garboden (2017).

To summarize: property concept lexemes can both modify nouns and serve as independent nominals; can be possessed and take case endings; and betray ambiguities of the 'tall/height', 'heavy/weight', 'smart/knowledge', and 'ugly/ugliness' sort. These facts suggest that Tuparí lacks a class of true adjectives, with all property concept-denoting words instead belonging to the class of nouns. This hypothesis is further supported by the fact that the language's morphology never seems to target 'adjectives' to the exclusion of nouns; that is, I know of no affixes which categorically discriminate between unambiguous nouns (*aoro* 'parrot', *ek* 'house', etc.) and the kind of property concept-denoting words discussed in this section. The lack of any affixes that are restricted to 'adjectival' bases is striking given that the language's morphology rigorously enforces the nounverb distinction; see Chapter 3 as well as Singerman (2018).

As for the status of the adjectival word class in other Tuparían languages, Nogueira (2014) presents morphosyntactic diagnostics that distinguish between nouns and adjectives in Wayoró. In particular, adjectival predicates in Wayoró must take a pronominal proclitic or prefix when used as predicates; that is, the Wayoró equivalent to Tuparí *Tàn 'en* 'You are tall' (example 88a) would require the second person singular *e*- immediately prior to 'tall'. This morphosyntactic distinction is not, however, at work in Tuparí, which treats all nominal predicates (including those lexemes previously identified as adjectives) identically. Note that the morphological marking found on adjectival predicates in Wayoró recalls the 'stative verbs' of the Mawetí-Guaraní branch of the Tupían family (see the chapters in Queixalós 2001 as well as the helpful synthesis in Meira 2006).

2.6 Number in the nominal domain

Tuparí grammar actively distinguishes between singular, paucal, and plural arguments; in addition, a dual/non-dual contrast obtains in the first person inclusive weak nominative enclitics. Pronouns and non-pronominal NPs often do not overtly expone number contrasts. This task is left to the verbal morphology, much of which agrees in number with the subject. This section first explains the realization of number on pronominals, including the weak nominative enclitics analyzed as agreement heads in Chapter 5 (§2.6.1); it then turns to the optional suffix -'*eat* 'MANY' (§2.6.2); and it concludes with a discussion of the interpretation of numerically unmarked NPs (§2.6.3).

2.6.1 Number marking on pronominals

Number is not marked in systematic fashion on third person pronominals in Tuparí (see §2.1.3 and §2.2.2, above). Only first and second person morphemes make obligatory number distinctions, though even among these there is underspecification of number: while multiple verbal roots show a contrast between singular, paucal, and plural, the weak nominative enclitics and proclitic pronouns generally contrast only singular and non-singular. Consider the existential paradigm in (95), repeated from (9). Inside of the auxiliary roots there obtains a contrast between singular *tero'e*, paucal *oro'e*, and plural *'anẽ*. But the weak nominative enclitics and proclitics draw a contrast

only between singular (o-, 'on) and plural (ote-, 'ote).

- (95) Underspecification of number in weak nominative enclitics and pronominal proclitics
 - a. Otero'aem 'on. o-tero'e-a-em 'on $1SG-AUX_{g0}.SG-TH-still$ 1SG 'I am still here.' common in everyday speech
 - b. Oteoro'aem 'ote.
 ote-oro'e-a-em 'ote
 1PL.EXCL-AUXgo.PAUC-TH-still 1PL.EXCL
 'We-EXCL.PAUC are still here.'
 common in everyday speech
 - c. Ote'anaem 'ote. ote-'an \tilde{e} -a-em 'ote 1PL.EXCL-AUXg0.PL-TH-still 1PL.EXCL 'We-EXCL.PL are still here.' common in everyday speech

The only nominal morphemes that make more than just a singular versus non-singular contrast are the first person inclusive weak nominative enclitics '*okit* and '*okitwat*. These, however, do not contrast paucal against plural but rather *dual* against plural: '*okit* is used only when the subject is of cardinality two. This is clear from the two examples in (96). The lexical verbs in these two utterances – *ot* 'go', \tilde{a} ' \tilde{e} 'come' – is paucal in reference: it is used when the subject is between two and five (sometimes six) people. (See §4.2.) But the weak nominative enclitic in these utterances is '*okitwat*, not '*okit*:

- (96) The weak nominative enclitic '*okitwat* is non-dual rather than non-paucal
 - a. *Kafe nã 'aet 'okitwat kafe eteoraptenã*.
 kafe nẽ-a 'aet 'okitwat kafe ete-ot-ap-tenã coffee make-TH NEGATIVE.LAMENT **1PL.INCL** coffee COM-go.PAUC-NMZ_{ap}-PURP 'We didn't even make coffee so as to take coffee along with us.' / 'It's a shame that we didn't even make coffee so as to take coffee along with us.' casual discourse: 2015-11-04

b. Cedonã 'okitwat kiã'emsira. cedonã 'okitwat ki-ã'ẽ-msira too.early 1PL.INCL 1PL.INCL-come.PAUC-EV.PL 'We arrived here too early (NON-WITNESSED).' casual discourse: 2017-08-03 (see also elicitation on 2017-08-03)

The numerical interpretation of these subjects is greater than two (since plural '*okitwat* was used instead of dual '*okit*) but still relatively small (since the verbal roots *ot* 'go' and \tilde{a} ' \tilde{e} 'come' are paucal). To my knowledge there are no other nominal morphemes that make a dual/plural contrast, though the verbal prefixes *erote-* 'all' and *urut-* 'both' do so (§3.5.2).¹⁰

2.6.2 The optional plural morpheme -'eat 'MANY'

The suffix -'eat functions as a kind of collective or group marker on NPs. I gloss it here as MANY.

(97) Examples of -'eat 'MANY' on third person NPs

a.	<i>Here kut</i> here kut	1	<i>e teueapsio'ipsirap</i> e te-eue-apsio'i-psir	a-ap	<i>okio'earet.</i> okio- 'eat -et	
	then ANCI	ENT.PAST now	3C-RCP-confer.wi	th-EV.P	L-ADV.FOC man-MANY-NUC	
	'And at this	s time, the man	y men / group of me	en confe	erred with one another.'	
	text: Raul Pat	t'awre Tupari, aut	hor			
b.	<i>Ũrorẽ</i> ũrorẽ far.off.there <i>'on</i> . 'on 1SG	kampina-re	<i>arophìt'earet</i> arophìt- 'eat -et animal- MANY -NUC	-	<i>oterat</i> o-tet-a-t H 1SG-go.SG-TH-NEAR.PAST	
	'Far off, in the meadow, I went to see many animals.'					
	text: Isaias Tarimã Tupari, author					

¹⁰Karlos Arregi (p.c.) asks how '*okit* might be analyzed on a system that interprets dual pronouns as the instantiation of a MINIMAL first person inclusive. (See Thomas 1955 for an early treatment of Ilocano, as well as Cysouw 2003, 2011 and Bobaljik 2008.) Though I do not go into a full theoretical analysis here for reasons of space, it is important to note that analyses that make use of a minimal/augmented contrast rather than a singular/dual/plural one should predict erstwhile duals to behave like the uncontroversial singulars. This is because on a minimal/augmented system, the duals and the singulars all belong to the minimal category. In Tuparí, however, '*okit* does not behave exactly like the unambiguously singular '*on* '1SG' or '*en* '2SG' as it goes with non-singular verbal roots. For instance, '*okit* to my knowledge cooccurs with the paucal allomorph of 'go', *ot*, rather than singular *tet*. In this respect '*okit* differs from the uncontroversially singular members of the set of weak nominative enclitics.

c. Here herop pora nã terapbi'ae òwet, tarupa'eat here herop pore-a nã tet-a-pbi'a e o-op-et, tarupa-'eat so rubber cut-TH FOCUS go.SG-TH-DUR 3 1SG-father-NUC non.indigene-MANY aropnã.
aropnã for 'So my father would go off to tap rubber for the white folks.' text: Pedro Kup'eoyt Tupari, narrator

It also possible for -eat to occur on a nominal predicate like poareman 'good, well':

(98) -'eat 'MANY' on nominal predicates

- a. Poareman'eare.
 poareman-'eat e
 good/well-MANY 3
 'They are all well.'
 casual discourse: 2016-07-11
- b. Poareman'eat nẽ wat kinõ'eat? Sim'ẽ poat kiarop'eatnã.
 poareman-'eat nẽ wat ki-nõ-'eat? sim'ẽ poat ki-arop'eatnã
 good-MANY Y/N 2PL 1PL.INCL-friend-MANY night good 1PL.INCL-for+MANY
 'How are you all doing, friends/cousins? A good evening to all of us.'
 casual discourse: 2017-04-13

The speaker of (b) places -'*eat* 'MANY' on multiple noun phrases, probably to emphasize the size of the group he is addressing: *-eat* appears on the predicate *poareman* 'good, well'; on the vocative *kinõ*'*eat* 'our friends/cousins'; and in between *arop* 'stuff, thing' and $n\tilde{a}$ 'VBZ_{$n\tilde{e}$} + TH', the morphemes which make up the postposition *aropnã*.¹¹

The optionality of -'*eat* is shown by (99). In both of these utterances the auxiliary roots are plural, but the NP subjects do not bear -'*eat*.

- (99) Plural subjects are not required to bear -eat
 - a. *Hare tambaki sa sapteka kuret.* hare tambaki si-a s-**apteka kut-et** here tambaqui spear-TH 3-HABIT.PL child-NUC 'Here the children spear tambaqui.' casual discourse: 2015-11-08

¹¹It is possible for $n\tilde{o}$ 'other, another' to occur in this same position: *waropnã* 'to me, for me, to be my thing/possession', *waropnãn* 'again for me, to be my second thing/possession'.

b. *Here waot ium teõrõka teip'anã sapteka*... here **wao-t** *iu-m* te-eõrõk-a te-**ip'anẽ**-a s-**apteka** and **crocodile-NUC** river-INS 3C-come.to.a.stop-TH 3C-**come.PL**-TH 3-**HABIT.PL** 'The crocodiles always come and lay out by the river.' text: Tereza Miraká Tupari, narrator

The singular form of the present habitual auxiliary takes an initial glottal stop, plausibly analyzed as a distinct singulative prefix (§4.5.1). This singulative prefix systematically distinguishes the plural form of the habitual auxiliary (*sapteka*) from the singular form (*i'apteka*~*y'apteka*). Plural *sapteka* is used in (99a) and (99b), so the NP subjects *kuret* and *waot* must be interpreted as plural – despite the fact that neither bears -*'eat*. Note further that the root of the movement verb in (99b) is plural: *ip'anẽ* 'come.PL' contrasts paradigmatically with singular $\hat{V}s/ip$ and paucal $\tilde{a}'\tilde{e}$. So there can be no doubt that the subject of this utterance, *waot*, is to be interpreted as plural.

It is also worth noting that *-eat* is not always consistently marked within running discourse. Consider (100), repeated from (57). The subject of (b), *aramirã'earet* 'the women', bears *-eat*. But in the immediately prior line the NP subject lacks *-'eat*.

(100) Alternation with and without plural/collective -eat

ma'ã ko a. *Kiapsio'iaet* 'on. aramiran kut takara ki-apsio'iap-et ma'ẽ-a ko 'on aramirã-n kut takara 1PL.INCL-story-NUC tell-TH POLITE.FUT 1SG [woman-NUC ANCIENT.PAST tapir etewaka teirigoapsira hètpe. ete-wak-a te-irigoa-psira-a hè-t-pe COM-cry-TH 3C-go.away.PL-EV.PL-TH] HÈ-NUC-LOC 'Let me tell our story, the one of the women who went off, crying for the tapir (NON-WITNESSED).'

b. Aramirã'earet kut takarat meop aramirã-'eat-et kut takara-t meop woman-MANY-NUC ANCIENT.PAST tapir-NUC fool.around.with 'eanemsira.
'eanẽ-msira-a AUXgo.PL-EV.PL-TH
'The women were fooling around with the tapir (NON-WITNESSED).' text: Rita Sisi Tupari, narrator

Although the NP subject in the embedded clause in (a) does not bear -eat, the verbal morphology

is unambiguously plural: the lexical verb *irigoa* 'go away' is restricted to plural subjects. And in both (a) and (b) we see the plural rather than singular allomorph of the evidential suffix.

2.6.3 Interpretive flexibility of numerically bare NPs

It is possible for proper names to receive a non-singular reading even in the absence of any plural morphology. In (101) the clause-initial NP subject is just the name Glessiane, but the verbal root *ot* 'go.PAUC' and the auxiliary root *i* 'AUX.PL_{moving}' show that this NP must be interpreted as plural. (See §4.6 for discussion of the plural auxiliary '*i*, which paradigmatically opposes singular *kop*.)

(101) Glessianin teatoa teora te'ia.
Glessiane-n te-ato-a te-ot-a te-'i-a
Glessiane-NUC 3C-bathe-TH 3C-go.PAUC-TH 3C-AUX.PL_{moving}-TH
'Glessiane and her parents are going off to shower.' / 'Glessiane and her parents may be going off to shower.'
casual discourse: 2016-11-20

This utterance was spoken by someone who saw Glessiane walking to the shower with her parents, which is what ensures the proper interpretation of the NP subject: 'Glessiane and her parents.'

It is important to differentiate between utterances like (99), (100a) and (101) – in which numerically unmarked NPs receive plural interpretations – and cases where in-laws are treated as paucals out of respect. This kind of respectful speech is ubiquitous in the speech of middle-aged and older Tuparí, though whether younger speakers maintain this practice I cannot say for certain. The speaker of (102a) uses non-singular auxiliary roots when discussing her daughter-in-law; but when the subject is her own daughter, as in (102b), the auxiliaries switch to singular.

- (102) Minimal pair showing effect of in-law speech on verbal morphology
 - a. *Rozat tobeko kot'oa teoro'a teaka*. Roza-t tobeko kot'oy-a te-**oro'e**-a te-**aka**-a Roza-NUC beans want-TH 3C-AUXgo.PAUC-TH 3C-AUX.PLhabit-TH 'Roza [=the speaker's daughter-in-law] has been wanting beans.' casual discourse: 2015-12-21

b. Saletxit tobeko kot'oa tero'a te'eka.
Saletxi-t tobeko kot'oy-a tero'e-a te-'eka-a
Salete-NUC beans want-TH AUXgo.SG-TH 3C-AUX.SGhabit-TH
'Salete [=the speaker's daughter] has been wanting beans.'
elicitation: 2016-01-01
(based on casual discourse: 2015-12-21)

These examples demonstrate that NPs that do not bear any overt number marking enjoy considerable interpretive flexibility. Table 2.12 summarizes. Of these three NPs *Saletxit* is the only one that both (*a*) triggers singular verbal agreement and (*b*) is interpreted as singular. Observe that the fourth possible combination – an NP which is interpreted as non-singular but which triggers singular agreement in the verbal morphology – is unattested.

Table 2.12: Interpretation and behavior of numerically unmarked NPs

NP	Example	Interpretation	Agreement on verbs
Glessianin	101	paucal	paucal
Rozat	102a	singular	paucal
Saletxit	102b	singular	singular

The utterances examined in this section have shown that whereas number marking on auxiliaries and certain lexical verbs – and in the evidential morphology – is obligatory, the same is not true of nominals. Put slightly differently, the feature NUMBER is overt in much of the verbal morphology but is frequently covert in the nominal domain.

2.7 Conclusion

This chapter has discussed the major morphosyntactic properties of the Tuparí nominal domain. Overall, the language's NPs do not exhibit much in the way of elaborate functional structure. There are no determiners or articles; the only grammaticalized morpheme that could be interpreted as marking definiteness or specificity is the nuclear case -et/-t, but the data in §2.4.1 show that giveness/topicality are better predictors of that suffix's distribution. In particular, the nuclear case cannot be present on focused nominals – including focused pronouns – but is obligatory on all NP subjects.

In keeping with the relatively sparse functional structure of the Tuparí NP, there is at most ambiguous evidence for the existence of a clear adjectival projection in the nominal domain. All of the property concept-denoting words can be possessed like any other noun. They also exhibit a systematic ambiguity such that *tàn* means both 'tall' and 'height', *kuray'om* means both 'ugly' and 'ugliness', and so on. This ambiguity becomes clear in comparative constructions, in which the standard of comparison is a possessed property concept lexeme serving as the direct object of *otetka* 'be taller than, exceed, surpass'.

One of the few functional categories that is unambiguously present in the Tuparí nominal domain is negation. Singerman (2018) shows that negation in this language is an exclusively nominal category: the negative/privative suffix -'*om* is restricted to nominal bases, so all verbs must undergo an overt process of deverbal nominalization in order to be negated. (Examples in this chapter of deverbal nominalization prior to negation include 53b, 54 and 75c; many comparable utterances are provided in Chapter 3 as well.) The data presented in §2.3.1 show further that -'*om* on the privative reading paradigmatically opposes the possessive suffix -*psiro*, giving rise to pairs such as *a'usipsiro* 'having a wife' and *a'usi'om* 'lacking a wife, bachelor' or *apsikum'emsiro* 'having an inner ear, hearing' and *apsikum'ẽ'om* 'lacking an inner ear, deaf'. So even though the Tuparí nominal domain lacks various functional categories that are prototypically associated with NPs/DPs, it is home to the language's Negative Phrase.

As far as the realization of number is concerned, the distinction between singulars, paucals and plurals is largely covert in the nominal domain. A recurring theme in this dissertation is the fact that multiple verbal morphemes – roots of movement verbs, roots of auxiliaries, the resultative suffix *-psẽ/-pnẽ/-psira*, and evidential suffix *-pnẽ/-psira* – agree in number with the subject, even though subjects often fails to overtly expone the two-way contrast between singular and non-singular (let alone the three-way contrast between singular, paucal, and non-paucal plural).

In §2.3.3 we saw that *wat*- '2PL' takes part in several sandhi phenomena at morpheme boundaries: it requires intrusive h and can also trigger stem suppletion and the epenthesis of glottal stops. This set of facts may undermine the claim that Tuparí requires an analysis involving separate relational prefixes of the sort known from Tupi-Guaraní. The existence of relational prefixes is rampant in Tupían, particularly in the Mawetí-Guaraní branch, and Rodrigues and Cabral (2012:511–17) reconstruct a set of such prefixes for Proto-Tupían. Yet in other members of the family the relevant alternation is not one of an overt prefix versus zero but instead consists of a phonological process: in Gavião, initial voicing distinguishes certain nouns when possessed by full noun phrases or simply pronominal proclitics (Moore 1984:25–26). Building upon Moore and Galucio's (1994) reconstruction of the Proto-Tuparían phonemic inventory, Meira and Drude (2013) advance the hypothesis that the relevant contrast throughout Tupían consists not of separable prefixes but rather Gavião-style stem-internal alternations. In previous work the Tuparí facts have been interpreted as providing support for a Rodrigues-style reconstruction, one involving relational prefixes that are separate from the nominal roots on which they surface. But the new facts detailed in this chapter lend at least some support to the theory of Meira and Drude (2013): there exist roots in Tuparí that exhibit an $h \sim \emptyset$ alternation triggered on phonological grounds alone, and second person plural *wat*- can trigger other sandhi alternations beyond intrusive *h*. As the purpose of this dissertation is to provide a comprehensive description and analysis of Tuparí morphosyntax - not to advance a particular historical reconstruction – the diachronic implications of the facts discussed here must await further research. However, the data in this chapter suggest that what have been previously called relational prefixes in Tuparí may in certain cases constitute stem alternations instead.

Chapter 3

Verbal morphology

The Tupían languages exhibit a great variety of verbal morphological types, a reflection of the family's long history of internal diversification and of its extensive dispersion across lowland South America (Noelli 1996, Urban 1996, Rodrigues and Cabral 2012, Eriksen and Galucio 2014). On the more isolating end of the spectrum, Karo packs few morphemes onto its verbs, instead expressing inflectional categories such as tense, aspect, and evidentiality through free-standing particles (Gabas Jr. 1999). Other Tupían languages show more complex verbal marking; Karitiana, for example, has tense, mood and absolutive agreement affixes on verbs in matrix clauses (Storto 1999, 2014). Several members of the Tupi-Guaraní branch also exhibit complex verbal morphology, including noun incorporation processes (Rodrigues 2013[1953]). And so on. Despite the considerable diversity in the family's verbal morphology, there are a handful of pan-Tupían derivational morphemes that signal the different languages' historical relatedness. First and foremost among these is a productive causative prefix, reconstructed by Rodrigues and Cabral (2012) as *mo-. This morpheme's reflexes can be found throughout the family, including in Tuparí (§3.3.1).

As regards verbal morphology in Tuparí proper, Caspar and Rodrigues (1957) describe the causative prefix *m*-/ \tilde{o} -, the comitative causative *ete-/ite-*, a 'lusive' *etat-/tat-*, and several verbalizing suffixes: *-n* \tilde{e} , *-ka*, *-ki*, *-kat*. That work also identifies the use of reduplication to provide iterative readings of verbs, plus inflectional suffixes such as theme vowel *-a* and the resultative *-s* \tilde{a} ~*-ms* \tilde{a} . Alves (2004) presents these verbal morphemes in her adaptation of Caspar and Rodrigues's (1957) earlier work, adding a handful of others to the list; for instance, she identifies a non-witnessed evidential suffix (see §6.2).

As this chapter will show, Tuparí verbal morphology is more intricate than previously recognized. In terms of both the number of morphemes within the verb and the proliferation of number-sensitive grammatical agreement exhibited by those morphemes, Tuparí easily surpasses the other members of the Tuparían branch of the Tupían family: Akuntsú (Aragon 2014), Makurap (Braga 2005), Sakurabiát (Galucio 2001), and Wayoró (Nogueira 2011). The language's verbal morphology obeys a tightly-constrained set of ordering restrictions. These restrictions determine the scope of reduplication and also demonstrate that the language makes productive use of noun incorporation.

The objective of this chapter is to provide the most in-depth description of the morphology of the Tuparí verb yet available, detailing each of the many affixes that contribute to the verbal whole. I begin in §3.1 by laying out the two major templates of relevance to the present discussion: Figure 3.1 shows the morphology of the left edge of the predicate complex, and Figure 3.2, that of the right edge. §3.2 then discusses several verbalizing suffixes. The description turns in §3.3 to the valency-manipulating prefixes that lie immediately to the left of the verbal root itself. Since the reduplication of verbal roots makes use of verbalizing affixes but only targets a subset of the valency-manipulating prefixes, it is discussed in §3.4. The adverbial prefixes are presented in §3.5, which also discusses the incorporation of direct objects.

The discussion of the suffixes begins in §3.6. §3.6.1 briefly addresses both the resultative *-psē/-pnē/-psira* and the evidential *-pnē/-psira*. The resultative belongs to the left edge of the Tuparí predicate complex and encodes a positional contrast with singular subjects; the evidential, in contrast, marks a clausal category positioned toward the right edge of the clause. More details on these two suffixes are provided in Chapter 6. §3.6.2 presents the conditional suffix *-kot'oy*; §3.6.3 describes the near past *-t* and durative *-pbi'a*; and §3.6.4 discusses the still enigmatic adverbial focus suffix *-ap*. Near past *-t* and durative *-pbi'a* belong to a larger set of tense morphemes which also includes auxiliary verbs and 2P particles; for this reason discussion of their paradigmatic behavior is deferred until Chapter 5. Finally, §3.7 presents several derivational suffixes which serve to produce nouns from verbs.

This chapter does not analyze in detail the theme vowel -a, a morpheme which can surface various times in a single clause. In separate work (Singerman In preparation b) I analyze this suffix's distribution in terms of subject-predicate agreement. §4.1 provides more information on where the theme vowel (which is sensitive to the syntactic position of the NP subject) can and cannot appear, and §A.4 describes its phonological effects.

3.1 The verbal templates

To make sense of the morphological composition of the Tuparí verb it is vital to pay attention to where morphemes attach in the overall PREDICATE COMPLEX (defined here as the lexical verb plus any and all auxiliaries). In Tuparí the lexical verb must always precede the auxiliaries; and auxiliaries in turn obey specific ordering restrictions (see Chapter 4). The practical effect of this fact is that morphemes that provide adverbial meanings or adjust argument structure will attach to the lexical verb – which is to say, near to or at the *left* edge of the predicate complex. Inflectional affixes that mark clausal categories such as tense or evidentiality, meanwhile, attach to the structurally highest auxiliary – which is to say, near to or at the *right* edge of the predicate complex.

Let me illustrate by way of some specific examples. Consider (103a). Since this utterance contains no auxiliary, both the valency-altering reciprocal prefix *eue*- and the plural evidential suffix *-psira* attach to the lexical verb *apsio'i* 'advise, give counsel, confer with'. In (103b), in contrast, the lexical verb *nõnõka* 'befriend' is followed by two different auxiliaries: *teoro'a* and *sakapsira*. Reciprocal *eue*- attaches to the lexical verb in this example – just as it did in (a) – but evidential *-psira* now surfaces on the rightmost of the two auxiliaries.

(103) Key differences between left edge morphology and right edge morphology

- a. *Here kut* kiepe teueapsio'ipsirap okio'earet.
 here kut kiepe te-eue-apsio'i-psira-ap okio-'eat-et
 and ANCIENT.PAST now 3C-RCP-advise-EV.PL-ADV.FOC man-MANY-NUC
 'And at this time, the many men / group of men advised one another (NON-WITNESSED).'
 text: Raul Pat'awre Tupari, author
- b. CONTEXT: A Tuparí woman explains how her elderly aunt came to learn the Arikapu language.

Tekurere	õpot	teuenõnõka	teoro'a		
te-kut-ere	õpot	te- eue -nõnõka-a	te-oro'e-a		
3C-childhood-OBL	DISTANT.PAST	3C-RCP-befriend-TH	3C-AUX _{go} .PAUC-TH		
sakapsira	Nazare A	Arikapu eanã.	-		
s-aka- psira	Nazare .	Arikapu eanã			
3-AUX.PLhabit-EV.PL [PP Nazaré Arikapu together.with]					
'In their childhood, she and Nazaré Arikapu became friends with one another.'					

casual discourse: 2017-08-15

The contrast illustrated here for reciprocal *eue*- and plural evidential *-psira* applies throughout the language: there are morphemes which occur at or near the left edge of the predicate complex and there are morphemes which occur at or near the right edge. In the absence of an auxiliary - as in (103a) - all the morphology will show up on the lexical verb itself. But when one or more auxiliaries are present - as in (103b) - then the division between the two sets of morphemes becomes clear.

Figure 3.1 shows the morphological template for the left edge of the Tuparí predicate complex. Since lexical verbs precede auxiliaries in Tuparí, the morphemes shown in Figure 3.1 will always occur on the lexical verb, regardless of whether an auxiliary is present in the clause. We must recognize five distinct prefixal positions. P1, immediately to the left of the verbal root, hosts the intransitivizing prefix *e*-, responsible for the contrast in pairs such as transitive *tãramka* 'kill [plural objects]' versus derived intransitive *etãramka* 'die [plural subjects]'. P2 may be filled by either the causative *m-/õ*- or the comitative-causative *ete-/ite-*. P2, P1 and the root serve as the domain for reduplication processes, which can be thought of as manipulating lexical aspect (\$3.4). Moving further leftward, P3 includes several morphemes which perform the work of incorporated adverbials: these include the potentially pejorative (*e*)*tat-* 'just'; the quantificational *erote-/irote-* 'all' and *urut'-* 'two, both'; and (*e*)*tom'en-* 'without someone being aware', whose deictic value is determined by the speech context. The reciprocal *eue-* also belongs to this prefixal position. It is likely that the prefixes in P3 will show their own cooccurrence possibilities and ordering restrictions, but this issue must be saved for future research.

P4 is where incorporated direct objects reside. Their position inside of the verb is clearly demonstrated by their occurring to the right of the prefixes $p\tilde{e}an$ - 'first' and (*e*)t $\tilde{a}reman$ - 'not again', which occur in P5. Finally, P6 is host to the object focus prefix y'-, an erstwhile nominalizer whose properties are detailed in greater length in Singerman (In preparation a).

Several verbalizing suffixes occur to the immediate right of the verbal root, in S1; these are -*ka*, -*kat*, -*ki* and -*n* \tilde{e} . (We saw -*ka* in 103b, above, where it follows the reduplicated $n \tilde{o} n \tilde{o}$ – from $n \tilde{o}$ 'friend, relative, other' – to give $n \tilde{o} n \tilde{o} ka$ 'befriend'.) Next, in S2, we find the resultative

		S4	- <i>p`a</i> NEAR FUT				
dicate complex		S 3	нт Тн				
		S2	- <i>psē/-pnē/-psira</i> RESULTATIVE				
uparí pre		S1	-ka VBZ	- <i>kat</i> VBZ	- <i>ki</i> VBZ	- <i>nẽ</i> VBZ	
of the T	← uo	0	VERBAL	ROOT			
Figure 3.1: Morphological template for the left edge of the lupari predicate complex	$\longleftarrow \text{ Domain for reduplication } \longrightarrow$	P1	e- INTRNS				
	← Domain	P2	<i>m-/õ-</i> CAUS	ete-/ite- COM			
		P3	erote-/irote-	<i>urut-</i> 'two, both'	tom'en- TOM'EN	eue- RCP	<i>tat-</i> 'just'
gure 3.1		P4	INCORPO	ORATED	DIRECT	OBJECT	TS .
μ		P5	pẽan- first'	<i>tãreman-</i> 'not again'			
		P6	y- OBJ FOCUS				

Figure 3.1. Mornhological template for the left edge of the Tunari predicate complex

morpheme $-ps\tilde{e}/-pn\tilde{e}/-psira$, which is sensitive both to the number of the subject and its physical position in space. The near future, restricted to a single auxiliary construction (§4.4.1), occurs to the immediate right of the theme vowel -a, in S4. With the exception of the theme vowel - which enjoys a wider distribution – all of the morphemes in Figure 3.1 always attach to the lexical verb, even in clauses that contain one or more auxiliaries. For this reason it is coherent to speak of them as belonging to the left edge of the Tuparí predicate complex.

Figure 3.2: Clausal categories marked morphologically at the right edge of the predicate complex

0	S5	S6	S7
VERB/AUXILIARY ROOT	<i>-pnẽ/-psira</i> EVIDENTIAL <i>-kot'oy</i> CONDITIONAL	<i>-а</i> тн	<i>-t</i> NEAR PAST <i>-pbi'a</i> DURATIVE <i>-ap</i> ADVERB FOCUS

Figure 3.2 shows the template for the clause-level categories that are marked morphologically at the right edge of the predicate complex. There are no prefixes which are restricted to auxiliaries only; that is, the inflectional morphology realized at the right edge of the predicate complex is entirely suffixal. To the right of the highest verbal/auxiliary root, in S5, we find evidential *-pnẽ/-psira* and conditional *-kot'oy*; these morphemes never cooccur due to the fact that they require incompatible commitments to p on the part of the speaker (Chapter 6). In S6 resides only one morpheme, the theme vowel *-a*. The rightmost column, S7, is home to the near past tense *-t*, the durative tense *-pbi'a*, and the adverbial focus marker *-ap* (called the 'second indicative' by Alves 2004). Whereas the morphemes in Figure 3.1 generally manipulate the interpretation of the lexical verb itself, those in Figure 3.2 instantiate sentential categories: the use of the evidential, conditional and tense morphemes are determined on the level of clause – independently of the valency or lexical semantics of the verb – and the adverb focus suffix *-ap* is sensitive to the information

structural status and syntactic category of clause-initial adverbials.

Before proceeding to the description, I wish to clarify the use of the term 'template' here. There is considerable debate in linguistic theory as to whether morphological templates accurately capture speakers' linguistic competence, or whether they are merely a kind of descriptive shorthand. Rice (2000), for example, argues that the apparently templatic organization of various Athapaskan languages derives from semantic considerations, and in particular from the scopal relations that obtain between the verbal affixes. (See also Good 2016, who offers a typology of templates as they are invoked in linguistic description and analysis.) It is probable that some of the Tuparí morphological facts given in Figure 3.1 and Figure 3.2 could be reduced to semantic and scopal facts, as Rice (2000) accomplishes for Athapaskan; yet it remains unclear whether such an approach could capture the ordering restrictions among the various adverbial prefixes and incorporated direct objects. The adverbial tom'en- 'without someone being aware', for example, sits closer to the verbal root than do incorporated direct objects or the temporal adverbials pean- 'first' and tareman- 'not again', even though it contributes what is probably a 'high' semantic interpretation: it is capable of picking out an individual from the context, even when that individual is not overtly mentioned within the utterance itself (§3.5.3). Given such complications, I have chosen to present the Tuparí morphological facts here as a (potentially stipulative) template. Finding a way to derive that template in whole or part from scopal properties is a task that must await further research.

3.2 Verbalizers (position S1)

Tuparí possesses several morphemes which build verbs out of nouns. Turning nouns into verbs is crucial in this language since only verbal predicates may combine with evidential, aspectual, or tense morphology. (See Singerman 2018 for exemplification with regards to the negator -'om, which is a strictly nominal affix.) These verbalizing suffixes are discussed also by Caspar and Rodrigues (1957:§3.3.3.2). Nogueira (2011) devotes considerable attention to verbalizing suffixes in Wayoró; given the genealogical proximity between Tuparí and Wayoró within the Tuparían branch of Tupían, close comparison of the two languages' verbalizing systems should be a priority

for future research.

3.2.1 -nẽ

Perhaps the most ubiquitous verbalizer in all of Tuparí is the suffix $-n\tilde{e}$. This morpheme, which changes to $n\tilde{a}$ when inflected with the theme vowel, transforms nominals into verbs that can then bear the full range of verbal derivational and inflectional morphemes. (104) offers an example with *puop*, a noun meaning 'knowledge, knowledgeable, smart'.

(104) Puopnambi'ae Tupari ema'erē.
puop-nē-a-mbi'a e Tupari ema'ē-re
knowledge-VBZ_{nē}-TH-DUR 3 Tuparí language-OBL
'He knew/had knowledge of the Tuparí language.'
casual discourse: 2015-10-08

Here the suffix $-n\tilde{e}$ is what transforms *puop* into a verb capable of bearing the theme vowel and the durative past tense suffix -pbi'a.

The complement of $-n\tilde{e}$ may itself be internally complex, consisting of a noun plus derivational morphemes such as *-psiro* 'POSS' (example 105a) or the privative/negative *-'om* (example 105b):

(105) Morphologically complex complements of verbalizer -ne

- a. Aoropsironambi'a 'on. aoro-**psiro-nẽ**-a-mbi'a 'on parrot-**POSS-VBZ** $_{n\tilde{e}}$ -TH-DUR 1SG 'I used to have a parrot.' casual discourse: 2016-01-15
- b. *Men'omnaerẽ* $n\tilde{e}$ '*en ipatkot'oy?* men-'**om-nẽ**-ap-ere nẽ 'en i-pat-kot'oy husband-**NEG-VBZ**_{$n\tilde{e}$}-NMZ_{ap}-OBL Y/N 2SG 3-marry-COND 'If she were husbandless, would you marry her?' casual discourse: 2016-11-29

Reduplicated nominals, followed by *poat* 'good' or the diminuitive *kut'a*, may also serve as the complement for $n\tilde{e}$:

- (106) Reduplicated nominals serving as complements for $-n\tilde{e}$
 - 'e a. *Pẽikpeikpoatna* nã kiepe. pēĩkpēĩk-poat-nē-a nã 'e kiepe $[\text{smell}]^2$ -good-VBZ_{ne}-TH PROG AUX.SG now 'You are smelling nice now.' casual discourse: 2016-11-28 b. Poatpoatkut'anã õpot wat warakapsira. poatpoat-kut'a-ne-a õpot wat wat-aka-psira [good]²-DIMIN-VBZ_{ne}-TH DISTANT.PAST 2PL 2PL-AUX.PL_{habit}-EV.PL 'You-PL were cute (NON-WITNESSED).'

casual discourse: 2016-12-15

The nominal complement of $-n\tilde{e}$ can even consist of a possessed nominal, as in (107). Here *eapsin'oam hi'a* 'love of/for playing' serves as the complement of $-n\tilde{e}$. The nominal root *i'a* 'love, affection' exhibits intrusive *h* following an NP possessor (see also Footnote 4, in §2.3.2).

(107) Ekurere nẽ eapsin'õam hi'anambi'a 'en?
e-kut-ere nẽ e-apsin'om-am hi'a-nẽ-a-mbi'a 'en
2SG-childhood-OBL Y/N 2SG-play-NMZ_{ap} love-VBZ_{nẽ}-TH-DUR 2SG
'In your childhood, did you love to play? / In your childhood, did you have love for playing?'
casual discourse: 2016-02-10

A related use of $-n\tilde{e}$ is to transform borrowed Portuguese verbs into inflectable predicates. Portuguese verbs are borrowed into Tuparí as infinitives and then undergo verbalization with $n\tilde{e}$. The derived verbs built with $-n\tilde{e}$ can inflect for the full range of verbal categories, including tense and evidentiality, and can take derivational endings such as the nominalizers -ap or -ro. (See Appendix A for discussion of loanword phonology in Tuparí.)

(108) Portuguese infinitives are verbalized with $-n\tilde{e}$

a.	Aramiram nẽ	votanan	'en?
	aramirã-m nẽ	vota-nẽ-a-n	'en
	woman-INS Y/N	vote-VBZ _{ne} -TH-NEAR.PAST	2SG
	'Did you vote fo	or the woman?'	
	[from Portugues	e votar 'vote']	
	casual discourse: 20	016-11-12	

- b. Èma'erẽ 'on puopnaerẽ 'on e-ema'ẽ-re puop-ne-am-ere 2SG-language-OBL knowledgeable-VBZ_{$n\tilde{e}$}-NMZ_{ap}-OBL 1SG eprecisanerõ'omkakot'oy. e-precisa-ne-ro-'om-ka-kot'oy 2SG-need-VBZ_{nē}-NMZ_{ro}-NEG-VBZ_{ka}-COND 'If I were knowledgeable of your language, I wouldn't need you [to teach me].' [from Portuguese *precisar* 'need'] casual discourse: 2016-02-03 c. Jogo assistinam kot'oa nã oyẽ. jogo assisti-ne-am kot'oy-a nã o-yẽ game watch-VBZ_{$n\tilde{e}$}-NMZ_{ap} want-TH PROG 1SG-AUX_{hzntl} 'I am wanting to watch the soccer game.' [from Portuguese *assistir* 'watch, attend'] casual discourse: 2016-02-21 d. Omeren teapaixonanam'a te'a Guarani te-'e-a o-men-en te-**apaixona-nē**-a-m'a Guarani
- d. Omeren interpaixonanian a field Guarani o-men-en te-**apaixona-nẽ**-a-m'a te-'e-a Guarani 1SG-husband-NUC 3C-**fall.for-VBZ** $_{n\tilde{e}}$ -TH-NEAR.FUT 3C-AUX.SG-TH Guarani *ypero*. ypet-o woman-INS 'My husband is going to fall in love with a Guarani woman.' [from Portuguese *apaixonar* 'fall in love with, fall for'] casual discourse: 2016-11-16

Sometimes a loaned infinitive plus $-n\tilde{e}$ takes no additional core arguments. With *votanã* 'vote for' (108a), for example, there is no direct object; the non-core NP *aramiram* is marked with instrumental -m. A borrowed infinitive verbalized with $-n\tilde{e}$ may combine with an additional direct object – either a pronoun or full NP – as in (108b) and (108c), or it may combine with a pronominal proclitic that doubles the intransitive subject, as in (108d).

It is important to distinguish between the verbalizer $-n\tilde{e}$, a bound morph that is unstressed, and the lexical verb $n\tilde{e}$ 'do, make'. The lexical verb $n\tilde{e}$ may occur without any base, as in the standalone command $N\tilde{e}$! 'Do it!'. The same verb can also replace a discourse-salient verb phrase, much like English 'do so'. In (109) $n\tilde{e}$ 'do so' substitutes for *jogo assistin* \tilde{e} 'watch the soccer match'. (109) Example of $n\tilde{e}$ 'do so, do it'

a.	Jogo	assistinam	kot'oa	nã	oyẽ.
	jogo	assisti-nẽ-am	kot'oy-a	nã	o-yẽ
	soccer.match	watch-VBZ _{ne} -NMZ _{ap}	want-TH	PROG	1SG-AUX _{hzntl}
	'I am wanting to watch the soccer match (SITTING).'				

b. Pare mãkērõ nam'a o'e, televisão'ommē. pare mãkērõ nē-a-m'a o-'e, televisão-'om e where DUNNO do.so-TH-NEAR.FUT 1SG-AUX.SG television-NEG 3 'I don't know where I am going to do so, there's no television here.' casual discourse: 2016-02-21

And in (110), $n\tilde{e}$ replaces the predicate of the first sentence – 'come tomorrow' – in the subsequent if/when clause.

- (110) Example of $n\tilde{e}$ 'do so, do it'
 - a. *Eret nãkop ke ìap*. eret nãkop ke e **ip**-ap tomorrow MAYBE POLITE.FUT 3 **come.SG**-ADV.FOC 'He might come tomorrow [=Saturday].'
 - b. Nerõ'omka te'a domingope nã tèy pey'ap. **nẽ**-ro-'om-ka-a te-'a domingo-pe nã te-s pey'ap [**do.so**-NMZ_{ro}-NEG-VBZ_{ka}-TH 3C-if.SG] Sunday-LOC FOCUS 3C-come.SG FUT.3SG 'If he doesn't do so, then he'll come on Sunday.' casual discourse: 2017-08-04

3.2.2 -ka

Rivaling *-ne* for overall productivity is *-ka*. This suffix, too, derives verbs from nominal bases. Basic examples include *'apka* 'fry' from *'ap* 'oil, fat, grease'; *patak'asika* 'have a stomachache' from *patak* 'stomach' and *asi* 'painful, pain'; *memsitka* 'impregnate' from *memsit* 'child of woman'. Alves (2004) states that *-ka* only ever derives transitive verbs. But with reduplication (§3.4) and negated predicates (discussed immediately below; see also Singerman 2018), *-ka* produces intransitive verbs as easily and productively as it does transitive ones.

As detailed in Singerman (2018), -*ka* is the verbalizer of choice for turning negated verbs – which are formally nominals – back into verbs. In such cases there is no sensitivity whatsoever

to valency: -*ka* attaches to transitives (*ko* 'eat' in 111a, *wetom* 'let someone know' in 111b) and intransitives (*apsitwat* 'forget' in 111c, *wak* 'cry' in 111d, *pop'e* 'be afraid of' in 111e) alike.

(111) Suffix -ka reverbalizes negated verbs

Mãy koro'omka e'a, Tupari'om 'en. a. e-'a mãy ko-ro-**'om-ka**-a Tupari-'om 'en [manioc eat-NMZ_{ro}-NEG-VBZ_{ka}-TH 2SG-if.SG] Tuparí-NEG 2SG 'If you don't eat manioc, you're not Tuparí.' casual discourse: 2016-01-23 b. '*Ero*'are kure tea'usìt wetomto'omka 'ero'are kut e te-a'usi-t wetom-to-'om-ka-a while ANCIENT.PAST 3 3C-wife-NUC let.know-NMZ_{ro}-NEG-VBZ_{ka}-TH i'ekapnẽ... i-'eka-pnẽ

3-AUX.SG-EV.SG

'But he did not let his wife know [about her brother] (NON-WITNESSED).'

text: Isaias Tarimã Tupari, author

- c. *Kiema'erē* kitwat
 ki-ema'ē-re kitwat
 1PL.INCL-language-OBL POLITE.FUT+1PL.INCL *kiapsitwàromkap*.
 ki-apsitwat-ro-'om-ka-ap
 1PL.INCL-forget-NMZ_{ro}-NEG-VBZ_{ka}-ADV.FOC
 'Let's not forget our language.' / 'We ought not to forget our language.'
- d. 'Ero'are haytokia watwakto'omkaro pewarap.
 'ero'are haytokia wat-wak-to-'om-ka-ro pewarap
 but a.lot 2PL-cry-NMZ_{ro}-NEG-VBZ_{ka}-NMZ_{ro} FUT.2PL
 'But you-PL will not cry a lot.'

text: Miraci Aguissi Tupari, narrator

e. 'Onẽporet opop'ero'omkaro peo'ap ẽrerẽ.
'onẽporet o-pop'e-ro-'om-ka-ro peo'ap en-ere
1SG.too 1SG-fear-NMZ_{ro}-NEG-VBZ_{ka}-NMZ_{ro} FUT.1SG 2SG-OBL
'I too won't be afraid of you.'
text: Tereza Miraká Tupari, narrator

The suffix *-ka* will reverbalize a negated predicate even if the original verb contained different verbalizing morphology. This is clear in example (112), below, with *pòtkat* 'grow up, grow old'.

This verb is built from $p \partial t$ 'old, grown up' with the intransitivizer *-kat*, not *-ka*; but after the predicate is negated with *-'om*, it is reverbalized with *-ka*, not *-kat*.

(112) Ètãremanpòtkaro'omkap'a 'e, tàn 'en.
e-etãreman-pòtkat-ro-'om-ka-a-p'a 'e, tàn 'en
2SG-not.again-grow-NMZ_{ro}-NEG-VBZ_{ka}-NMZ_{ap} NEAR.FUT AUX.SG tall
'You're not going to grow anymore; you're tall.'
casual discourse: 2016-11-13

So -ka does not care whether the original verb was built with -ka, -kat, $-n\tilde{e}$, or some other morpheme; if a verb has been negated with -'om after nominalizing with -ro, then -ka will carry out the subsequent reverbalization process. However, there is sensitivity to the original categorical status of the predicate – that is, whether it was to a noun or to a verb that -'om attached in the first place. To verbalize a noun that has been negated with -'om, $-n\tilde{e}$ rather than -ka is the morpheme of choice. (113) neatly contrasts the two post-negation verbalization options:

(113) Yõporo'omka kia, kiarop'omnam'a y-õpo-ro-'om-ka-a ki-a ki-arop-'om-nẽ-a-m'a [3-kill-NMZ_{ro}-NEG-VBZ_{ka}-TH 1PL.INCL-if.PL] 1PL.INCL-food-NEG-VBZ_{nẽ}-NEAR.FUT y'e. y-'e
3-AUX.SG
'If we don't kill it, it won't be/won't become our food.' casual discourse: 2016-02-14

Inside of the protasis, the bound suffix *-ka* reverbalizes the negated verb $y \tilde{o} poro'om$ 'not kill it' (from the verb $\tilde{o} po$ 'kill'). But in the apodosis it is *-ne* that verbalizes the negated nominal *kiarop'om* 'not our food' (from the noun *arop* 'food, thing, possession').

While $-n\tilde{e}$ is usually employed to turn Portuguese infinitives into verbal predicates in Tuparí, on the loan *vendeka* 'sell' it is *-ka* which performs the verbalizing function: see (74b) in the previous chapter. This seems to be a case of lexical irregularity.

A final use of -ka is with reduplication, discussed in §3.4, below. In that context, too, it produces both intransitive and transitive verbs.

3.2.3 -kat

Unlike -*ka*, which can derive both intransitive and transitive verbs, the denominal suffix -*kat* always builds intransitives. The nouns to which -*kat* attaches often denote property concept in the sense of Dixon (1982).

(114) <u>Verbalizer -kat derives intransitive verbs</u>

_		, ,	,~		~
a.	Otepoatkara			moraer ~	
	ote- poatkat -a	'ote		morẽ-ai	
	1pl.excl -finish- th				MZ _{ap} -OBL
	'We-EXCL have finis	hed playin	g ball.'	,	
	[from <i>poat</i> 'good, re	ady']			
	casual discourse: 2016-0	2-09			
b.	Tèpa'omkara nã	tet'e.			
	te- epa'omkat -a nã	tet'e			
	3C-go.blind-TH PRO	G AUXgo.S	SG		
	'He is going blind.'				
	[from epa 'eye' and	negative/p	rivative	- 'om, <u>y</u>	yielding epa'om 'blind']
	casual discourse: 2015-1	2-30			
c.	Eõyẽ haet	nẽ tepò	tkara	nã	tearonã?
	e-õyẽ hap-et	nẽ te-pà	otkat-a	nã	te-a-ronã
	2sg-mouth hair-NUC	с у/N 3с -g	row-TI	H PROG	3C-AUX.PL-again
	'Are your beard hairs	s growing	longer	again?'	
	[from <i>pòt</i> 'old, adult	, grown']			
	casual discourse: 2015-1	2-30			
d.	Tepẽanwakkara	ke!			
	te-pẽan- wakkat -a	ke	(e	
	3C-first-make.noise-	TH POLIT	E.FUT	3	
	'Let it [the bus] mak	e noise firs	st!'		
	[from wak 'noise, cr	y']			
	casual discourse: 2016-0	2-15			
e.	Õwãkiret tearipo	otkara	nã	te'anã	Ĩ.
	o-wãkit-et te-arip	otkat-a	nã	te-'an	ẽ-a
	1SG-pet-NUC 3C-go.	hungry-T	H PROC	g 3c-au	JX _{go} .PL-TH
	'My pets are going h	ungry.'			
	[from aripot 'hunger	.']			
	casual discourse: 2015-1	2-24			

f. Oteapsitkara oteapteka ẽrõ ote eporet. ote-apsitkat-a ote-apteka 'ẽn-o 'ote eporet 1PL.EXCL-think-TH 1PL.EXCL-HABIT 2SG-INS 1PL.EXCL also 'We-EXCL think about you, too.' [from apsit, presumably related to apsirip'a 'ear', apsikum'ẽ 'inner ear', apsi'e 'to hear/listen'] casual discourse: 2016-11-15

Intransitive verbs derived with -kat can undergo subsequent causativization, as in (115):

(115) <u>Causativization of intransitives derived with -kat</u>

- a. Here kut isìt teapsitkòmkara tet'epnẽ. te-apsitkòmkat-a tet'e-pnẽ here kut i-si-t then ANCIENT.PAST 3-mother-NUC 3C-grow.sad-TH AUXgo.SG-EV.SG 'His mother grew sad.' text: Isaias Tarimã Tupari, author b. *Kuret* mamsitkòmkara 'en. kut-et m-apsitkòmkat-a 'en
 - child-NUC CAUS-grow.sad-TH 2SG 'You have made the child grow sad.' casual discourse: 2016-01-23

See §3.3, below, for discussion of the causative prefix $m-/\tilde{o}$ - and other valency-changing morphology.

3.2.4 -ki

Like -ka and -kat, -ki builds verbs from nominal bases. Many of the verbs built with -ki are frequently used as adverbs rather than as main predicates. Intransitives derived with -ki systematically lack pronominal proclitics, forming an exception to the generalizations discussed in Singerman (In preparation b). The precise semantic contribution of the suffix -ki is not well understood at this point, though it generally serves to indicate a change of state: *ã*eki 'to become stinky', *wak'awe'omki* 'to become not funny, to become unpleasant', *soka'omki* 'to become not cold', *p*eõyki 'to become cold/chilled'.

(116) offers examples in which verbs that bear -ki serve as the main predicate.

(116) Examples of -ki

a. *Ãẽkiro* pey'ap tearopka y'a. ãẽ-ki-ro te-arop-ko-a pey'ap y-'a stinky-VBZ_{ki}-NMZ_{ro} FUT.3SG [3C-food-eat-TH 3-when.SG] 'It [the baby boy's feces] will become stinky when he eats real food.' casual discourse: 2016-02-06 b. *Òwet* poatkiro'om 'on. toap poat-ki-ro-'om o-op-et top-ap 'on 1SG-father-NUC see-NMZap good-VBZki-NMZro-NEG 1SG 'I didn't get to know my father well.' text: Iracema Taydyup Tupari, narrator c. Peovkipnae. peoy-ki-pne-a e cold-VBZ_{ki}-EV.SG-TH 3 'It [the pot of beans] got cold (NON-WITNESSED).' casual discourse: 2016-02-06 d. *Kiepe nẽ* het'aem soka'omkiap? soka-'om-ki-ap kiepe nẽ e het'ae-m now Y/N 3 where.you.are-INS cold-NEG-VBZ_{ki}-ADV.FOC 'Is it no longer cold where you are?'

casual discourse: 2018-02-10

Note that the last example shows -ki verbalizing a negated nominal: soka'om, from soka 'cold'.

(See also 118d, below, where -ki attaches to hayto'om 'not many, few'.)

Main predicates derived with *-ki* may also contain reduplicated verbal roots, discussed at greater length in §3.4:

(117) -ki attaching on top of reduplicated verbal roots

a. Oterap koroykot'oykia nã otet'e aodeyam.
o-tet-a-p kot'oykot'oy-ki-a nã o-tet'e aodeya-m 1SG-go.SG-NMZ_{ap} [want]²-VBZ_{ki}-TH PROG 1SG-AUX_{go}.SG village-INS 'I am wanting to go to the village.' casual discourse: 2016-05-24
b. Weut'eutkipsã 'on.

w-**eut'eut-ki**-psē-a 'on 1SG-**[get.full]²-VBZ_{ki}-**RSLT.SG.HZNTL-TH 1SG 'I'm stuffed, sitting down.' casual discourse: 2016-02-11

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c. *Kafe kokokiap* erop'a 'on o'ero'aptekat. kafe **koko-ki**-ap erop'a 'on o'ero'aptekat coffee [**drink**]²-**VBZ**_{ki}-NMZ_{ap} bad 1SG AUX.1SG 'I can't drink too much coffee too much.' / 'It's bad for me to drink too much coffee.' casual discourse: 2016-12-10

(118) offers examples in which verbs derived with -ki adverbially modify other predicates. In each of these examples, the VP derived with -ki is used as an adverbial that modifies the manner of the main predicate: sut 'cook' (marked with the evidential -pne) in (a), epsik 'sit' (marked with the resultative -pse) in (b), ko 'eat' in (c), and puop'ot 'learn' in (d). These facts recall the multiple VPs first identified for Tupían languages by Moore (1984, 2001).

- (118)Predicates derived with -ki serving as adverbial modifiers
 - a. Awekia 'en sutnẽ. awe-**ki**-a 'en Ø-sut-nẽ tasty-VBZ_{ki}-TH 2SG 3-cook-EV.SG 'You cooked it deliciously (NON-WITNESSED).' [from the nominal awe 'tasty, delicious'] casual discourse: 2015-11-10 b. *Here kòmkòmkia* tèpsiksãrẽ. here kòmkòm-ki-a te-epsik-se-a-n then [silence]²-VBZ_{ki}-TH 3C-sit-RSLT.SG.HZNTL-TH-NEAR.PAST 3 'And it [the monkey] sat, in silence.'

e

[from the nominal *kòm* 'silence', here reduplicated to *kòmkòm*] text: Isaias Tarimã Tupari, author

- c. Haytokia 'on ko, here 'on weurap. hayto-ki-a 'on ko, here 'on w-eut-ap a.lot-1PL.INCL-TH 1SG eat so/then 1SG 1SG-get.full-ADV.FOC 'I ate a lot, so I got full.' [from the nominal predicate *hayto* 'a lot'] casual discourse: 2015-11-07
- d. Hurum 'on herõwap opuop'orap, hayto'omkia. hurum 'on herõwap o-puop'ot-ap, hayto-'om-ki-a a.little 1SG yesterday 1SG-learn-ADV.FOC, a.lot-NEG-VB Z_{ki} -TH 'I learned just a little yesterday, not a lot.' [from *hayto* 'a lot' plus negative '*om*] casual discourse: 2018-02-?

Observe the polarity contrast in (c) and (d): -*ki* can attach both to positive *hayto* 'a lot' and to negated *hayto* 'om 'not a lot'.

The factors that distinguish -ki from -kat, -ka and $-n\tilde{e}$ appear to be lexical in nature rather than morphosyntactic. From a morphological perspective, -ki behaves just like -kat, -ka and $-n\tilde{e}$: it performs a denominal, verbalizing function. That the differences between the various verbalizing suffixes are semantic, not morphosyntactic, is apparent from examples such as (116d) and (118d), where -ki verbalizes negated nominals. That is, -ki can perform the exact same post-negation verbalizing function that -kat, -ka and $-n\tilde{e}$ do.

3.2.5 -'ot

The suffix -'ot derives intransitive verbs from nominals. It is attested on only a few predicates: *puop'ot* 'learn' (from *puop* 'knowledgeable, intelligence'), *yen'ot* 'defecate' (from *yen* 'feces'), *yto'ok'ot* 'urinate' (from *yto'ok* 'urine'), *kut'ora* 'ejaculate' (from *kut* 'child'). The suffix does not seem to be productive beyond these bases.

In the speech of older Tuparí, *yen'ot*, *yto'ok'ot* and *kut'ot* often have a long vowel on the /o/ of the suffix. It seems that *òt* may be an older verb of limited productivity that means 'expel' or 'excrete'. In (119), *nẽ* 'do so' replaces *yto'ok'ot* 'urinate':

(119) CONTEXT: When a man says he needs to urinate, his friend encourages him to do so.

Nã	ewan	kiorope.			
nẽ-a	e-wan	ki-ot-ro-pe			
do.so-TH	2sG-go.nearby	1PL.INCL-go.PAUC-NMZ _{ro} -LOC			
'Go a short distance and do so [=urinate] before we-PAUC go.'					
casual discourse: 2016-11-27					

But the same speaker offered the following alternative to $n\tilde{e}$ 'do so' here. Note that the third person pronominal proclitic *s*- here demonstrates that we are looking at a transitive root, ∂t .

120)	Sòra	ewan	kiorope.				
	s- òt -a	e-wan	ki-ot-ro-pe				
	3-?expel-TH 2SG-go.nearby 1PL.INCL-go.PAUC-NMZ _{ro} -LOC						
	'Go a short distance and expel it, before we-PAUC go.'						
	casual disco	ourse: 2016-11-2	7				

. .

It seems probable that *yen'ot* 'defecate', *yto'ok'ot* 'urinate' and *kut'ot* 'ejaculate' are lexicalizations of this same root *ot*.

3.2.6 Summary of verbalizing morphology

This section has reviewed the various morphemes used to construct verbs in Tuparí. A theme recurring through all of the data discussed here is that Tuparí grammar goes to great lengths to keep nominal and verbal elements distinct. The following example, repeated from (108b), illustrates. All deverbal nominalizers and denominal verbalizers are bolded.

(121) $\dot{E}ma'er\tilde{e}$ puopnaer \tilde{e} 'on e-ema' \tilde{e} -re puop- $n\tilde{e}$ -am-ere 'on 2SG-language-OBL knowledgeable-VBZ_{n \tilde{e}}-NMZ_{ap}-OBL 1SG eprecisaner \tilde{o} 'omkakot'oy. e-precisa- $n\tilde{e}$ -ro-'om-ka-kot'oy 2SG-need-VBZ_{n \tilde{e}}-NMZ_{ro}-NEG-VBZ_{ka}-COND 'If I were knowledgeable of your language, I wouldn't need you [to teach me].' casual discourse: 2016-02-03

In the protasis the nominal *puop* 'knowledgeable, know' must be verbalized with $-n\tilde{e}$. This is because such protases contain oblique *-ere* attaching on top of the deverbal nominalizer *-ap*; and as *-ap* may only attach to verbal bases, *-n* \tilde{e} must intervene in between *puop* and *-ap*. Within the apodosis the base *precisa* 'need' (borrowed from Portuguese) is itself verbalized with *-n* \tilde{e} , only to then undergo nominalization with *-ro* so as to bear negative *-'om*. But since the counterfactual conditional suffix *-kot'oy* – just like the nominalizer *-ap* – can only attach to a verbal base, another process of denominal verbalization must apply before *-kot'oy* can attach. The suffix *-ka* is the morpheme that accomplishes this final process of denominal verbalization. These morphological gymnastics are illustrated in Figures 3.3 and 3.4.

The first of the two figures shows the processes that change *èma'erẽ puop* 'knowledgeable of your language', which is a nominal constituent, into the full protasis *èma'erẽ puopnaerẽ*. The second of the two figures shows the processes that change *precisa* 'need', a Portuguese infinitive borrowed into Tuparí as a nominal root, into the counterfactual apodosis *precisanerõ'omkakot'oy* 'would not need'. (Since the presence of the second person singular proclitic *e*- is not important

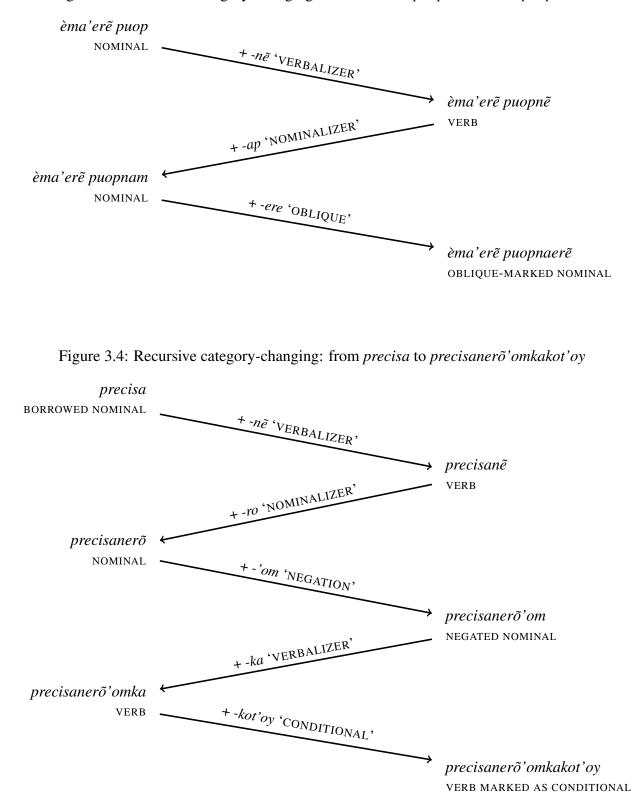


Figure 3.3: Recursive category-changing: from *èma'erẽ puop* to *èma'erẽ puopnaerẽ*

for present purposes, I omit it from Figure 3.4.)

The kind of recursive category-changing shown in example (121) and schematized in Figures 3.3 and 3.4 is an inescapable part of Tuparí grammar. It is rampant in everyday casual discourse, and it shows up without fail in texts.

3.3 Valency-manipulating prefixes (positions P3, P2, and P1)

Manipulating the argument structure of verbs is a frequent process in Tuparí. This section reviews the language's four valency-altering prefixes: causative m-/ \tilde{o} -, comitative-causative ete-, intransitivizing e-, and reciprocal eue-.

3.3.1 Causative *m*-/õ-

Many Tupían languages have a productive causative prefix characterized by the nasal labial /m/ and usually by a subsequent back mid or high vowel. Examples include Gavião *ma*- (Moore 2014), Karitiana *m*- (Storto and Rocha 2014), Mundurukú *mu-/muy*- (Gomes 2006:78–81), Tapirapé *ma*-(Praça 2014), Tupinambá *mbo-/mo*- (Rodrigues 2013[1953]), Kamaiurá *mo*- (Seki 2000b:chapter 12), Sakurabiát and Wayoró *mõ-/õ*- (Galucio and Nogueira 2014), etc. Based on these cognates, Rodrigues and Cabral (2012) reconstruct the prefix **mo*- for Proto-Tupían.

The Tuparí reflex of this prefix has split into two separate, phonologically-conditioned allomorphs, \tilde{o} - and *m*-. The former occurs before consonants, the latter before vowels:

(122) <u>Causative \tilde{o} - occurs before consonant-initial roots</u>

- a. *E'era 'en*. e-'et-a 'en 2SG-sleep-TH 2SG 'You slept.' elicitation: 2013-08-23
- b. Eõ'era 'on. e-õ-'et-a 'on 2SG-CAUS-sleep-TH 1SG
 'I made you sleep / put you to bed.' elicitation: 2013-08-23

- (123) <u>Causative *m* occurs before vowel-initial roots</u>
 - a. *Waora* 'on. w-aot-a 'on 1SG-go.out.SG-TH 1SG 'I left.' elicitation: 2013-08-31
 b. *Omaorã* 'en. o-**m**-aot-a 'en 1SG-CAUS-go.out.SG-TH 2SG 'You sent me out / made me leave.' elicitation: 2013-08-31

The Tuparí causative prefix can only attach to verbs which are intransitive, a fact presumably related to the larger generalization that the language has no ditransitive verbs or double object constructions.

Intransitive	Intransitive base		orm
pòtkat	'grow up, grow old'	õ pòtkat	'raise [a child, an animal]'
aot	'leave.SG'	m ãon	'send out, spend [time]'
'et	'sleep, fall asleep'	õ'et	'put to bed, put out [a light]'
pop'e	'fear, be afraid of'	õpop'e	'scare, frighten'
apsitkòmkat	'be/become sad'	m amsitkòmkat	'make someone sad'
akora	'become warmer'	m ãkora	'warm something up'
apsikat	'think of/about'	m amsikat	'remind'
emo'ãk	ʻpass by'	m emo'ãk	'make something pass; put on a song'
ãum	'enter.SG'	m ãum	'put inside of something'
ekòmka	'fall silent'	m ẽkòmka	'switch off [an appliance]'
ket'e	'dry out'	õket'e	'dry something [clothing, meat]'
ekiarapka	'become happy'	m ẽkiarapka	'make someone happy'
pat'e	'boil'	õpat'e	'boil something'

Table 3.1: Intransitive-transitive pairs related via causativization

Table 3.1 provides a selection of the intransitive-derived causative pairs found thus far. Per the language's regular processes of nasal harmony and coda nasalization (Singerman 2016), the nasality of the causative prefix can spread onto subsequent segments. Several intransitive verbs given in Table 3.1 contain root-internal derivational morphology in addition to causative m-/ \tilde{o} -. The intransitive denominalizer -*kat* appears in *pòtkat* 'grow up, grow old', *apsikat* 'think of, think

about' and *apsitkòmkat* 'become sad', while intransitivizing *e*- occurs together with verbalizing *-ka* in *ekòmka* 'fall silent' and *ekiarapka* 'become happy'. Some of the derived causatives have acquired idiosyncratic meanings, as we would expect in cases of derivational morphology.

An important generalization emerging from the pairs in Table 3.1 is that the intransitive roots capable of undergoing causativization with m- $/\tilde{o}$ - fall into just a few semantic classes: verbs of motion (*emo'ãk* 'pass by', *ãum* 'enter.SG', *aot* 'leave.SG'), non-volitional states or changes of state (*ket'e* 'dry out', '*et* 'sleep, fall asleep', *pat'e* 'boil'), and some verbs of thought or emotion (*apsikat* 'think of, think about', *pop'e* 'be afraid of', *apsitkòmkat* 'become sad'). None of these roots involve highly volitional subjects; in certain cases (*pat'e* 'boil') they could not combine with animate subjects at all. These roots are largely UNACCUSATIVES in the sense of Perlmutter (1978) and Levin and Hovav (1995). It is not just that transitive verbs cannot undergo synthetic causativization in Tuparí; intransitives with agentive subjects are also barred from doing so.

Since m- $/\tilde{o}$ - can only attach to intransitive roots – and unaccusative ones, at that – alternative means are required to causativize other kinds of verbs. Such causativization is accomplished periphrastically with the verb $ma'\tilde{e}$ 'order, say, command', which takes a nominalized VP complement. With periphrastic causativization the causee may be left unspecified (124a and 124b) or may be introduced into the utterance as the complement of a postposition (124c).

- (124) Periphrastic causativization with $ma'\tilde{e}$ 'order, say, command'
 - a. CONTEXT: When I come down with a cold, my friend recommends that I drink tea.

Echa nam ma'ã ke 'en. e-cha **nẽ-am ma'ẽ-**a ke 'en 2SG-tea **make-NMZ***ap* **order**-TH POLITE.FUT 2SG 'You should order/ask someone to make you tea.' casual discourse: 2016-11-27

b. CONTEXT: A grandmother addresses a pet parrot that is seeking attention.

Aoro!Katke nãetet'e,epepo'iapma'ã?Aoro!katke nãe-tet'e,e-pepo'i-apma'ẽ-aParrot!whatPROG 2SG-AUXgo.SG2SG-handle-NMZaporder-TH'Parrot!What are you doing, ordering/asking someone to handle you?'casual discourse: 2016-12-10

c. *Omoram ma'erõ peo'ap tete lvã yam.* **o-morẽ-am ma'ẽ**-ro peo'ap **tete lvã yam 1SG-drop.off-NMZ***ap* **order**-NMZ*ro* FUT.1SG **maternal.uncle Ivan to** 'I will order/ask Uncle Ivan to drop me off.' casual discourse: 2016-01-24

When no causee is overtly specified, as in (a) and (b), the identity of the person or persons who will carry out the ordered or requested action must be inferred from context. Only in (c) – with the postpositional phrase *tete Ivã yam* – is the causee made explicit.

Although *m*- $/\tilde{o}$ attaches productively only to intransitive roots, there are a few cases where transitive verbs appear to undergo causativization. For instance, *top* 'see, watch, look after' gives rise to $\tilde{o}top$ 'show', and *ko* 'eat drink' is causativized to give $\tilde{o}ko$ 'feed'.

(125) Cases in which causative morphology attaches to transitive bases

- a. *Siroteõtop!*s-irote-õ-top
 3-all-CAUS-see
 'Show all of them!'
 casual discourse: 2016-12-12
- b. Anomaen pēan'arop'õkà ko 'on. Anomaē-n pēan-arop-**õ-ko**-a ko 'on Anomaē-NUC first-food-CAUS-eat-TH POLITE.FUT 1SG 'Let me first feed Anomaē.'
 casual discourse: 2016-11-18

An important peculiarity of the verb δtop is that it can be further intransitivized with the prefix *e*-. As will be discussed in §3.3.3, *e*- usually lies closer to the verbal root than causative *m*-/ δ - does; this is shown by pairs such as *ekiarapka* 'become happy', *mẽkiarapka* 'make someone happy' and *ekòmka* 'fall silent', *mẽkòmka* 'make something go silent, turn something off'. In Figure 3.1 this generalization is captured templatically, with intransitivizing *e*- in P1 but causative *m*-/ δ - in P2. But in the case of δtop 'show', intransitivization with *e*- applies outside of the causative prefix:

(126) Here tetãreman'ẽõtopto'om. here te-tãreman-e-õ-top-to-'om and/then 3C-not.again-INTRNS-CAUS-see-NMZ_{ro}-NEG
'But it [a violent night monkey] never appeared again.' text: Iracema Taydyup Tupari, narrator

The inverted ordering between intransitivizing e- and causative \tilde{o} - in this example suggests that the causativized $\tilde{o}top$ has been lexicalized.

There are other instances of what appear to be fossilized or lexicalized causativization. Transitive $\tilde{o}puopma'\tilde{e}$ 'to teach' appears to have been built, idiosyncratically, from causative \tilde{o} -, the nominal *puop* 'know', and the verbal root *ma'* \tilde{e} 'order, say, command':

(127) Here kut yõpuopma'ã i'ekapnẽ. here kut y-õpuopma'ẽ-a i-'eka-pnẽ then ANCIENT.PAST 3-teach-TH 3-AUX.SG-EV.SG
'So then she taught them (NON-WITNESSED).' text: Miraci Aguissi Tupari, narrator

Finally, it is possible that *õpo* 'hit, kill, strike' (with the irregular form *õpà* when inflected with the theme vowel) is the causativized version of a now-lost intransitive root meaning to die, perhaps related to *pap* 'die, get drunk'.

Highly comparable causativization facts obtain in Sakurabiát and Wayoro, both close relatives of Tuparí. See Galucio and Nogueira (2014) for description and analysis.

3.3.2 Comitative-causative ete-/ite-

While causative m-/ \tilde{o} - demotes an intransitive subject to transitive object, the comitative-causative *ete-/ite-* has the opposite effect: it promotes an intransitive subject to a transitive subject by adding a new direct object to the verbal argument structure. My use of the label COMITATIVE-CAUSATIVE for this prefix follows the convention of prior literature on the Tuparían languages (Caspar and Rodrigues 1957; Galucio and Nogueira 2014; Nogueira 2017). The defining feature of this kind of causative is that it requires the subject to undergo the action in question; hence in (128b), below, the subject and the object both partake in the act of coming to the site of speaking. As both the

causer and causee must take part in the action, scholars including Guillaume and Rose 2010 prefer the label SOCIATIVE CAUSATIVE for this category.

A very common example of the comitative-causative in Tuparí is *etès* 'bring', where *ete*- has attached to *s* 'come.SG'. Note that the *ite*- allomorph appears after the third person proclitic *s*-; *ete*- is used in all other contexts.

- (128) Comitative-causative ete- derives 'bring, come with' from 'come'
 - a. *Òsa* 'on.
 o-s-a 'on
 1SG-come.SG-TH 1SG
 'I have come.'
 common in everyday speech
 b. *Sitèsa* 'on.
 s-ite-s-a 'on
 3-COM-come.SG-TH 1SG

'I brought it.'

common in everyday speech

Similarly, etetet 'take' is composed of ete- and tet 'go.SG':

(129) Comitative-causative ete- derives 'take, take along' from 'go'

a. Otera 'on.
o-tet-a 'on
1SG-go.SG-TH 1SG
'I went.'
common in everyday speech
b. Sitetera 'on.
s-ite-tet-a 'on
3-COM-go.SG-TH 1SG
'I took it.'
common in everyday speech

In interviews speakers approve putting the comitative-causative on a wide range of verbs of movement, including *wan* 'go nearby', *wi'ip* 'go up, climb', *aoros* 'arrive.SG', *earap'õã* 'take off running', and *kop* 'descend, get down from'.

Comitative-causative *ete-* may also attach to certain auxiliaries to provide an interpretation of temporary possession.

(130) Sitetero'a nẽ 'en?
s-ite-tero'e-a nẽ 'en
3-COM-AUXgo.SG-TH Y/N 2SG
'Do you have it [on you]?'
casual discourse: 2016-11-21

This usage of *ete-* contrasts with *-psiro*, which generally indicates a permanent, or at least non-transitory, state of possession or ownership (see §2.3.1):

- (131) Nominal suffix -psiro indicates permanent/non-transitory possession
 - a. Aoropsironambi'a 'on. aoro-**psiro**-nē-a-mbi'a 'on parrot-**POSS**-VB $Z_{n\tilde{e}}$ -TH-DUR 1SG 'I used to have/own a parrot.' casual discourse: 2016-01-15
 - b. Korakorapsironambi'a nẽ mõket? korakora-psiro-nẽ-a-mbi'a nẽ e mõket chicken-POSS-VBZ_{nẽ}-TH-DUR Y/N 3 long.ago 'Did they have/own chickens in the old days?' casual discourse: 2016-01-13

While the prefix *ete*- lives in the verbal domain, the suffix *-psiro* may only attach to nouns. This is why reverbalization with *-ne* is necessary in the two utterances in (131). If that process of reverbalization did not apply, then it would be impossible for the predicates *aoropsiro* 'having/owning a parrot' and *korakorapsiro* 'having/owning chickens' to host the durative tense suffix *-pbi'a*.

While *ete-/ite-* usually attaches to verbs of movement or members of the AUX_{go} series, it also builds *etewak* 'mourn, miss, cry for/after' from *wak* 'cry'. (132) contrasts intransitive *wak* 'cry' against transitivized *etewak* 'mourn, miss'.

(132)Otewaka ko 'ote. oteowat ote-wak-a 'ote, ko ote-owa-t 1PL.EXCL-cry-TH POLITE.FUT 1PL.EXCL 1PL.EXCL-brother.of.woman-NUC etewaka. puop'om 'ote otewakaere. puop-'om 'ote ete-wak-a, ote-wak-ap-ere COM-cry-TH know-NEG 1PL.EXCL 1PL.EXCL-cry-NMZap-OBL 'We-EXCL must cry, we must mourn/cry for our brother, we do not know how to cry.' text: Miraci Aguissi Tupari, narrator

Comitative-causative *ete-* exhibits very interesting behavior when it attaches to verbal roots that undergo subject-sensitive number suppletion. Such suppletion continues to track the number of the subject even after this prefix has attached. (133) and (134) illustrate the paradigms for the lexical verbs 'go' and 'come'. Both of these verbs have distinct singular, paucal, and plural forms (as do 'arrive', 'leave' and 'enter').¹

- (133) Singular-paucal-plural number suppletion on intransitive root 'go'
 - a. Otera 'on. 'on o-tet-a 1SG-go.SG-TH 1SG 'I went.' common in everyday speech b. Oteora 'ote. ote-ot-a 'ote 1PL.EXCL-go.PAUC-TH 1PL.EXCL 'We-EXCL went [2 to 5 people].' common in everyday speech c. Otetet'anã 'ote. ote-tet'anẽ-a 'ote 1PL.EXCL-go.PL-TH 1PL.EXCL 'We-EXCL went [6 people and up].' common in everyday speech

¹The verb 'come' has two competing allomorphs for the singular: \dot{Vs} , which obligatorily lengthens the preceding vowel, and *ip*. The latter form is used if a consonant-final adverbial prefix, such as *pean*- 'first' or (*e*)*tareman*- 'not again', intervenes in between the root and the absolutive proclitic:

(ii) After consonant-final adverbial prefix, the allomorph of 'come' is *ip*

a.	<i>Ham opēan'ìat</i> ham o- pēan-ip -a-t hither 1SG- first-come.SG -TH-NEAR.PAST	' <i>on</i> . 'on 1SG				
	'I came here first [before going to my elde casual discourse: 2017-08-21	er sister's].'				
b.	Pare ètãreman'ipto'omka pare e- etãreman-ip -to-'om-ka-a or 2SG- not.again-come.SG -NMZ _{ro} -NEC	n	<i>iẽ</i> nẽ r/N	ke	'en	<i>ham?</i> ham hither
	'Or will you not come back here again?' casual discourse: 2017-06-03					

It is also possible for the *ip* allomorph to surface when there is no proclitic present at all, as in (61b) (§2.4.2). For more discussion of 'come', see §4.2.

- (134) Singular-paucal-plural number suppletion on intransitive root 'come'
 - a. *Òsa* 'on. 0-**s**-a 'on 1SG-come.SG-TH 1SG 'I came.' common in everyday speech $\sim Ote \tilde{a}$ 'ote. b. Oteã'ã 'ote. ote-ã'ẽ-a 'ote 1PL.EXCL-come.PAUC-TH 1PL.EXCL 'We-EXCL came [2 to 5 people].'² common in everyday speech 'ote. c. Oteip'anã ote-ip'anẽ-a 'ote 1PL.EXCL-come.PL-TH 1PL.EXCL 'We-EXCL came [6 people and up].' common in everyday speech

The same pattern obtains when *ete-* is present. The number suppletion continues to track the subject; the number of the direct object has no impact on the allomorph of the verbal root:

- (135) Number suppletion on comitative-causativized version of 'go' (i.e., 'take')
 - a. Sitetera 'on.
 s-ite-tet-a 'on
 3-COM-go.SG-TH 1SG
 'I took it/them. = I went with it/them.'
 elicitation: 2016-11-10
 - b. Siteora 'ote.
 s-ite-ot-a 'ote
 3-COM-go.PAUC-TH 1PL.EXCL
 'We-PAUC took it/them. = We-PAUC went with it/them.'
 elicitation: 2016-11-10
 c. Sitetet'anã 'ote.
 s-ite-tet'anẽ-a 'ote
 3-COM-go.PL-TH 1PL.EXCL
 'We-PL took it/them. = We-PL went with it/them.'
 elicitation: 2016-11-10

²The paucal allomorph, $\tilde{a}'\tilde{e}$, has a tendency to contract from $\tilde{a}'\tilde{a}$ to just \tilde{a} once inflected with theme vowel -a.

(136) shows the same point for 'come'. The number suppletion within the root continues to track the subject even after the comitative-causative prefix attaches; the third person pronominal proclitic *s*- on the derived transitive verb is number-invariant.

- (136) Number suppletion on comitative-causativized version of 'come' (i.e., 'bring')
 - a. Sitèsa 'on.
 s-ite-s-a 'on
 3-COM-come.SG-TH 1SG
 'I brought it/them. = I came with it/them.'
 elicitation: 2016-11-10
 - b. Siteã 'ote.
 s-ite-ã'ẽ-a 'ote
 3-COM-come.PAUC-TH 1PL.EXCL
 'We-PAUC brought it/them = We-PAUC came with it/them.'
 elicitation: 2016-11-10
 - c. Siteip'anã 'ote.
 s-ite-ip'anẽ-a 'ote
 3-COM-come.PL-TH 1PL.EXCL
 'We-PL brought it/them. = We-PL came with it/them.'
 elicitation: 2016-11-10

3.3.3 Intransitivizing e-

The prefix *e*- is attested on a few intransitive verbs, deriving them from an unmarked transitive base.

A scommon pair is $ma'\tilde{e}$ 'say, command, order' (transitive) versus $ema'\tilde{e}$ 'speak' (intransitive). The

derived intransitive ema'e is homophonous with the noun ema'e 'language, speech, voice'.

(137) Intransitivization on ma'e 'say, command, order'

a.	Oma'ã	ke	'en	esi	yam.			
	o- ma'ẽ- a	ke	'en	e-si	yam			
	1SG- speak -TH POLITE.FUT 2SG 2SG-mother to							
	'Please speak of me [give my regards] to your mother.'							
	casual discourse:	2016-01-04						
				•				

b. Tarupa ema'em moem tèma'ã nã i'anẽ. Tarupa ema'ẽ-m moem te-e-ma'ẽ-a nã i-'anẽ Tarupa language-INS by 3C-INTRNS-speak-TH PROG 3-AUXgo.PL 'They speak only in Portuguese.'
casual discourse: 2015-11-11 (138) further illustrates with *tãramka* 'kill.PL' versus derived *etãramka* 'die.PL'. While the transitive form requires a semantically plural object, the derived intransitive requires a semantically plural subject:

(138) Intransitivization on *tāramka* 'kill.PL'

- a. Amẽkòt kiparorot erotetãramka nã tero'a, Amẽko-t ki-paroro-t erote-**tãramka**-a nã tero'a, jaguar-NUC 1PL.INCL-armadillo-NUC all-**kill.PL**-TH PROG AUXgo.SG.TH saraerem e'awa tero'a te'a. te-'a saraerem e'awa-a tero'e-a everyday hunt-TH AUXgo.SG-TH 3C-when.SG 'The Jaguar is killing all of our armadillos when it's out hunting everyday.' text: Isaias Tarimã Tupari, author
- b. Korakorat terote'etãramka. korakora-t te-erote-e-tãramka-a chicken-NUC 3C-all-INTRNS-kill.PL-TH 'The chickens have all died.' casual discourse: 2016-12-11

Intransitives derived with e- may undergo further valency changes, including causativization:

(139) Intransitivization can feed causativization

a. Wekiarapka 'on. w-e-kiarap-ka-a 'on 1SG-INTRNS-happiness-VBZ_{ka}-TH 1SG 'I became happy.' casual discourse: 2017-08-13
b. Emẽkiarapkap'a y'e. e-m-e-kiarap-ka-a-p'a y-'e 2SG-CAUS-INTRNS-happiness-VBZ_{ka}-TH-NEAR.FUT 3-AUX.SG 'It's going to make you happy.'

casual discourse: 2016-12-14

In both of these examplies the nominal *kiarap* 'happiness' – attested also in the reduplicated verb *kiarapkiarap ke* 'be happy, be ecstatic' – is verbalized with *-ka* and then intransitivized with *e*-. The resulting verb, *ekiarapka* 'become happy', stays intransitive in (139a), where no additional argument structure changes take place; but it undergoes a round of causativization in (139b), producing the transitive *mẽkiarapka* 'make someone happy'.

As discussed by Nogueira (2013) and Galucio and Nogueira (2014), Sakurabiát and Wayoró also contain an intransitivizing prefix *e*-. The facts in those languages closely parallel what we find here for Tuparí. In particular, in Wayoró there are cases where *e*- must occur together with the verbalizing suffix *-ka*. This is seen in Tuparí, as well, as in *ekiarapka* 'become happy', derived from the nominal *kiarap* 'happiness, joy' (example 139a). Comparable morphology is attested in Akuntsú, too, where the combination of the reflexive or middle voice prefix *e*- with the transitivizing suffix *-ka* 'conveys an indirect causation' (Aragon 2014:218).

3.3.4 Reciprocal eue-

The reciprocal prefix *eue*- (sometimes realized as *ue*- or *we*-) identifies the subject of a transitive verb with the direct object, thereby engaging in a kind of detransitivization. (140) (repeated from 103b) illustrates.

(140) CONTEXT: A Tuparí woman explains how her elderly aunt came to learn the Arikapu language.

Tekurereõpotteuenõnõkateoro'ate-kut-ereõpotte-**eue**-nõnõka-ate-oro'e-a3C-childhood-OBLDISTANT.PAST3C-RCP-befriend-TH3C-AUXgo.PAUC-THsakapsiraNazare Arikapu eanã.s-aka-psiraNazare Arikapu eanã3-AUX.PLhabit-EV.PLNazaré Arikapu together.with

'In their childhood, she and Nazaré Arikapu became friends with one another.' casual discourse: 2017-08-15

The reciprocal prefix can only ever attach to transitive roots, such as 'em 'fight, fight with', (i)yma'ek 'speak with', and apsio'i 'advise, give advice to, teach'.

- (141) Reciprocal *eue* attaches to transitive verbs: '*em*, (*i*)yma'ẽk, apsio'i
 - a. *Wat'eue'emto'om moem!* wat-**eue-'em**-to-'om moem 2PL-**RCP-fight**-NMZ_{ro}-NEG POSTPOSITION 'Don't fight with one another!' casual discourse: 2017-09-02

- b. Eret kieue'iyma'ẽk pekiaronam.
 eret ki-eue-iyma'ẽk pekiaronam
 tomorrow 1PL.INCL-RCP-speak.with FUT.1PL.INCL+again
 'Tomorrow we will speak with one another again.'
 common in everyday speech
- c. *Here kut* kiepe teueapsio'ipsirap okio'earet. here kut kiepe te-**eue-apsio'i**-psira-ap okio-'eat-et and ANCIENT.PAST now 3C-**RCP-advise**-EV.PL-ADV.FOC man-MANY-NUC 'And at this time, the many men advised one another (NON-WITNESSED).' text: Raul Pat'awre Tupari, author

The transitivity of these roots is demonstrated in (142), in which there is no reciprocal morphology.

Here 'em, (i)yma'ek and apsio'i all take direct objects that are distinct from the subject:

(142) Those same verbs ('em, (i)yma'ek, apsio'i) without reciprocal eue-

a.	-	nẽ ke C Y/N POLITE.FUT white man to figh			est the white man
	casual discourse: 201	-			
b.		'en i- yma'ẽk -a 2SG 3- speak.with c with him later or			
c.	ke ke in.this.way POLIT	wat wat-ku E.FUT 2PL 2PL-ch ou-PL should give	<i>ret apsio'ia</i> nt-et apsio'i -a nild-NUC advise -TH e advice to / should	wat-aka 2PL-AUX.PL	

The position of the reciprocal within the verbal template is shown by (143), where *eue*- occurs to the left of both causative *m*- and dismissive (*e*)*tat*- 'just'.³

³Example 143b shows that reciprocal *eue*- occurs to the left of *tat*- 'just', a fact which suggests that the P3 position given in Figure 3.1 will need to be subdivided further. A task for future research will be to test all the cooccurrence possibilities of the different prefixes assigned to that slot.

- (143) Reciprocal *eue* occurs outside of causative and (*e*)tat- 'just'
 - a. *teuemãtoa*te-**eue-m**-ato-a
 3C-RCP-CAUS-bathe-TH
 'bathing one another'
 elicitation: 2015-12-11
 - b. *teuetat'em'emkia*te-**eue-tat**-'em'em-ki-a
 3C-RCP-just-[fight]²-VBZ_{ki}-TH
 'fighting one another without reason'
 casual discourse: 2016-02-06

Although causative m-/ \tilde{o} - and comitative-causative *ete*- do not cooccur, the reciprocal can combine with these morphemes. This fact indicates that the reciprocal occupies a position farther to the left than P2, where the causative and comitative-causative reside (Figure 3.1). Further evidence for this analysis comes from the reduplication facts, discussed in §3.4 below. That section shows that whereas causative and comitative-causative prefixes always fall within the domain of verbal reduplication, the reciprocal does not. (144) illustrates:

(144) Teueõpo'õpoka nã i'anẽ. te-eue-**õpo'õpo**-ka-a nã i-'anẽ 3C-RCP-[**hit**]²-VBZ_{ka}-TH PROG 3-AUX_{go}.PL 'They are hitting one another.' casual discourse: 2016-11-20

Here reciprocal *eue*- is not reduplicated along with the verbal root *opo* 'hit, kill, strike'. In this respect the behavior of the reciprocal is different from the causative and comitative-causative pre-fixes, which do fall within the domain of reduplication.

It must be emphasized that reciprocal *eue*- is not a reflexive, which would be compatible with a singular subject acting upon himself or herself. Rather *eue*- only ever occurs with plural subjects who are acting upon each other. The Tuparí verbal complex does not contain a dedicated reflex-ivizing morpheme compatible with singular subjects. Instead, reflexive readings on transitives with singular subjects are obtained by using the same person and number specification on the subject and on the absolutive proclitic. (The following data are repeated from §2.2.3.) It is the combination

of *o*- '1SG' with the enclitic subject '*on* '1SG' in (145a), and of *e*- '2SG' with '*en* '2SG' in (145b), which forces the reflexive interpretation with transitive *top* 'see'.

- (145) Reflexive interpretations with transitive verbs and non-third person subjects
 - a. Otoa 'on toaere.
 o-top-a 'on toap-ere
 1SG-see-TH 1SG mirror-OBL
 'I saw myself in the mirror.'
 elicitation: 2014-06-24 & 2015-10-15
 - b. Etoa 'en toaere.
 e-top-a 'en toap-ere
 2SG-see-TH 2SG mirror-OBL
 'You-SG saw yourself in the mirror.'
 elicitation: 2014-06-24 & 2015-10-15

In the case of third person subjects, it is *te*- which forces the reflexive interpretation:

- (146) Coreferent proclitic *te* provides reflexive interpretation with transitive verbs
 - a. Silvana memsiret tesit toa. Silvana memsit-et te-si-t top-a Silvana child.of.woman-NUC **3C**-mother-NUC 3-see-TH 'Silvana's child_i saw $his_{i/*j}$ mother.' elicitation: 2014-06-24 & 2015-10-15 b. Silvana memsiret itoa.
 - Silvana memsit-et **i-**top-a Silvana child.of.woman-NUC **3-**see-TH 'Silvana's child_i saw $\lim_{i/j}$.' elicitation: 2014-06-24 & 2015-10-15
 - c. Silvana memsiret tetoa. Silvana memsit-et te-top-a Silvana child.of.woman-NUC **3**C-see-TH 'Silvana's child_i saw himself_i.' elicitation: 2014-06-24 & 2015-10-15

That *te*- provides a reflexive reading here follows from the fact that this morpheme is always coreferent with the clausal subject (which is the NP *Silvana memsiret* 'Silvana's child' in all three of the sentences in 146).

3.3.5 Summary of valency-manipulating prefixes

In this section we have examined several prefixes which manipulate the argument structure of existing verbs. Each of these prefixes has specific demands regarding the kind of base to which it will attach. Causative m-/ \tilde{o} - and comitative-causative *ete-/ite-* will only attach to intransitives, while *e*- 'INTRNS' only attaches to transitives. Reciprocal *eue-* shares with *e-* a strict restriction to transitive bases; however, it sits farther away from the verbal root than *e-*, *m-/\tilde{o}-* and *ete-/ite-* do and it does not reduplicate together with the root.

3.4 Reduplication of verbal roots (positions P2, P1, and 0)

Reduplication is a productive means for indicating iterative or intensive actions in Tuparí. The entire verbal root is reduplicated and then suffixed with -ka. More rarely, the reduplicated root may be suffixed with -ki, subject to semantic factors; see (117), above.

(147) Reduplication of verbal roots with the verbalizer -ka

- a. Yomki'omkikaap'a y'e.
 y-omki'omki-ka-a-p'a y-'e
 3-[take.apart]²-VBZ_{ka}-TH-NEAR.FUT 3-AUX.SG
 'He's going to take it [an unoccupied house] apart.'
 [from omki 'take apart, remove, dismantle']
 casual discourse: 2016-12-12
- b. Poat nẽ kuydyoem tettetkaet? poat nẽ e kuydyoem tettet-ka-ap-et good Y/N 3 by.foot [go.SG]²-VBZ_{ka}-NMZ_{ap}-NUC 'Is it good to walk around by foot?' [from tet 'go.SG'] casual discourse: 2016-02-04
- c. Nãpe nã ewekawekakapnam.
 nãpe Ø nã e-wekaweka-ka-pnẽ-am that's.why 3 FOCUS 2SG-[bite]²-VBZ_{ka}-EV.SG-ADV.FOC 'That's why it bit you again and again (NON-WITNESSED).' [from wek∼weka 'bite'] text: Iracema Taydyup Tupari, narrator

d. Eatãum'atãumka 'aet etet'e. nã e-[atãum'atãum]²-ka-a 'aet nã e-tet'e 2SG-[stay]²-VBZ_{ka}-TH NEGATIVE.LAMENT PROG 2SG-AUX_{go}.SG 'You don't ever stay put.' / 'It's a shame that you don't ever stay put.' [from *atãum* 'stay, remain'] casual discourse: 2016-12-17 Haytokia mòy yen'ã ka *o'a*, wẽken'ẽkenkap kot'oa e. [haytokia mòy yen'ã ko-a o-'a] w-**ẽken'ẽken-ka**-ap kot'oy-a cow meat eat-TH 1SG-if.SG] 1SG-[vomit]²-VB Z_{ka} -NM Z_{ap} want-TH [a.lot o'apteka. o-'apteka **1SG-HABIT.SG** 'Whenever I eat a lot of beef, I always want to throw up a lot.' [from *ẽken* 'vomit'] casual discourse: 2016-12-15 f. Sakup'ek'akup'ekkapsit'om nãpe, tepop'a saka. s-akup'ek'akup'ek-ka-psit-'om nãpe, te-pop'e-a s-aka 3-[handle]²-VBZ_{ka}-PASS-NEG since 3C-fear-TH 3-AUX.PL 'Since they [a pair of pet parakeets] are not handled much, they get scared.' [from *akup'ek* 'embrace, handle'] casual discourse: 2016-11-12 Saraerem ko 'on owi'ipwi'ipkap ke nã y'e. g. 'on o-wi'ipwi'ip-ka-ap ke nã y-'e saraerem ko POLITE.FUT 1SG 1SG-[go.up]²-VBZ_{ka}-ADV.FOC] say PROG 3-AUX.SG [always 'He [=a little boy climbing a table] is saying, let me go up and go up and go up.' [from *wi'ip* 'go up, climb'] casual discourse: 2016-12-08 h. Itektekkaro'om moem! i-**tektek-ka**-ro-'om moem $3-[hold]^2-VBZ_{ka}-NMZ_{ro}-NEG$ by 'Don't grip him!' [from *tek* 'hold'] casual discourse: 2016-02-15

In each of these examples the reduplication of the verbal root conveys the sense that the action in question was repeated multiple times and/or was carried out with intensity. The derived verb maintains the valency of the original root, that is, the reduplication process does not add or remove any arguments. Further, no obligatory transitivization takes place with -ka, either (contra the claim by Alves 2004 that -ka creates transitive verbs only). Note that (147h) is a negative imperative of the sort described in Singerman (2018:§5); see also example (141a).

More rarely, the verbalizer used following reduplicated verbal roots may be -ki rather than -ka.

- (148) -ki attaching on top of reduplicated verbal roots
 - a. *Oterap* koroykot'oykia nã otet'e aodeyam. o-tet-a-p **kot'oykot'oy-ki**-a nã o-tet'e aodeya-m 1SG-go.SG-NMZ_{ap} [want]²-VBZ_{ki}-TH PROG 1SG-AUX_{go}.SG village-INS 'I am wanting to go to the village.' casual discourse: 2016-05-24
 - b. Weut'eutkipsã 'on.
 w-eut'eut-ki-psẽ-a 'on
 1SG-[get.full]²-VBZ_{ki}-RSLT.SG.HZNTL-TH 1SG
 'I'm stuffed, sitting down.'
 casual discourse: 2016-02-11
 - c. *Kafe kokokiap erop'a 'on o'ero'aptekat*.
 kafe koko-ki-ap erop'a 'on o'ero'aptekat
 coffee [drink]²-VBZ_{ki}-NMZ_{ap} bad 1SG AUX.1SG
 'I can't drink coffee over and over again.' / 'It's bad/hard for me to drink coffee over and over again.'
 casual discourse: 2016-12-10

Reduplication targets a specific subsection of the verbal template: the verbal root, intransitivizing *e*- (if present) and a causative or comitative-causative prefix (again, if present). This domain corresponds to 0 through P2 in Figure 3.1. (149) illustrates with comitative-causative *ete-* on *tet* 'go.SG'; the derived verb, *etetet*, is roughly equivalent to 'take'. The initial vowel in the reduplicated form changes to /i/ following the pronominal *s*-.

(149) Comitative-causative undergoes reduplication together with the verbal root

a. *Here teuapeka y'a, isìt sitetet'etetekapbi'ae.* here te-uapek-a y-'a i-si-t s-**itetet'etetet-ka**-a-pbi'a e then [3C-hatch-TH 3-when.SG] 3-mother-NUC 3-[COM+go.SG]²-VBZ_{ka}-TH-DUR 3 'Then when they [the turtle eggs] hatch, the mother takes them along with her.' text: Raul Pat'awre Tupari, author b. *Kanã sitetet'etetkaro'om* '*en e'ero'aptekat kire* kanã s-itetet'etetet-ka-ro-'om 'en e-'ero'aptekat kire why 3-[COM+go.SG]²-VBZ_{ka}-NMZ_{ro}-NEG 2SG 2SG-AUX.SG.NUC [person *irowa 'ekaptenã?* irowa-a 'eka-ap-tenã photograph-TH AUX.SG_{habit}-NMZ_{ap}-PURP]
'Why don't you bring it [your camera] around with you, so as to regularly take photos of people?' casual discourse: 2017-11-27

My corpus of natural speech and of native language texts does not include any examples in which reduplication targets verbs bearing causative morphology. In elicitation, however, speakers confirm the well-formedness of such examples, as shown by (150). (150a) was judged as felicitous for a context where a parent or older sibling complains about a child who keeps falling asleep, despite being woken up multiple times. (150b), conversely, was judged as felicitous for a context where a parent or older sibling about a child who refuses to settle down for the night despite being put into bed multiple times.

(150) Comitative-causative and causative prefixes undergo reduplication together with the root

a. *Mẽpakmẽpaka* nã otet'e. Ø-mēpakmēpak-ka-a nã o-tet'e 3-[CAUS+wake]²-VB Z_{ka} -TH PROG 1SG-AUX_{go}.SG 'I wake her up over and over again.' [from *m*- 'CAUS' and intransitive *epak* 'wake up'] elicitation: 2016-11-10 b. Yõ'et'õ'etka otet'e. nã y-õ'et'õ'et-ka-a nã o-tet'e 3-[CAUS+sleep]²-VBZ_{ka}-TH PROG 1SG-AUX_{go}.SG 'I put her to bed over and over again.' [from \tilde{o} - 'CAUS' and intransitive 'et 'sleep, fall asleep'] elicitation: 2016-11-10

Although reduplication must target the comitative-causative and causative, prefixes to left of position P2 in Figure 3.1 are never included within the reduplicant. (151) illustrates with the reciprocal *eue*-, which is not reduplicated along with the root δpo :

(151) Teueõpo'õpoka nã i'anẽ. te-eue-**õpo'õpo-ka**-a nã i-'anẽ 3C-RCP-[**hit**]²-VBZ_{ka}-TH PROG 3-AUX_{go}.PL 'They are hitting one another.' [from *õpo* 'kill, hit, strike'] casual discourse: 2016-11-20

Reciprocal *eue*- is much like causative m- $/\tilde{o}$ - and comitative-causative *ete*- in that it manipulates argument structure. Nonetheless, it – and all other prefixes farther from the root than the causative and comitative-causative – fall outside of the domain of verbal reduplication.

The reduplication of verbal roots is very similar to the verbalization of reduplicated nominals. Reduplicated nominals are often verbalized with *-ka*, producing intransitives and transitives alike:

- (152) Reduplication of nominals with verbalizer -ka derives new verbs
 - a. *Esumsumkap'a y*'*e*. e-**sumsum-ka**-a-p'a y-'e 2SG-[wet]²-VBZ_{ka}-NEAR.FUT 3-AUX.SG 'She's going to soak you.' [from *sum* 'wet'] casual discourse: 2015-11-01 kot'oyto'om b. *O'um'umkap* 'on, watopsã o-'um'um-ka-ap kot'oy-to-'om 'on, w-ato-pse-a 1SG-[dirty]²-VBZ_{ka}-NMZ_{ap} want-NMZ_{ro}-NEG 1SG 1SG-bathe-RSLT.SG.HZNTL-TH 'on. 'on 1SG 'I don't want to get myself dirty, I have already bathed / am already bathed (sitting).' [from '*um* 'dirty'] casual discourse: 2016-01-07 c. Teãẽ'ãẽkapnaẽ. te-ãẽ'ãẽ-ka-pnẽ-a e 3C-[stinky]²-VBZ_{ka}-EV.SG-TH 3 'He got all stinky/dirty (NON-WITNESSED).' [from *ãẽ* 'stinky, smelly']

It is also possible to derive a new verb from a reduplicated nominal using $-n\tilde{e}$:

casual discourse: 2016-11-21

(153) CONTEXT: During an English lesson, a friend explains that he can't learn because he is feeling tired.

 Puop'ompuop'omnã
 nã
 oyẽ.

 puop'ompuop'om-nẽ-a
 nã
 o-yẽ

 [knowledgeable+NEG]²-VBZ_{nẽ}-TH PROG 1SG-AUX_{hzntl}
 'I'm being dumb (SITTING).'

 'I'm being dumb (SITTING).'
 [from puop'om 'not know, without knowledge', itself derived from puop 'knowledge, knowledgable']

 casual discourse: 2016-11-30

The choice of verbalizing morpheme, in conjunction with reduplication, can produce semantically diverse results: compare $\tilde{a}\tilde{e}$ 'stinky, smelly' in (152c) – where it is reduplicated and verbalized with -*ka* – to its use in (116a), where it does not undergo reduplication and combines with -*ki*.

3.5 Adverbial prefixes and noun incorporation (positions P5, P4, and P3)

Tuparí has several prefixes which semantically modify the manner or timing of the verb. That these morphemes are true verbal prefixes – rather than, say, independent particles – is shown by the fact that they come to the *right* of the absolutive proclitic or direct object that sits at the left edge of the verb. Verbs in this language always carry an argument (either a pronoun or a full NP) at their left edge. Since the morphemes under discussion in this section all show up in between the verbal root and the argument at the verb's left edge, we must conclude that they are part of the verbal word itself. The existence of these adverbial prefixes testifies to the considerably more elaborate verbal morphology found in Tuparí when compared to the closely related Sakurabiát (Galucio 2001), Wayoró (Nogueira 2011) or Akuntsú (Aragon 2014).

Three of the adverbial prefixes discussed here – *tat*- 'just', *tom'en*- 'without someone being aware', and *tãreman*- 'not again' – exhibit an allomorphic alternation when they follow a pronominal proclitic: an extra /e/ occurs in between these prefixes and all pronominal proclitics other than *wat*- '2PL'. (154) illustrates this epenthesis with *tom'en*-. Observe that first person singular $o \sim w$ - and second person singular *e*- behave differently from second person plural *wat*-. (That *wat*- does not trigger this epenthetic /e/ is probably because it is consonant-final; see §2.3.3 for discussion of

the unique behavior of the second person plural within the set of pronominal proclitics.)

- (154) The /t/-initial prefix tom'en- 'without someone being aware' takes an epenthetic /e/
 - a. Wetom'en'ẽã nãkop wat. w-**e-tom'en**-'em-a nãkop wat 1SG-EPNTH-TOM'EN-fight-TH MAYBE 2PL 'Perhaps you-PL are fighting me without my being aware.' elicitation: 2017-08-03 (based on casual discourse: 2016-12-11) b. *Ètom'en'emto'om* 'ote. e-e-tom'en-'em-to-'om 'ote 2SG-EPNTH-TOM'EN-fight-NMZ₁₀-NEG 1PL.EXCL 'We-EXCL are not fighting you without your being aware.' elicitation: 2017-08-03 c. Wattom'en'emto'om 'ote. wat-(*e)-tom'en-'em-to-'om 'ote 2SG-(*EPNTH)-TOM'EN-fight-NMZ_{ro}-NEG 1PL.EXCL 'We-EXCL are not fighting you-PL without your-PL being aware.' elicitation: 2017-08-03

The three adverbial prefixes which exhibit this epenthetic alternation all begin with /t/: *tat-* 'just', *tom'en-* 'without someone being aware', *tãreman-* 'not again'. No epenthesis occurs with *pẽan-* 'first' even though this prefix sits in the same morphological slot (P5) as *tãreman-*. For expository ease I do not gloss this epenthetic /e/ as a separate morpheme in the following discussion; rather, when it is present I treat it as part of the adverbial prefix itself.

3.5.1 Dismissive *tat-* 'just, aimlessly, without purpose'

The prefix *tat*- is dismissive or minimizing; it is used to indicate that a particular action lacks purpose or seriousness. Depending on context, the effect of this prefix can be rather pejorative. As discussed above, the allomorph with initial /e/ occurs only after a pronominal proclitic other than *wat*-.

The following utterances illustrate the uses of this prefix. (155) is a common reply to the questions *Katke nã etet'e? / Katke nã 'e?* 'What are you up to?':

(155) Wetattettetka $n\tilde{a}$ otet'e. w-**etat**-tettet-ka-a $n\tilde{a}$ o-tet'e 1SG-**just**-go.SG²-VBZ_{ka}-TH PROG 1SG-AUX_{go}.SG 'I am just walking around.' common in everyday speech

Here the verb is not *tet* 'go.SG', which could indicate a clear direction or destination, but instead the reduplicated *tettetka* 'go about, walk around', which lacks a definite destination or purpose.

In many cases, *tat*- comes close to performing verbal focus. In each of the following examples the verb that bears *tat*- is implicitly or explicitly evaluated against some salient, unrealized alternative. For the rain to just pass by contrasts with it actually falling; to sleep contrasts with being active and awake; to listen to the radio contrasts with watching the television; and to stay seated, doing nothing, contrasts with joining the manioc-peeling effort.

(156) *tat*- performs verbal focus

a. CONTEXT: I remark to my interlocutor that it has not rained yet; this is how she replies.

Tètat'emo'ãkae iut. te-**etat**-emo'ãk-a e iu-t 3C-**just**-pass.by-TH 3 rain-NUC 'The rain just passed by.' casual discourse: 2016-11-29

b. CONTEXT: My interlocutor sees me after I wake up from a nap.

Ètat'era nã etet'e. e-etat-'et-a nã e-tet'e 2SG-just-sleep-TH PROG 2SG-AUX_{go}.SG 'You've just been sleeping.'

casual discourse: 2016-12-03

c. CONTEXT: I hear a broadcast playing in a friend's home and ask if I can come in to watch the nightly news program with them. My friend tells me that she and her family are not in fact watching television but are instead listening to the radio.

Ètat'apsi'ap'a 'e. e-etat-apsi'e-a-p'a 'e 2SG-just-listen-TH-NEAR.FUT AUX.SG 'You are just going to listen / only going to listen.' casual discourse: 2016-11-28 d. CONTEXT: I offer to help some friends peel manioc, but as I do not know how to do so properly, they order me to stay put.

Ètatyẽ!Ètat'epsiksẽ!e-etat-yẽe-etat-epsik-sẽ2SG-just-be.horizontal2SG-just-sit-RSLT.SG.HZNTL'Just be there, sitting!Just stay seated!'casual discourse:2016-11-15

3.5.2 Quantificational *erote-* 'all, entirely' and *urut-* 'two, both'

The prefixes *erote-* 'all, entirely' and *urut-* 'two, both' are quantificational and occupy the same position in the verbal structure. The initial /e/ of *erote-* changes to /i/ after the third person pronominal proclitic *s-*, just as with comitative-causative *ete-* (\$3.3.2).

The following examples show the scopal potential of *erote-*. With transitives such as *tãramka* 'kill.PL', *pek* 'buy, request' and *õpuopma'ẽ* 'teach', *erote-* always quantifies the direct object.

(157) Examples with *erote-* 'all' on transitives

a.	Amẽkòt	kiparo	prot		erotetãramka	nã	tero'a,	
	Amẽko-t	ki-par	roro-t		erote-tãramka-a	nã	tero'e-a,	
	jaguar-NUC	1PL.IN	NCL-armadill	o-NUC	all- kill.pL - TH	PROG	AUXgo.SG-TH	
	saraerem e	'awa	tero'a	te'a.				
	saraerem e	'awa-a	tero'e-a	te-'a				
	everyday h	unt-TH	AUXgo.SG-TH	3c-wl	nen.SG			
	'The Jaguar is killing all of our armadillos when it goes out hunting everyday.'							
	text: Isaias Ta	ırimã Tuj	pari, author					

b. CONTEXT: A speaker describes the commercial success of his family's majestic rooster.

Ia'ueterotepekarekire'earet.i-a'up-eterote-pek-a-te kire-'eat-et3-son.of.man-NUCall-buy-TH-NEAR.PAST3 person-MANY-NUC

'The people bought all of his sons.'

casual discourse: 2016-12-14

c. CONTEXT: A Tuparí elder explains why all her children are fluent speakers of Tuparí.

Siroteõpuopma'ambi'a 'on. s-**irote**-õpuopma'ẽ-a-mbi'a 'on 3-**all**-teach-TH-DUR 1SG 'I taught all of them.' casual discourse: 2016-12-15 When *erote-* combines with an NP direct object, the object must bear the nuclear case *-et/-t*. This seems to be because the presence of the nuclear case on a direct object can sometimes indicate specificity and/or definiteness (§2.4.1), and *erote-* by virtue of its quantificational meaning ('all') is semantically compatible only with definite/specific objects. In elicitation sessions and interviews, speakers do not accept variants on sentences that combine *erote-* with caseless direct object NPs.

On intransitives, erote- may quantify the intransitive subject or an oblique, if one is present.

(158) Examples with *erote*- on intransitives

- a. Korakorat terote'etãramka. korakora-t te-erote-e-tãramka-a chicken-NUC 3C-all-INTRNS-kill.PL-TH 'The chickens have all died.' casual discourse: 2016-12-11
- b. Werotepuop'orap kot'oa nã otero'e, wat'ema'erẽ.
 w-erote-puop'ot-ap kot'oy-a nã o-tero'e wat-ema'ẽ-re
 1SG-all-learn-NMZ_{ap} want-TH PROG 1SG-AUX_{go}.SG 2PL-language-OBL
 'I am wanting to learn all of your-PL words/all of your-PL languages.'
 elicitation: 2017-08-03

In (158b) the first person singular subject is not compatible with an 'all' reading, which is why *erote-* instead quantifies *wat'ema'erẽ* 'your languages-OBL'. So while these two examples show that it is possible for *erote-* to quantify either the intransitive subject or an oblique NP, it is not yet known how *erote-* behaves when the intransitive subject and the oblique are equally felicitous with an 'all' reading. More research is needed to determine the full possibilities of *erote-*.

In elicitation speakers have confirmed the existence of an additional prefix, *urut*- 'both', that functions morphosyntactically just like *erote*-. This prefix bears some relationship to the noun *huru* 'pair' (which is itself the base for oblique-marked numeral *hurure* 'two'), but the origin of the final /t/ in the prefix is unknown. My corpus does not include any examples of *urut*- from everyday conversation or texts.

3.5.3 Evidential-like *tom'en-* 'without someone being aware'

The prefix *tom'en*- is used when some participant in the event being described was ignorant or unaware of the event as it was happening. The exact identity of the participant is subject to contextual variability and is therefore determined pragmatically.

Let us look at a few concrete examples to see the interpretive flexibility of *tom'en*-. In (159) a speaker in a different room suspects that her sister and I are passive-agressively arguing with her. Here the deictic center of *tom'en*- is the speaker herself.

(159) Wetom'en'ēã nãkop wat.
w-etom'en-'em-a nãkop wat
1SG-TOM'EN-fight.with-TH MAYBE 2PL
'Perhaps you-PL are fighting with me, without my being aware.'
elicitation: 2017-08-03
(based on casual discourse: 2016-12-11)

In this situation all the participants are animate and human: the speaker, her sister, and me. A comparable example is (160), which is what one speaker said to me after I left town for a few days without providing any advance notice to her or her family members.

(160)	Ètom'enwaro'omka	ke	'en!					
	e- etom'en -wat-ro-'om-ka-a	ke	'en					
	2sg- tom'en -flee-NMZ _{ro} -NEG-VBZ _{ka} -TH POLITE.FUT							
	'Don't go without our-EXCL being aware!'							
	casual discourse: 2016-12-17							

An important difference between (159), on the one hand, and (160), on the other, is that the verb in the former example is transitive – 'em 'fight with' – so all the relevant discourse participants are morphosyntactically represented: the object is first person singular (the speaker), the subject is second person plural (the addressees). The ignorant party to which tom'en- refers in (159) is therefore present in the utterance itself. This is not true for (160), where the verb is intransitive wat 'flee, leave': the only speech act participant overtly represented in the sentence is the second person singular subject, which is to say, the addressee. Nonetheless, the interpretation of tom'en- concerns the speaker and her friends. What this shows, then, is that tom'en- can pick out as its deictic

origo a person or persons who are situationally relevant even if they are not morphosyntactically represented in the utterance.

As both (159) and (160) have agentive human subjects, one might conclude that the core meaning of *tom'en*- is that the agent has failed to proactively inform others of his or her action. However,*tom'en*- does not require the sentential subject to be [+ANIMATE] or even capable of communicating at all. In (161a) (a focus construction) the subject is the bee that stung the addressee. Observe that the evidential *-pne* is necessary here, too, since the speaker did not personally witness the stinging take place. And in (161b) the subject is a pen that has gone missing.

(161) tom'en- can occur with [-HUMAN] or [-ANIMATE] subjects

a. CONTEXT: I feel an itch on my arm and look down to see a small red bump. A local mother looks at my arm to figure out what has happened.

Kapbenãètom'ensipnan.kape nãe-etom'en-si-pnẽ-a-nbee3 FOCUS 2SG-TOM'EN-sting-EV.SG-TH-NUC

'It was a bee that stung you without your being aware (NON-WITNESSED).' casual discourse: 2017-08-29

b. CONTEXT: As I unsuccessfully search for a pen inside of my backpack, a speaker suggests that it might be lying by my feet.

Het'aere $n\tilde{a}kop$ tetom'enyam. het'aere $n\tilde{a}kop \varnothing$ te-tom'en-yẽ-am where.you.are MAYBE 3 3C-TOM'EN-AUX_{hzntl}-ADV.FOC 'Perhaps it's lying where you are, without your being aware.' casual discourse: 2017-09-02

Just as a bee does not verbally communicate its intention to sting, it is impossible for a missing pen to inform anyone about its whereabouts. What these examples show is that the semantic core of *tom'en-* is not about the actor's failure to communicate but rather the patient or experiencer's failure to perceive.

According to the available evidence the ignorant party that serves as the deictic origo for *tom'en*- must be first or second person, not third. Furthermore, the ignorant party to which *tom'en*- is oriented must be distinct from the sentential subject. This requirement may have to do with the

fact that coreference between the subject and the ignorant participant in constructions with *tom'en*would imply unintentional behavior, and such behavior in Tuparí is – at least in the case of first person subjects – encoded with the evidential suffix *-pnẽ/-psira* (§6.5). The relationship between *tom'en-* and*-pnẽ/-psira* is explored in §6.A, which repeats the data given in this subsection.

3.5.4 Procrastinative *pean-* 'first' and negative *tareman-* 'not again'

This subsection discusses the two leftmost adverbial prefixes in the Tuparí verbal complex, *pẽan*-'first' and *tãreman*- 'not again'. Their position in the verb proves that the language makes use of at least some noun incorporation.

Procrastinative *pẽan*- 'first' must have grammaticized from the nominal *pẽan* 'elder, first'. It can attach to both intransitive and transitive stems and causes no valency changes; it contributes the meaning that some other action is being delayed.

(162) Examples of *pean*- 'first'

a. CONTEXT: I run into a friend in the village of Trindade. I am surprised to see her, since I had thought she would still be visiting her elder sister in a different village.

Ham opẽan'ìat'on.ham o-**pẽan**-ip-a-t'onhither 1SG-first-come.SG-TH-NEAR.PAST 1SG'I came here first [before going to my elder sister's].'

casual discourse: 2017-08-21

b. CONTEXT: I ask a friend why she hasn't yet gone to visit her mother's village.

Osìtketepẽan'aorosaAlta Florestàre.o-si-tkete-**pẽan**-aoros-aAlta Floresta-re1SG-mother-NUC POLITE.FUT 3C-first-arrive.SG-TH Alta Floresta-OBL'My mother ought to come back from Alta Floresta first [before I go to visit her].'casual discourse: 2016-02-08

c. CONTEXT: A speaker asks permission to go have coffee before we continue to chat on the phone.

Here	ko	'on	opẽankafekà	owãram.
here	ko	'on	o- pẽan -kafe-ko-a	o-wan-am
so	POLITE.FUT	1sg	1SG-first-coffee-drink-TH	1SG-go.nearby-ADV.FOC

'So let me go a short distance to drink my coffee first [before we continue chatting].' casual discourse: 2017-05-20

Negative *tãreman*- 'not again', meanwhile, indicates that some previous or potential activity will not be repeated again. *tãreman*- must always cooccur with the negative suffix -'*om*, which scopes over it. This prefix thus qualifies as a NEGATIVE POLARITY ITEM in the sense of Giannaki-dou (1998, 2011) and Hoeksma (2000).

- (163) Examples of tareman- 'not again', which must cooccur with negative -'om
 - a. CONTEXT: A Tuparí woman asks if I will continue to return to the community after completing my dissertation.

Papeo nīkaereepoatkarae'anẽke'enpapeo nīk-ap-eree-poatkat-ae-'anẽke'en[paper write-NMZ_{ap}-OBL 2SG-finish-TH 2SG-when.SG] Y/N POLITE.FUT 2SGhamètāreman'ipto'omka?hame-etāreman-ip-to-'om-kahither 2SG-not.again-come.SG-NMZ_{ro}-NEG-VBZ_{ka}

'When you finish writing on paper [=studying], will you not come back here again?' casual discourse: 2017-08-?

b. CONTEXT: A Tuparí woman warns her grandson to behave if he wants an older playmate to pick him up again.

Ètãremankoakiro'omkap'a y'*e*. e-etãreman-koaki-ro-'om-ka-a-p'a y-'e 2SG-not.again-lift-NMZ_{ro}-NEG-VBZ_{ka}-TH-NEAR.FUT 3-AUX.SG

'He's not going to lift you up again.'

casual discourse: 2016-12-06

c. *Watkot'oire*, *wat'epatwara wara kiepe* wat-(y)-kot'oy-re wat-epatwat-a wat-a kiepe 2PL-(OBJ.NMZ)-want-OBL [2PL-die-TH 2PL-when.PL] now *wattãreman'epapokto'omkaro pewarap*. wat-**tãreman**-epapok-to-**'om**-ka-ro pewarap 2PL-**not.again**-return-NMZ_{ro}-NEG-VBZ_{ka}-NMZ_{ro} FUT.2PL 'Because you-PL disobeyed, when you die, you will not return again.' text: Miraci Aguissi Tupari, narrator

Using *tāreman*- without the negative/privative suffix results in total ungrammaticality. Speakers' judgments are categorical in this respect: *tāreman*- can be used only if -'*om* is also present.

- (164) *tāreman-* cannot be used without -'om
 - a. Esìt nẽ tetãreman'ẽkto'om?
 e-si-t nẽ te-tãreman-'ẽk-to-'om
 2SG-mother-NUC Y/N 3C-not.again-dance-NMZ_{ro}-NEG
 'Does your mother not dance anymore?'
 casual discourse: 2016-11-16
 - ** Esìt nẽ tetãreman'ẽka?* elicitation: 2016-11-16 & 2016-11-17

The two prefixes $p\tilde{e}an$ - and $t\tilde{a}reman$ - demarcate the far left edge of the Tuparí verb. They attach outside of all valency-manipulating morphology, such as causativizing m-/ \tilde{o} -, as well as to the left of the adverbial prefixes surveyed in the previous sections (*erote-* 'all', *tom*'en- 'without someone being aware').

- (165) pean- and tareman- occur outside of all other verbal prefixes
 - a. *Pẽanmãkorap'a o*'*e*. peovkipnae. Ø-**pẽan-m**-akot-a-p'a o-'e, peoy-ki-pne-a e 3-first-CAUS-heat.up-NEAR.FUT 1SG-AUX.SG, cold-VBZ_{ki}-EV.SG-TH 3 'I'm going to heat them [the beans] up first, they got cold (NON-WITNESSED).' casual discourse: 2016-02-06 'on wat'ema'erẽ, b. *Opẽan'erotepuop'ora ko* hare. o-**pẽan-erote**-puop'ot-a ko 'on wat-ema'e-re hare 1SG-first-all-learn-TH POLITE.FUT 1SG 2PL-language-OBL here 'First let me learn all of your-PL languages here [before I go to the Guaporé Reserve

to learn the languages there]'. elicitation: 2017-08-03

c. Wetãremantom'enwaro'omkap'a o'e.
w-etãreman-tom'en-wat-ro-'om-ka-a-p'a o-'e
1SG-not.again-TOM'EN-leave-NMZ_{ro}-NEG-VBZ_{ka}-TH-NEAR.FUT 1SG-AUX.SG
'I will not leave again without your being aware.'
elicitation: 2017-08-03

The relationship between *pean*- and *tāreman*-, on the one hand, and incorporated direct objects, on the other, is interrogated in the next subsection.

3.5.5 Noun incorporation as demonstrated by *pean*- and *tareman*-

The previous subsection showed that $p\tilde{e}an$ - 'first' and $t\tilde{a}reman$ - 'not again' occupy the leftmost prefixal position in the Tuparí verb. In fact, these two prefixes can even precede certain direct objects. These objects do not carry the nuclear case and are unmodified. In (166a), the direct object is $p\tilde{e}$ 'clothing'; in (166b) and (166c), it is *arop* 'food, thing, possession'.⁴

- (166) pean- and tareman- can precede incorporated objects
 - a. *Opẽanpè'aepatka* ko 'on õwan. 'on o-wan o-**pẽan-pè**-aepatka-a ko 1SG-first-clothing-change-TH POLITE.FUT 1SG 1SG-go.nearby 'Let me go a short distance to change my clothing first [before I join all of you].' casual discourse: 2016-02-11 b. *Opẽan'aropmã* ko 'on. o-pean-arop-ma-a ko 'on 1SG-first-food-put-TH POLITE.FUT 1SG 'Let me put my food [on my plate] first [before I eat with you].' casual discourse: 2016-02-06 c. Tetāreman'aropkoro'omkap'a *y*'*e*. te-tareman-arop-ko-ro-'om-ka-a-p'a i-'e 3C-not.again-food-eat-NMZ_m-NEG-VBZ_{ka}-TH-NEAR.FUT 3-AUX.SG 'He will not eat his food again.'

elicitation: 2016-11-10

The possessor of the incorporated object does not need to be identical to the sentential subject, i.e., verbs with incorporated objects are not obligatorily intransitivized. In (167a), a first person singular agent acts on a third person singular patient; in (167b), the subject is the first person singular while the object is first person plural inclusive.

(167) Transitive verbs can remain transitive even after incorporation applies

a.	Anomaen	pẽan'arop'õkà	ko	'on.				
	Anomaẽ-n	pẽan-arop -õ-ko-a	ko	'on				
	Anomae-NUC first-food-CAUS-eat-TH POLITE.FUT 1SG							
	'Let me first feed Anomaẽ.'							
	casual discourse	: 2016-11-18						

⁴In keeping with the literature on noun incorporation (Sadock 1980; Mithun 1984), better translations for (166a) through (166c) might be 'Let me go clothing-change first', 'Let me food-put first' and 'He will not food-eat again'.

b. *Kipẽansukonã nã o'e*. ki-**pẽan-suko**-nẽ-a nã o-'e
1PL.INCL-**first-juice**-make-TH PROG 1SG-AUX.SG
'I'm first making our juice / juice for us.'
casual discourse: 2016-12-15

We see from (167b) that at least some loanwords are capable of undergoing incorporation: here the incorporated object is *suko* 'juice', from Portuguese *suco*. Other incorporated loanwords in my corpus of non-elicited, natural discourse include *mãkga* 'mango' and *kafe* 'coffee':

(168) Loanwords can incorporate

- a. Opẽanmãkgakà ko 'on.
 o-pẽan-mãkga-ko-a ko 'on
 1SG-first-mango-eat-TH POLITE.FUT 1SG
 'Let me eat my mango first.'
 casual discourse: 2016-11-10
 b. Here ko 'on opẽankafekà owãram.
- b. *Here ko* on opeankageka owaram. here ko 'on o-**pẽan-kafe**-ko-a o-wan-am so POLITE.FUT 1SG 1SG-**first-coffee**-drink-TH 1SG-go.nearby-ADV.FOC 'So let me go a short distance to drink my coffee first.' casual discourse: 2017-05-20

The linear string provides unambiguous evidence that a direct object has undergone incorporation only when $p\tilde{e}an$ -' or (*e*)t $\tilde{a}reman$ - cooccurs with a possessed – but otherwise morphologically bare – direct object. This is the sole circumstance where the order of suffixes shows that incorporation must have applied; in other cases, the surface string is ambiguous. Note also that in interviews speakers often approve leaving the direct object unincorporated. So there are cases of apparent optionality:

- (169) Optional incorporation with *uoka* 'water'
 - a. *Uoka pẽankà ko 'on.* **uoka pẽan**-ko-a ko 'on **water first**-drink-TH POLITE.FUT 1SG 'Let me drink water first.' casual discourse: 2016-11-09

b. Opẽan'uokakà ko 'on.
o-pẽan-uoka-ko-a ko 'on
1SG-first-water-drink-TH POLITE.FUT 1SG
'Let me drink (my) water first.'
elicitation: 2016-11-10

Certain direct objects will resist incorporation. As a general rule, speakers reject incorporating objects that are [+ANIMATE] or [+HUMAN]. Hence *a'usi* 'wife' must occur outside of $p\tilde{e}an$ - in the following example.

(170) [+ANIMATE] or [+HUMAN] objects resist incorporation

- a. *Tea'usi pẽanpara ke*.
 te-a'usi pẽan-pat-a ke e
 3C-wife first-marry-TH POLITE.FUT 3
 'He ought to take a wife first.'
 elicitation: 2016-11-17
- b. * *Tepẽan'a'usipara ke*.
 te-**pẽan-a'usi**-pat-a ke e
 3C-**first-wife**-marry-TH POLITE.FUT 3
 intended: 'He ought to take a wife first.'
 elicitation: 2016-11-17

While there are some configurations that make object incorporation possible, others prohibit it from taking place; and I know of no circumstances that render it obligatory.

Noun incorporation is well-known from other branches of Tupían, including Tupi-Guaraní (Rodrigues 2013[1953], Seki 2000b:143–46, Praça 2007:132–26), Mundurukú (Gomes 2008) and Mondé (Moore 1985). The examples in this subsection may constitute the first clear cases of incorporation among the Tuparían languages.

3.5.6 Summary of adverbial prefixes

In this section we have examined the morphological position and semantic contribution of several adverbial prefixes. While dismissive *tat*- 'just' was described in previous works on Tuparí (Caspar and Rodrigues 1957:§3.3.3.1.3), the other prefixes have been described for the first time here. Whether these newly-described prefixes were innovated more recently than when Caspar and Ro-

drigues's (1957) work was written, or whether they were already productive in the language at that time, is unknown.

Certain properties of Tuparí morphophonology provide an easy pathway for independent adverbs to be reanalyzed as bound verbal prefixes. In §2.2.2 we saw that the omission of overt direct objects prior to transitive verbs is possible when (*a*) the verb is consonant-initial and (*b*) the direct object is third person. Hence the overt third person proclitic $s - \sqrt{i} - \sqrt{y}$ - may be replaced by the null allormoph prior to the consonant-initial verb $m\tilde{a}$ 'place in a container', but not prior to verb-initial $\tilde{o}r\tilde{o}k$ 'place flat on a surface':

(171) Vowel-initial transitive verbs do not accept the null third person proclitic

- a. *Mã!*Ø-mã **3-**place.in.container
 'Place [it] in!'
 common in everyday speech
- b. *Imã*!
 i-mã
 3-place.in.container
 'Place it in!'
 common in everyday speech
- c. Yõrõk!
 y-õrõk
 3-place.on.surface
 'Put it down!'
 common in everyday speech
- d. *Õrõk!

This is locally-conditioned allomorphy on the part of the third person pronominal proclitics: these proclitics care about whether the immediately subsequent segment is a vowel or a consonant, but pay no attention to whether that segment belongs to the verbal root itself or to a prefix. So if one adds the vowel-initial prefix *erote-/irote-* 'all' to a verb like $m\tilde{a}$, the proclitic ceases to be optional. Compare (172a) (consonant-initial verb; third person proclitic need not be overt) against (172b) (vowel-initial verb; third person proclitic cannot be null).

(172) Adding erote- 'all' to a consonant-initial verbal root forces proclitic to be overt

- a. Mã!
 Ø-mã
 3-place.in.container
 'Place [it] in!'
 common in everyday speech
- b. Sirotemã!
 s-irote-mã
 3-all-place.in.container
 'Put all of it [in your bowl]!'
 casual discourse: 2016-02-09

The practical effect of this allomorphy is that consonant-initial transitive verbs frequently surface without any overt object. Now, if a consonant-initial adverb surfaces prior to such a verb, the string will be ambiguous: is the null third person proclitic occurring to the left or the right of the adverb? Consider (173), where *tat*- 'just' attaches to *kot'oy* 'want'. The object here – understood from discourse to refer to *kõãtek* 'palm grubs' – is null.

(173) CONTEXT: A speaker who lives in Alta Floresta D'Oeste discusses what she will do if her mother doesn't send her fresh *kõãtek* 'palm grubs' from the village.

Here tatkot'oa oyam'a o'e. here ∅-**tat**-kot'oy-a o-yẽ-a-m'a o-'e then 3-**just**-want-TH 1SG-AUX_{hzntl}-TH-NEAR.FUT 1SG-AUX.SG 'Then I'll just be wanting it/some, sitting down.' casual discourse: 2018-01-22

There are two plausible parses for this utterance: *tat* could be analyzed as occurring to the left of the null object, in which case it is a syntactic element independent of the verb itself; or the null proclitic could be analyzed as attaching to the left of *tat*, such that the adverb has been reanalyzed as a verbal prefix. This ambiguity is schematized in Table 3.2.

There is independent evidence that the two different parses shown in Table 3.2 remain available synchronically for *tat*, at least in some contexts. In (156), above, we saw four examples of *tat*-attaching inside of overt proclitics at the left edge of the verb. In such cases the only possible

String	Parse		Analysis
tat kot'ov	tat Ø-kot'oy	\rightarrow	<i>tat</i> - is an element independent of the verbal word
tat kot oy	Ø-tat-kot'oy	\rightarrow	<i>tat-</i> is a prefix on the verb

Table 3.2: Two possible parses with consonant-initial transitive verbs

analysis is one where the adverbial is a prefix within the verbal word. But what appears to be the same morpheme is attested attaching to the left of overt proclitics, as well:

(174) CONTEXT: My friend and I are listening to the radio in one of the villages. It is difficult to hear anything, and I suggest that perhaps no one is speaking anymore. My friend disagrees.

Tèma'ã	nã	i'anẽ	wan'om	tat	kiapsi'ap	erop'ae.		
te-e-ma'ẽ-a	nã	i-'anẽ	wan'om	tat	ki-apsi'e-ap	erop'a	e	
3C-INTRNS-speak-TH	PROG	3-AUX _{go} .PL	yet	just	1PL.INCL-hear-NMZ _{ap}	bad/hard	13	
'They are speaking but it is just hard for us to hear.'								
casual discourse: 2017-08-17								

Since absolutive proclitics demarcate the far left edge of the verbal word, the only possible parse in this utterance is that *tat*- does not belong to the verb. It instead has independent status.

The diachronic pathway illustrated here for *tat* 'just' may explain the means by which the Tuparí verbal complex has accumulated so many more adverbial prefixes than are reported for its sister languages.

3.6 Suffixal morphology (positions S2, S3, S4, S5, S6, and S7)

This section examines the verbal morphemes realized as suffixes rather than prefixes. The resultative *-psẽ/-pnẽ/-psira* sits in position S2, immediately after the root of the lexical verb, whereas the evidential *-pnẽ/-psira* immediately follows the highest verbal or auxiliary root (S5). In other words, much of the burden of distinguishing between these sometimes homophonous affixes is accomplished by their distinct positions within the predicate complex. This section also examines the conditional *-kot'oy*, which sits in the same position (S5) as evidential *-pnẽ/-psira*, and the two verbal tense suffixes *-t* 'NEAR.PAST' and *-pbi'a* 'DUR'. The latter suffixes occupy the rightmost suffixal position in the entire predicate complex. Their relationship to the language's broader system of tense marking is discussed in Chapter 5.

3.6.1 Resultative *-psẽ/-pnẽ/-psira* (S2) and evidential *-pnẽ/-psira* (S5)

The resultative suffix *-psē/-pnē/-psira* and the evidential suffix *-pnē/-psira* exhibit some homophony and may even be confused with one another in a limited set of grammatical contexts. In general, however, their distributions are different; what is more, the semantic contributions made by each of the two suffixes are distinct. Readers interested in the meaning and morphosyntactic behavior of the resultative and the evidential are referred to Chapter 6. In the interest of space, I will simply provide a few representative examples of each of the two morphemes here.

Evidential *-pnẽ/-psira* is used in declaratives and a subset of non-declarative clause types to indicate that the deictic origo (typically the speaker) did not witness p take place.

- (175) Evidential -pnē/-psira indicates that the event being related was not witnessed
 - a. *Pamẽkgen õpot* mõket malokare ototonã mõket maloka-re Pamẽk-en õpot o-toto-ne-a Pamek-NUC DISTANT.PAST long.ago maloca-OBL 1SG-grandfather-VBZne-TH tero'a te'ekapnã. tero'e-a te-'eka-pne-a AUXgo.SG-TH 3C-AUX.SGhabit-EV.SG-TH 'Pameek was my grandfather in the maloca [communal long house] (NON-WITNESSED).' casual discourse: 2017-08-04 b. *Mõket* kut kire'õerẽ. kiakoet koepa eanã
 - mõket kutkire-'om-erekiakop-et koepa eanãlong.ago ANCIENT.PAST person-NEG-OBL sun-NUCmoon together.withkirenãsoro'epsira.kire-nẽ-as-oro'e-**psira**person-VBZ $_{n\tilde{e}}$ -TH 3-AUXgo.PAUC-EV.PL'Long ago, when there were no other people, the sun and the moon were people (NON-WITNESSED).'text: Isaias Tarimã Tupari, author

While the evidential and the resultative both show a singular/plural contrast, the resultative also distinguishes physical position in the singular: horizontal *-psẽ* versus vertical *-pnẽ*. This contrast is illustrated by the following paradigm, discussed also in 6.8.

(176) Resultative -psē/-pnē/-psira marks positional contrast in the singular

a. CONTEXT: I go off to shave my beard and then return to my friend's house. I am sitting down when my friend says this to me.

Èpotekapsã'en eoyẽhaetatpe.e-epoteka-**psẽ**-a'en e-oyẽhap-etat-pe2SG-change-**RSLT.SG.HZNTL-**TH2SG 2SG-mouth hair-NUC cut-after'You are changed (SITTING), having shaved off your beard.'casual discourse:2017-08-09

b. CONTEXT: How example 176a would be spoken to someone who is standing up.

Èpotekapnã	'en	eoyẽ	haet	atpe.
e-epoteka- pnẽ -a	'en	e-oyẽ	hap-et	at-pe
2sg-change-RSLT.SG.VRTCL-TH	2sg	2sG-mouth	hair-NUC	cut-after

'You are changed (STANDING), having shaved off your beard.'

elicitation: 2017-08-14

(based on casual discourse: 2017-08-09)

c. CONTEXT: How example 176a would be spoken to an in-law, who must be addressed as paucal rather than singular (§2.6.3).

Wat'epotekapsira	wat	wat'õyẽ	haet	atpe.
wat-epoteka- psira -a	wat	wat-oyẽ	hap-et	at-pe
2PL-change-RSLT.PL-TH	2PL	2PL-mouth	hair-NUC	cut-after

'You-PAUC are changed (**POSITION UNSPECIFIED**), having shaved off your-PAUC beard.'s

elicitation: 2017-08-14

(based on casual discourse: 2017-08-09)

I use the label RESULTATIVE for *-psē/-pnē/-psira* because this suffix meets the core typological criteria of Nedjalkov and Jaxontov (1988) and Nedjalkov (2001). See Chapter 6.

3.6.2 Conditional *-kot'oy* (S5)

The counterfactual conditional suffix *-kot'oy* is often paired with a protasis consisting of a VP that has been nominalized by *-ap* plus the oblique case ending *-ere*.⁵ Templatically, *-kot'oy* attaches

⁵In her discussion of the cognate construction in Sakurabiát, Galucio (2011b) observes that VPs that have been nominalized with *-ap* and then take the oblique case ending can be used in both realis and irrealis contexts. Tuparí, however, has a special non-counterfactual counterpart to *-ap* plus *-ere*: the subordinator (*')a* 'if, when'. The glottal stop in this subordinator occurs only with singular subjects. For examples of (*')a* 'if, when' in this chapter, see (110), (113), (116a), (147e), and (163c).

in the exact same suffixal position as evidential $-pn\tilde{e}/-psira$. The mutual exclusivity between the conditional and the evidential need not be stipulated in the morphology, since the two suffixes are in fact semantically incompatible: -kot'oy is used to mark unrealized events that would take place if some counterfactual condition were satisfied, whereas $-pn\tilde{e}/-psira$ can be used only when the speaker's commitment to p is presupposed (see Chapter 6). Hence -kot'oy and $-pn\tilde{e}/-psira$ require incompatible epistemic commitments on the part of the speaker.

(177) shows basic examples of *-kot'oy* with the oblique-marked protases also highlighted. Note from (177c) that *-kot'oy* attaches outside of negative *-'om* and will therefore require that reverbalization with *-ka* take place after *-'om* has attached (§3.2.6).

- (177) -kot'oy occurs in the apodosis of counterfactual conditionals
 - a. *Tambakipsironaerẽ* 'on ipekkot'oy herõwap nõ.
 tambaki-psiro-nẽ-**am-ere** 'on i-pek-**kot'oy** herõwap nõ
 tambaqui-POSS-VBZ_{nẽ}-NMZ_{ap}-OBL 1SG 3-buy-COND yesterday other
 'If there had been tambaqui [in the city] I would have bought it the day before yesterday.'

casual discourse: 2017-08-17

- b. *Presidentenã* eo'aere, katke 'en irik'enẽkot'oy?
 presidente-nẽ-a e-o'e-**ap-ere** katke 'en irik'e-nẽ-**kot'oy**?
 president-VBZ_{nẽ}-TH 2SG-place.upright-NMZ_{ap}-OBL how 2SG work-VBZ_{nẽ}-COND
 'If they placed you [=chose you] as president, how would you do the job?'
 casual discourse: 2017-08-17
- c. $\dot{E}ma'er\tilde{e}$ puopnaer \tilde{e} 'on e-ema' \tilde{e} -ere puop-n \tilde{e} -**am-ere** 'on 2SG-language-OBL knowledgeable-VBZ_{n \tilde{e}}-NMZ_{ap}-OBL 1SG eprecisaner \tilde{o} 'omkakot'oy. e-precisa-n \tilde{e} -ro-'om-ka-**kot'oy** 2SG-need-VBZ_{n \tilde{e}}-NMZ_{ro}-NEG-VBZ_{ka}-COND 'If I were knowledgeable of your language, I wouldn't need you [to teach me].' casual discourse: 2016-02-03

Conditional *-kot'oy* can also combine with tense morphology, such as near past *-t* or distant past *opot*, to produce a past counterfactual:

- (178) *-kot'oy* can occur with overt tense morphology
 - a. *Mãkinamsironaerē* irowakot'oat 'on mãkinã-msiro-nē-**am-ere** irowa-**kot'oy**-a-t 'on camera-POSS-do-NMZ_{ap}-OBL take.picture-COND-TH-NEAR.PAST 1SG *kipotoapnã*. ki-potop-ap-nē-a 1PL.INCL-view-NMZ_{ap}-do-TH 'If I had had a camera, I would have taken a picture for us to view.' text: Isaias Tarimã Tupari, author
 - b. CONTEXT: The speaker is describing a hunt from years before.

Pensironaerẽ $\tilde{o}pot$ 'on isikot'oy.pen-siro-nẽ-am-ere $\tilde{o}pot$ 'on i-si-kot'oygun-POSS-VBZ_{nẽ}-NMZ_{ap}-OBL DISTANT.PAST1SG 3-shoot-COND'If I had had a gun, I would have shot it.'casual discourse: 2016-12-15

That *-kot'oy* may combine with *-t* 'NEAR PAST' and $\tilde{o}pot$ 'DISTANT PAST' indicates that the conditional suffix does not belong to the tense system proper. As discussed in greater length in Chapter 5, no tense morphemes in Tuparí may cooccur in the same clause; they are all mutually exclusive. Note, further, that whereas true tense morphology always attracts the weak nominative enclitics (see Chapter 5), this does not occur with *-kot'oy* in (177a), (177b), (177c), or (178b): in these examples, the enclitic does not follow the conditional morpheme. For these reasons it is necessary to analyze *-kot'oy* as an inflectional affix independent of tense.

Conditional -*kot'oy* appears to be a recent grammaticization from the transitive lexical verb *kot'oy*~*kot'oa* 'want', with which it is homophonous. With both the lexical verb 'want' and the conditional suffixes, the final [c[¬]] (orthographic y) disappears when followed by the theme vowel -*a*. But even though *kot'oy* 'want' and -*kot'oy* 'CONDITIONAL' share similar morphophonology, they differ in a crucial respect: the conditional attaches directly to the verb stem, whereas 'want' takes as its direct object a VP that has been nominalized with -*ap* (§3.7.2). (179) illustrates. Here the contrast between *kot'oy* 'want' and -*kot'oy* 'CONDITIONAL' is especially clear, as the lexical verb is the same in the protasis and the apodosis: *puop'ot* 'learn'.

(179) Tepuop'orap kot'oaere, tepuop'otkot'oy. te-puop'ot-**ap kot'oy**-ap-ere \emptyset te-puop'ot-**kot'oy** 3C-learn-NMZ_{ap} **want**-NMZ_{ap}-OBL 3 3C-learn-COND 'If they wanted to learn, they would learn.' casual discourse: 2016-12-17

Whereas the lexical verb 'want' requires its VP complement to bear the nominalizer *-ap*, the conditional suffix attaches directly to *puop'ot* 'learn'. This consistent difference in the morphological shape of the complement ensures that *kot'oy* 'want' (a normal transitive verb) and *-kot'oy* 'CONDI-TIONAL' (an inflectional affix) cannot be mistaken for one another. See §3.7.2 for more examples of *kot'oy* 'want' selecting a nominalized VP complement.

3.6.3 Near past -*t* and durative tense -*pbi'a* (S7)

These two suffixes belong to the system of tense markers in Tuparí. This system includes auxiliary morphemes and 2P tense particles, as well, as detailed in Chapter 5. Here I describe the major empirical generalizations surrounding *-t* and *-pbi'a*. First, they occupy the rightmost suffixal position in the Tuparí verbal complex, on top of the highest auxiliary (if one is present).

(180) Near past -*t* attaches at the right edge of the Tuparí verbal complex

a.	Haytokia nẽ sitèsat haytokia nẽ s-ute-s-a- t a.lot Y/N 3-COM-come.Se 'Did you bring a lot?' casual discourse: 2016-11-23	'en? 'en G-TH-NEAR.PAST 2SG	
b.		nẽ wat-eue-pat-a- t Y/N 2PL-RCP-marry-TH- NEAR.P	<i>wat?</i> wat AST 2PL
	(based on casual discourse: 2016-12	2-14)	
c.	<i>Here otewãrã</i> here ote-wan-a then 1PL.EXCL-go.nearby-TH 'Then we-EXCL went a short of	oteoro'at ote-oro'e-a- t 1PL.EXCL-AUX _{go} .PAUC-TH- NE A distance.'	' <i>ote</i> . 'ote AR.PAST 1PL.EXCL

text: Nilson Tupari, narrator

- (181) Durative tense -pbi'a attaches at the right edge of the Tuparí verbal complex
 - a. Siroteõpuopma'ambi'a 'on. s-irote-õpuopma'ẽ-a-mbi'a 'on 3-all-teach-TH-DUR 1SG 'I taught all of them [the Tuparí language].' casual discourse: 2016-12-15 b. *Here herop pora nã* terapbi'ae òwet, tarupa'eat here herop pore-a nã tet-a-**pbi'a** tarupa-'eat e o-op-et, rubber cut-TH FOCUS go.SG-TH-DUR 3 1SG-father-NUC non.indigene-MANY so aropnã. aropnã for 'So my father would go off to tap rubber for the white folks.' text: Pedro Kup'eoyt Tupari, narrator c. *Mãkorapi'earet* te'anambi'a. õpuopma'ã o-õpuopma'ẽ-a te-'anẽ-a-mbi'a Mãkorapi-'eat-et Makurap-MANY-NUC 1SG-teach-TH 3C-AUXgo.PL-TH-DUR 'The Makuraps used to teach me [their language].'

elicitation: 2018-04-08

(based on casual discourse: 2016-02-04)

As they occupy the rightmost suffixal position, -t and -pbi'a sit farther away from the root than

do derivational suffixes such as the post-negation verbalizer -ka:

(182) Near past -t and durative -pbi'a attach outside of derivational suffixes

a.	Ikiret	etèyto'omkat		nẽ	'en?
	i-kit-et	ete-s-to-'om- ka -a-t		nẽ	'en
	3-seed-NUC	C COM-come.SG-NMZ _{ro} -NEG-VB	Z _{ka} -TH-NEAR.PAST	Y/N	2sg
	'Did you no	ot bring the seeds?'			
	casual discour	rse: 2015-12-24			
b.	<i>Ãto</i>	koro'omkapbi'ae	Tuparit.		
	ãto	ko-ro-'om- ka -a- pbi'a	e Tupari-t		
	earthworm	eat-NMZ _{ro} -NEG-VBZ _{ka} -TH-DUR	3 Tuparí-NUC		
	'The Tupar	i do not/did not eat earthworms.'			

casual discourse: 2016-11-13

For semantic reasons discussed at greater length in §6.9, the durative *-pbi'a* does not combine with the evidential suffix *-pnẽ/-psira*. The near past *-t*, however, can and does combine with the

evidential:

(183) Near past -t attaches outside of evidential -pnē/-psira

- a. Isipnarẽ mõket.
 i-si-pnẽ-a-n e mõket
 3-spear-EV.SG-TH-NEAR.PAST 3 long.ago
 'He speared it a while back (NON-WITNESSED).'
 casual discourse: 2015-11-06
 b. Yõpopsirae.
 y-õpo-psira-a-t e
 - 3-kill-EV.PL-TH-NEAR.PAST 3 'They killed it (NON-WITNESSED).' casual discourse: 2016-02-16

For more details on *-t* and *-pbi'a* – and for evidence that they belong to a broader class of tense morphology, including the 2P particles ko/ke 'POLITE FUTURE', $\tilde{o}pot$ 'DISTANT PAST', and kut 'ANCIENT PAST' – see Chapter 5.

3.6.4 Adverbial focus *-ap* (S7)

The final morphological slot of the Tuparí predicate complex can host not only near past -t and durative -pbi'a but also the adverbial focus suffix -ap, a suffix whose distribution is sensitive to information structure. This suffix does not occur on auxiliaries and cannot cooccur with the near past -t or durative -pbi'a. What is more, it is often absent when the clause-initial adverb is not a *wh*-word. The description I give here is necessarily brief; the question of this morpheme's distribution is addressed more extensively in Singerman (In preparation a).⁶

Adverbial focus *-ap* can appear on the lexical verb only when the following three conditions are satisfied: the clause-initial constituent is an adverbial; no auxiliaries are present; and the verb is not marked with near past *-t* or durative *-pbi'a*. Note that even though *-ap* does not cooccur with *-t* 'NEAR PAST' or *-pbi'a* 'DURATIVE', it is fully compatible with 2P tense particles. In the following

⁶Alves (2004) calls this suffix the 'second indicative' (Portuguese *indicativo II*) following the terminological practice of Rodrigues (2013[1953]). Her description states that this suffix 'occurs in utterances that start with a circumstancial complement of time, place, manner, etc' ('ocorre em orações iniciadas por um complemento circunstancial de tempo, lugar, modo, etc.') (Alves 2004:§4.3.2.2). For more recent work on the second indicative in Tupi-Guaraní, see Praça et al. (2017).

examples both the adverbial focus suffix itself and the clause-initial adverbials that trigger that suffix are bolded.

(184) Basic examples of adverbial focus -ap

a.	Katkaere ke katkaere ke when POLITE.FU' 'When are you going casual discourse: 2016-01	back again to yo	- am G-again-ADV.FOC	ekuydyo? e-kuy-o 2SG-land-INS
b.	Pare mãkērõ õpot pare mãkērõ õpot where DUNNO DISTA 'I don't know where y casual discourse: 2017-08	'en ev NT.PAST 2SG yc you hung up you	vaet ãpe-a our.hammock hang	1p
c.	Apo yope'enapo yope'enwho along.with 2SG'Who did you hitch acasual discourse: 2016-12	e-s- ap 2SG-come.SG-A ride with yestero		
d.	Haytokia 'on ko, her haytokia 'on ko, her	e 'on weurap re 'on w-eut-a then 1SG 1SG-ge ill.'	ар	
e.	[genipapo-NUC chev	pp-pe ke w-after] POLITE ed the genipapo,		
f.	~			

casual discourse: 2016-11-15

It is possible for an oblique-marked embedded finite clause of the sort described in Singerman (2018 [to appear]) (see also §6.7) to serve as the clause-initial adverbial:

Adãon (185) *Yã*, apait tèynã ke y'e here nẽ te-s-nẽ-a ke v-'e Adão-n yã apay-t here nẽ mom [[aunt-NUC 3C-come.SG-EV.SG-TH] say 3-AUX.SG Adam-NUC] HÈ.OBL Y/N 'en eapsi'ap? 'en e-apsi'e-ap 2SG 2SG-hear-ADV.FOC 'Mom, did you hear that Adam said that my aunt arrived (NON-WITNESSED)?' casual discourse: 2017-08-03

Importantly, the adverbial focus suffix cannot appear when the verb is marked for the near past or durative:

(186) No adverbial focus when verb bears tense morphology

a.Pareharettoatwat?parehat-ettop-a-twatwheresnake-NUCsee-TH-NEAR.PAST2PL'Wheredid you-PLsee the snake?'casual discourse:2016-01-01

b. Ham nẽ èsap kot'oapbi'a 'en mõket?
ham nẽ e-s-ap kot'oy-a-pbi'a 'en mõket
hither Y/N 2SG-come.SG-NMZ_{ap} want-TH-DUR 2SG long.ago
'Did you want to come here already a while back?'
casual discourse: 2016-02-10

It also cannot appear when an auxiliary of any sort is present:

(187) No adverbial focus when an auxiliary is present

a.	Pam	wat'ora	wat'i?	
	pam	wat-ot-a	wat-'i	
	whither	2PL-go.PAUC-	TH 2PL-AUX.PL _{moving}	
	'Where	are you-PAUC	going off to?'	
	casual dis	course: 2016-02-0	07	
b.	Katkaer	e Serrinham	eterap'a	'eronã?
	katkaer	e Serrinha-m	e-tet-a-p'a	'e-ronã
	when	Serrinha-INS	2SG-go.SG-TH-NEAR.FUT	AUX.SG-again
	'When a	re you going to	o go back to Serrinha?'	
	casual dis	course: 2016-02-0	07	

Note that *-ronã* 'again' in this last example cannot be responsible for the absence of the adverbial focus suffix, since *-ronã* cooccurs with *-ap* 'ADVERBIAL FOCUS' without problem in (184a).

For reasons of space I do not offer a full analysis of the adverbial focus suffix here. I must however note that there is considerable interspeaker variation outside of the core cases shown in (184a) through (184c). One of my consultants (an excellent speaker in her early twenties) uses *-ap* 'ADVERBIAL FOCUS' with all clause-initial adverbials; this suffix was present, for instance, when she spoke (188a). But some slightly older consultants (late twenties/early thirties) prefer this utterance without the adverbial focus suffix, as in (188b).

(188) <u>Alternation of adverbial focus suffix with non-wh adverbial</u>

- a. Hoy'ãēnã 'on nemnam.
 hoy'ãēnã 'on Ø-nē-mnē-am
 too.sweet 1SG 3-make-EV.SG-ADV.FOC
 'I made it [=the coffee] too sweet (NON-WITNESSED).'
 casual discourse: 2017-08-?05
- b. Hoy'ãēnã 'on nemnē.
 hoy'ãēnã 'on Ø-nē-mnē
 too.sweet 1SG 3-make-EV.SG
 'I made it [=the coffee] too sweet (NON-WITNESSED).'
 elicitation: 2017-08-06

At present the most I can say is that some speakers prefer to use the adverbial focus suffix with all clause-initial adverbials, whereas others use it only when the initial adverbial is [+wh]: *katkaere* 'when', *pare* 'where, from where', *pam* 'where to', *apo eanã* 'with whom', etc. This variation will be addressed in Singerman (In preparation a).

3.7 Deverbalizing morphology

In contrast to the previous sections of this chapter, which describe the morphological building blocks that make up the Tuparí verb, this section details several morphemes that turn verbs into other parts of speech – in particular, nouns. I focus here on the passive-like *-psit*, the multipurpose nominalizer *-ap*, and the actor nominalizer *-at*. The latter two suffixes trigger the same phonological changes that the theme vowel *-a* does, which could be interpreted as evidence that that they in fact contain the theme vowel within them. This set of phonological changes is discussed in Appendix A.

An additional nominalizer, the gerundive $-ro \sim to$, is discussed in separate work (Singerman 2018); see also §4.4 for the role of $-ro \sim to$ within the distant future auxiliaries. Another nominalizer not addressed here is the object-focusing *y*-. As this suffix's behavior makes sense only when situated within the broader context of the information structural properties of Tuparí clausal organization, I refer the reader to Singerman (In preparation a) for more discussion.

3.7.1 Passive-like -psit

The suffix *-psit* attaches directly to verbal stems that have not undergone any form of inflection. I label this suffix as PASS(IVE-LIKE) since its usage and meaning often correlate to the passive participles of more familiar languages: it suppresses the agent of a transitive predicate.

- (189) Basic examples of *-psit*
 - a. CONTEXT: I ask a speaker whether she enjoys eating roasted fish; she says yes, but that it's not her favorite.

Sutsireoyhi'ata'atèt.sut-site o-y'-hi'ata'ate-tcook-PASS 3 1SG-OBJ.FOC-love the.most-NUC'The cooked [fish] is what I love the most.'casual discourse: 2016-12-01

b. CONTEXT: A speaker explains what went into the delicious *bolinhos de arroz* that she made with her daughter.

Aroy sutsitnemsire. aroy sut-**sit**-nẽ-**msit** e rice cook-**PASS**-VBZ_{$n\tilde{e}$}-**PASS** 3 'They're made of cooked rice.'

Note the recursion in (b), where the nominal *aroy sutsit* 'cooked rice, rice that is cooked' is verbalized with $-n\tilde{e}$ 'VBZ_{$n\tilde{e}$}' and then hosts a second *-psit*.

That *-psit* performs deverbal nominalization is clear from the fact that the negative/privative suffix *-'om* may attach on top of it. As detailed in Singerman (2018) (see also §3.2.6, above), *-'om* can only ever attach to nominal bases. The fact that *-'om* may attach on top of *-psit* thus shows that *-psit* turns something verbal into something nominal.

- (190) Nominalization with -psit can feed negation with -'om
 - a. CONTEXT: A grandmother explains why her two pet parakeets (in Tuparí: *kurup'i*) do not enjoy playing with people.

Sakup'ek'akup'ekkapsit'om nãpe, tepop'a saka. s-akup'ek'akup'ek-ka-**psit-'om** nãpe, te-pop'e-a s-aka 3-[handle]²-VBZ_{ka}-**PASS-NEG** since 3C-fear-TH 3-AUX.PL

'Since they are not handled much / are not much-handled things, they get scared.' casual discourse: 2016-11-12

b. CONTEXT: A mother tells her dinner guest not to be embarrassed after burping.

Kisaup'ap	kot'oaet	teksit'om.
ki-saup'e-ap	kot'oy-ap-et	tek-sit-'om
1PL.INCL-burp-NMZ _{ap}	want-NMZap-NUC	hold-PASS-NEG

'One's wanting to burp is not to be held in / is not a held-in thing.'

casual discourse: 2017-08-28

c. CONTEXT: A man jokingly tells me not to mourn a pet *kurupsip'a* (a dusky-headed conure; *Aratinga weddellii*) that died the year before.

Sitewaksit'ommẽ. s-ite-wak-**sit-'om** e 3-COM-cry-**PASS-NEG** 3 'It is not something to miss / is not a missed thing.' casual discourse: 2017-08-13

As (191) shows, a derived nominal in *-psit* that has been negated with *-'om* can undergo subsequent

reverbalization with the light verb nē:

(191) CONTEXT: A woman explain what her interlocutor will have to do if he does not want to be laughed at.

Iwaywaykipsit'omnã nãpe ke 'en etet'e! i-waywayki-**psit-'om-nẽ**-a nãpe ke 'en e-tet'e 3-laugh.at-**PASS-NEG-VBZ_{nẽ}-**TH REALLY?! POLITE.FUT 2SG 2SG-AUX_{go}.SG

'Well, you shouldn't be so laughable!'

casual discourse: 2017-09-01

3.7.2 Nominalizer -ap

The nominalizer *-ap* is ubiquitous in Tuparí speech. That this suffix performs a nominalizing function is clear from several distributional facts. First, a verb marked with *-ap* may function as a

sentential subject; in this function it takes the nuclear case, just like non-derived NP subjects.

- (192) Nominalizer -ap builds sentential subjects out of VPs
 - a. *Poare kimamsãen.*poat e ki-mã-msẽ-**am-en**good 3 1PL.INCL-place-RSLT.SG.HZNTL-NMZ*ap*-NUC
 'It's good to be lying down, placed within [a hammock].'
 casual discourse: 2016-11-27
 - b. Poat nẽ kuydyoem tettetkaet?
 poat nẽ e kuydyoem tettet-ka-**ap-et**good Y/N 3 by.foot go.SG²-VBZ_{ka}-NMZ_{ap}-NUC
 'Is it good to walk around by foot?'
 casual discourse: 2016-02-04
 - c. Tòkge èsaet, kurem nã èy!
 tòk e e-s-ap-et, kurem nã e-s
 distant 3 2SG-come.SG-NMZap-NUC now FOCUS 2SG-come.SG
 'Your coming/returning is far off, come now!'
 casual discourse: 2016-06-11

Second, several transitive verbs can select a verb phrase marked with *-ap* as their complement. This is especially common among verbs which would for semantic reasons be classified as control predicates, such as *kot'oy* 'want', *ma'ẽ* 'say, order, command', *'eaopka* 'attempt, try', *ket'eka* 'do somewhat', *ta'ateka* 'do truly, do for real', and *atapsika* 'begin to do'. (193) illustrates with *kot'oy~koroy* 'want'.

(193) Transitive kot'oy 'want' can take a nominalized VP complement

- a. *Emamsam* koroy'om nẽ 'en? e-mã-msẽ-**am** koroy-'om nẽ 'en 2SG-place-RSLT.SG.HZNTL-**NMZ***ap* want-NEG Y/N 2SG 'You don't want to lie down (in the hammock)?' casual discourse: 2016-11-27
- b. Ham nẽ èsap kot'oapbi'a 'en mõket? ham nẽ e-s-ap kot'oy-a-pbi'a 'en mõket hither Y/N 2SG-come.SG-NMZap want-TH-DUR 2SG long.ago 'Did you want to come here already a while back?' casual discourse: 2016-02-10

There are also some transitive verbs that prefer to take a direct object marked with the nuclear case *-et/-t*. It is possible for this case to attach on top of *-ap*. (194) exemplifies with *morẽ* 'throw, discard, stop'.

(194) CONTEXT: A speaker explains that the residents of his village no longer consume alcohol.

Uape kaetmorãõpot'oteote'anẽ.uape ko-ap-etmorẽ-aõpot'oteote-'anẽchicha drink-NMZap-NUC stop-TH DISTANT.PAST1PL.EXCL1PL.EXCL-AUXgo.PL'We-EXCL stopped drinking chicha.'casual discourse: 2016-11-29

A third reason to classify *-ap* as a nominalizer concerns the structural organization of clauses whose predicates are verbs marked with this suffix. Using a verb phrase marked with *-ap* as a predicate gives rise to a modal reading with an unspecified generic subject ('one').

(195) Predicates marked with the nominalizer -ap give generic modal readings

a.	Yõ'era	ko	'on, eret	tõarõnammẽ.	
	y-õ-'et-a	ko	'on, eret	tõã-ronã- am	e
	3-CAUS-sleep-TH	I POLITE.FUT	1sg tomorrow	burn-again-NMZ <i>ap</i>	3
	'I am going to pu	t it [the candl	e] out. One is t	o relight it tomorroy	<i>w</i> .'
	casual discourse: 20	16-01-19			

- b. Sokare kisot'ayto'omkapbe, Adãõ. soka-re ki-sot'ay-to-'om-ka-**ap** e Adãõ cold-OBL 1PL.INCL-die-NMZ_{ro}-NEG-VBZ_{ka}-NMZ_{ap} **3** Adam 'We/one mustn't die from the cold, Adam.' casual discourse: 2016-12-21
- c. CONTEXT: A speaker reacts with disgust upon seeing a giant snake on the television.

Kiẽken'ẽkenkap	kot'oapbe		hè.	
ki-ẽken'ẽken-ka-ap	kot'oy- ap	e	hè	e
$[1PL.INCL-[vomit]^2-VBZ_{ka}-NMZ_{ap}]$	want-NMZ <i>ap</i>	3]	НÈ	3
'It is something that makes one/us v	vant to barf.'			
casual discourse: 2017-08-?13				

As is detailed in Chapter 5 and in Singerman (2018), nominal predicates in Tuparí never bear the inflectional categories of tense, aspect, and evidentiality, which are ubiquitous in verbal clauses.

They are non-finite forms (at least on the surface; see Chapter 5 for evidence that nominal predicates combine with a null tense affix). Clauses like those in (195) – where the predicate is a VP suffixed with -ap – behave just like all other nominal predicates in lacking overt tense, aspectual, and evidential morphology. What is more, the placement of weak nominative enclitics in clauses where the predicate is a VP marked with -ap behaves exactly like what is found with all other nominal predicates (§5.5). This generalization, too, indicates that -ap is a nominalizer.

A further context in which *-ap* appears are purposive clauses headed by the suffix *-tenã*. This suffix always requires its complement to be nominalized with *-ap*. These complements are non-finite: they never include tense or evidential morphology. They can however contain positional or aspectual auxiliaries, as shown by the presence of *'eka* 'AUX.SG_{habit}' in (196d).⁷

(196) Purposive subordinator -tenã selects complements nominalized with -ap

a.	Eret	ko	'on	òytonã			okoit	
	eret	ko	'on	o-s-ton	iã-a		o-koy-t	
	tomorro	W POLITE	E.FUT 1SG	1sg-co	me.SG-a	again-TH	I [1SG-sister.of.man-N	UC
	toapten	ã,	kiekapn	ã.				
	top-ap-	tenã	_					
	see-NM	Z _{ap} -PURP] for.the.l	ast.time	e			
	'Tomor	row I am g	going to co	ome bac	k here in	n order t	o see my sister for the	last time.'
	text: Isaia	as Tarimã Tu	ipari, authoi					
b.	0'era	ptenã		nã	watoa	0	waram'a	
	o-'et-a	p-tenã		nã	w-ato-a	ı o	o-wan-a-m'a	
	[1SG-s]	leep-NMZ	ap-PURP]	FOCUS	1sG-ba	the-TH 1	SG-go.nearby-TH-NEA	AR.FUT
	<i>o</i> ' <i>e</i> .		•					
	o-'e							
	1sg-au	X.SG						
	'I am go	oing to go	a short di	stance a	ind bathe	e in orde	r to then sleep.'	
	casual dis	scourse: 201	7-12-08					
c.	Iunã	ke	,	oka	ıfe	mã	owãramtenã.	
	iu-nẽ-a	ke	;	e o-k	afe	mã-a	o-wan- am-tenã	
	rain-VB	Z _{nẽ} -th po	DLITE.FU7	3 [150	G-coffee	plant-TH	H 1SG-go.nearby-NMZ	ap-PURP]
	'It ough	t to rain, s	so that I m	ay go a	short di	stance ar	nd plant my coffee.'	
	casual dis	scourse: 201	6-12-09					

⁷There is no overt pronominal proclitic on the habitual auxiliary '*eka* in (196d) because *e*- '2SG' is always elided prior to '*eka*, just as it is prior to '*e*. See §4.3 through §4.5.

d. *Kanã sitetet'etetkaro'om* 'en e'ero'aptekat kire kanã s-itetet'etetet-ka-ro-'om 'en e-'ero'aptekat kire why 3-[COM+go.SG]²-VBZ_{ka}-NMZ_{ro}-NEG 2SG 2SG-always/never [person *irowa* 'ekaptenã? irowa-a 'eka-ap-tenã photograph-TH AUX.SG_{habit}-NMZ*ap*-PURP]
'Why don't you ever bring it [your camera] around with you, so as to regularly take photos of people?' casual discourse: 2017-11-27

3.7.3 Actor nominalizer -at

The suffix *-at* 'ACTOR' has an effect not unlike English *-er*, turning VPs into persons who carry out the action in question. Evidence that *-at* performs a nominalizing function comes from the fact that the constituent headed by this suffix can serve as subject or direct object:

- (197) Actor nominalization can serve as a subject or direct object
 - a. Eapepsaret nãkop tero'a.
 e-apepsi-at-et nãkop tero'a
 2SG-wait.for-ACTOR-NUC MAYBE AUXgo.SG.TH
 'Perhaps there's somebody who is waiting for you.'
 casual discourse: 2017-08-17
 - b. CONTEXT: A grandmother describes the behavior of a kitten that is trying to get several dogs to play with it.

Teakup'ekatorowatèsaikop,amẽko yam.te-akup'ek-atorowa-ate-s-ai-kop,amẽko yam3C-embrace-ACTORsearch.for-TH 3C-come.SG-TH 3-AUX.SGmovingdogto'It is looking among the dogs for someone/something that will embrace it.'casual discourse: 2017-08-21(see also elicitation on 2017-08-23)

A VP nominalized with this suffix can also serve as the complement of a postposition:

 (198) amẽko mĩan yope amẽko mĩ-an yope dog stab-ACTOR along.with
 'in the vehicle of the dog stabber' (i.e., in the vehicle of the health worker responsible for vaccinating dogs)
 casual discourse: 2017-08-21 What is more, an actor nominalization can be subsequently negated with -'*om*; and -'*om*, as argued in Singerman (2018), attaches to nominal bases only.

(199) Actor nominalizer -at feeds negation

 a. *Txau* kat'om nãkop wat.
 txau ko-at-'om nãkop wat manioc.flour eat-ACTOR-NEG MAYBE 2PL
 'Maybe you-PL aren't eaters of toasted manioc flour.'

casual discourse: 2016-02-04

- Emầkmầkkat'om b 'ero'are kot'oa eterap nã e-mākmāk-ka-**at-'om** 'ero'are e-tet-ap kot'oy-a nã [2SG-[send]²-VBZ_{ka}-ACTOR-NEG while.SG] 2SG-go.SG-NMZ_{ap} want-TH PROG etet'e. e-tet'e 2SG-AUXgo.SG 'Although there's no one sending you off, you are wanting to go.' casual discourse: 2016-12-16
- c. CONTEXT: A Tuparí woman explains why she has decided to disconnect the radio for the afternoon.

Tema'an'ommẽ. te-e-ma'ẽ-**an-'om** e 3C-INTRNS-speak-**ACTOR-NEG** 3 'There's no one talking.' casual discourse: 2017-08-16

An actor nominalization that has been negated with -'*om* can undergo subsequent verbalization with - $n\tilde{e}$. In (200) *ekoakiat*'*om* 'not someone who picks you up, no one who picks you up' undergoes verbalization so as to combine with the near future suffix -*pwa* (§4.4.1).

(200) CONTEXT: A grandmother lets her young granddaughter know that once her friend leaves the village, no one will pick her up anymore.

Ekoakiat'omnamwa 'e. e-koaki-**at-'om-nẽ-a-mwa** 'e 2SG-pick.up-ACTOR-NEG-VBZ_{nẽ}-TH-NEAR.FUT AUX.SG

'You will be without anyone to pick you up.' casual discourse: 2017-08-30 It is important to clarify that *-at* 'ACTOR' does not have any restriction to agentive or volitional bases. That is, while it can attach to to volitional transitive verbs such as *amẽko mĩ* 'stab/vaccinate dogs', *emằkmằkka* 'send you off, expel you', or *txau ko* 'eat manioc flour', it is also attested on (probably unaccusative) intransitives as well. The examples in (201) illustrate.

- (201) Actor nominalizer -at can also attach to unaccusatives
 - a. CONTEXT: Over the radio, a speaker tells his interlocutor that no one has arrived in the village.

Tèsat'ommẽ. **te-s-at**-'om e **3C-come.SG-ACTOR**-NEG 3 'Nobody has come.' casual discourse: 2016-11-12

b. CONTEXT: I think I hear someone yelling and ask *Apoe hàhàke nerõ tero'at?* 'Who here is yelling?' *Hàhàkat'ommẽ*.
hàhàke-at-'om e
yell-ACTOR-NEG 3
'There aren't yellers here.'
casual discourse: 2016-02-10

3.7.4 Summary of deverbalizing morphology

In this section we have seen three morphemes which perform a deverbalizing function: the passivelike *-psit*, the multipurpose nominalizer *-ap*, and the actor nominalizer *-at*. The language makes use of other deverbalizing nominalizers, as well, though I have not gone into these here for reasons of space. One morpheme not discussed here is the object nominalizer $y - \sqrt{iy}$, which builds inalienably possessed nouns from verbal roots:

(202) The object nominalizer *y*- $\sim iy$ - attaches to verbal roots

a. *Oytop'ommẽ*.
o-y-top-'om e
1SG-OBJ.NMZ-know-NEG 3
'I don't know him.' / 'He isn't my acquaintance.'
[from *top* 'see, know']
casual discourse: 2014-07-09

b. Oysi nẽ 'iporet?
o-y-si nẽ e 'ipot-et
1SG-OBJ.NMZ-spear Y/N 3 fish-NUC
'Is this fish the thing that I speared / my speared thing?'
[from si 'spear, catch, kill']
casual discourse: 2015-10-15

In Singerman (In preparation a) I discuss how this nominalizer has been reinterpreted as a synchronically distinct object extraction prefix in focus constructions. (203) provides representative examples of this prefix (see also Rodrigues et al. 2006, Galucio 2011a, and Galucio and Nogueira 2018 for comparative discussion).

(203) Examples of the object focus prefix y-

a.	Hemanẽ eykoro		'apteka?	
	heman nẽ e e- y -ko-ro		'apteka	
	only.that Y/N 3 2SG-OBJ.FOC-e	at-NMZ _{ro}	HABIT.SG	
	'That's the only thing that you e	at?'		
	casual discourse: 2015-12-27			
b.	<i>Tambakie tey'arapbi'at.</i> tambaki e te- y -at-a-pbi'a-t tambaqui 3 3C- OBJ.FOC -catch-	TH-DUR-1	NUC	
	'Tambaqui is what he used to ca	tch.'		
	casual discourse: 2016-01-07			
c.	<i>Upe oypekaret.</i> upe e o- y -pek-a-t-et papaya 3 1SG- OBJ.FOC -ask.for	-TH-NEAR	PAST-NUC	
	'What I asked for was papaya.'			
	casual discourse: 2016-01-16			
d.	<i>Kat'are eykoro</i> kat'at e e- y -ko-ro	'e		e-aropnã
	what 3 2sg- OBJ.FOC -eat-NM		SG sun/noon-OB	L 2SG-for
	'What did you eat today at midd	lay?'		
	casual discourse: 2015-11-09			
e.	Kat'are watkoro	a?		
	kat'at e wat-(y)-ko-ro	а		
	what 3 2PL-(OBJ.FOC)-eat-N	MZ _{ro} AUX	K.PL	
	'What did you-PL eat?'			
	casual discourse: 2016-11-15			

The object focus prefix in (e) has been fully elided in between the consonant-final proclitic *wat*-'2PL' and the consonant-initial verbal root *ko* 'eat, drink'. This elision also takes place with the homophonous object nominalizing prefix; see example (163c).⁸

3.8 Conclusion

The objective of this chapter has been to lay out in detail the major morphological components of the Tuparí verb. In addition to a productive system of deriving new roots through reduplication, the language possesses a rich set of valency-altering prefixes: causative m-/ \tilde{o} -, comitative-causative *ete*-, reciprocal *eue*-, and the intransitivizer *e*-. The domain for reduplication is very limited: it includes the verbal root, the intransitivizing prefix *e*-, and the causative and comitative-causative prefixes only. Although reciprocal *eue*- manipulates information structure (much like the causative and comitative-causative) it is excluded from the domain of reduplication.

Furthermore, a previously undescribed set of adverbial prefixes ($p\tilde{e}an$ - 'first', $t\tilde{a}reman$ - 'not again', tom'en- 'without someone being aware', erote- 'all') shows that the Tuparí verb can become quite synthetic. There is also a special prefixal position to host incorporated direct objects. These objects are not marked morphologically for case, and there is a strong preference (perhaps even a categorical requirement) that they be [-ANIMATE].

In the suffixal domain, this chapter has further shown that the inflectional possibilities of the Tuparí verb were understated in previous descriptive works. The evidential and resultative suffixes show singular-plural agreement and – in the case of the resultative – an additional positional

⁸Rodrigues et al. (2006) offer an example of the Tuparí object focus/object nominalization prefix that contains the same singular auxiliary seen in (203d). They leave it unglossed:

⁽iii) ka'are e-i-top to'é what 2-OBJ.NMZ-see
'What did you see?' (Rodrigues et al. 2006:29; original orthography and glossing)

The unglossed to'é in their example consists of two separate morphemes: the nominalizer -to 'NMZ₁₀', suffixed to the verb top 'see', and the singular auxiliary 'e. The presence of 'e in this example forces a same-day past interpretation of the sort discussed in §4.3.2; that is, this question asks about an action that took place on the same day as UT but at least several hours prior as UT. As shown by (203e), above, when the agent is plural rather than singular then the plural auxiliary a must be used instead. The paradigmatic contrast between singular 'e and plural a is a crucial component of the language's auxiliary system; it is operative in present, future, and same-day past constructions. See Chapter 4.

distinction in the singular. These two morphemes exhibit some homophony but have sharply different morphosyntactic behaviors (discussed at length in §6.8). The conditional suffix *-kot'oy*, which must have grammaticized relatively recently from the lexical verb *kot'oy* 'want', occupies the same morphological position as the evidential. The final morphological slot of the Tuparí verbal complex includes two tense suffixes (*-t* 'NEAR PAST', *-pbi'a* 'DURATIVE') as well as the suffix *-ap* 'ADVERBIAL FOCUS', whose sensitivity to information structural distinctions requires further research.

In the next chapter I turn my attention to the set of auxiliary verbs utilized in Tuparí. These mark a variety of positional, aspectual and temporal categories, and they behave morphologically like intransitive lexical verbs.

Chapter 4

The auxiliary system

Quite a few Tupían languages are described as making use of grammaticalized auxiliaries; examples include Gavião (Moore 1984:chapter 6), Karo (Gabas Jr. 1999), and Sakurabiát (Galucio 2001, 2018). Unlike the Gavião auxiliaries – which conflate various grammatical categories and are sensitive to a wide range of clause types and illocutionary force distinctions – Tuparí auxiliaries are largely segmentable morphologically and do not express clause type or illocutionary force. Their general use is to mark aspect, tense, and (in the case of the present progressive with singular subjects) physical position.

Given the genetic proximity between the various Tuparían languages, it is no surprise that the auxiliaries described here for Tuparí are similar in certain respects to those which Galucio (2001, 2018) details for Sakurabiát. Closer comparison between the two languages, however, shows that the Tuparí auxiliaries express a wider range of meanings and are used for a broader set of grammatical functions than their Sakurabiát cousins. In particular, whereas Sakurabiát has a broad set of non-inflecting TAM particles (Galucio 2001:68–69), many of the same meanings – such as future tense and habitual aspect – are expressed in Tuparí by inflecting auxiliaries.

Prior research into Tuparí grammar identified certain auxiliary morphemes without contextualizing them paradigmatically. For example, Caspar and Rodrigues (1957:§3.3.4.4.3) presented the auxiliary e but did not recognize that this is a singular form only; it contrasts paradigmatically against plural a in a wide range of temporal and aspectual contexts. It also contrasts with the explicitly horizontal auxiliary $y\tilde{e}$ in the present progressive. Because these sorts of contrasts have not been described before, a major goal of this chapter is to highlight the paradigmatic contexts of the language's many auxiliary forms.

The auxiliaries discussed in this chapter are given in Table 4.1, together with their glosses and a list of associated constructions or contexts. As this table shows, the horizontal positional auxiliary $y\tilde{e}$ may only occur with singular subjects; the language lacks a non-singular horizontal auxiliary of the sort attested in Sakurabiát (Galucio 2018). The AUX_{go} series makes a distinction between

		NICIPI		ennor é min	TADIO T.I. TIIV AUVILIALY TOTILIO ALOCADOVA III CHAPTOL T
SINGULAR	PAUCAL	PLURAL	Gloss	Section	Constructions
tet'e~tero'e	oro'e	`anẽ~`eanẽ	AUXgo	4.2	Occurs in present progressives (with the particle
					$n\tilde{a} \sim ner\tilde{o}$); present existentials (without $n\tilde{a} \sim ner\tilde{o}$); in
					combination with past tense morphology to mark inter-
					mediate tense gradations.
,e		a	AUX	4.3	Occurs in present progressives (with $n\tilde{a} \sim ner\tilde{o}$); present
					existentials (without $n\tilde{a}\sim ner\tilde{o}$); in the near future (in
					combination with the suffix -pwa/-p'a or, in the speech
					of younger Tuparí, the particle ba).
yẽ		N/A	AUXhzntl	4.3.3	Occurs in present progressives and present existentials,
				4.3.4	where it paradigmatically contrasts with singular 'e. As
					a result, 'e acquires a [-HORIZONTAL] meaning in those
					constructions.
pe,ap	pe.	peap	FUT	4.4.2	Marks future events that will not take place on the same
				4.4.3	day as UT.
'apteka	ap	apteka	HABIT	4.5.1	Fuses present tense and habitual aspect into a single in-
					divisible form.
'eka	>	aka	AUXhabit	4.5.2	Marks habitual aspect but without any temporal specifi-
					cation (i.e., it can occur in past, present and future con-
					texts alike).
kop		į,	AUXmoving	4.6	Occurs in two highly circumscribed contexts: (a) move-
			1		ment in the present tense; (b) doubt or uncertainty on the
					part of the speaker.

Table 4.1: The auxiliary forms discussed in Chapter 4

singulars, paucals, and non-paucal plurals, whereas all of the other auxiliaries draw only a singular versus plural contrast. The only verbal morphemes aside from AUX_{go} which distinguish between paucals and non-paucal plurals are lexical verbs of motion: 'go', 'come', 'arrive', and so on.

The following empirical generalizations apply to the entire class of auxiliaries. First, while all auxiliaries may inflect for the theme vowel, their cooccurrence with other verbal morphology is limited. Evidentials are common with auxiliaries in past tense contexts, and tense morphology often combines with auxiliaries; however, the adverbial prefixes and other verbal morphology detailed in Chapter 3 in general attach to lexical verbs only. This means that auxiliaries – which are in most cases more functional than lexical – do not typically bear adverbial prefixes such as *pẽan-* 'first', *tãreman-* 'not again', *tom'en-* 'without someone being aware', and so on.

Second, the default order is for the auxiliary to follow the verb phrase which it embeds. Since multiple auxiliaries may occur in a single sentence, this gives rise to a left-branching syntactic structure. See Chapter 5 for more explicit analysis.

Finally, all auxiliaries take a pronominal proclitic that reflects the person and number features of the subject – regardless of whether the lexical verb is intransitive or transitive. This gives rise to an apparent split in grammatical relations, since lexical verbs follow a (superficial) ergative-absolutive pattern while auxiliaries follow a (superficial) nominative-accusative one. Comparable facts obtain for Sakurabiát, as detailed by Galucio (2001, 2014a). This system is interrogated in greater detail in Singerman (In preparation b), which argues that the person-marking prefixes on intransitive verbs and auxiliaries function like resumptive pronouns. A theoretically-neutral description of the system is summarized for the reader's convenience in §4.1.

This chapter adopts a form-to-function approach, with auxiliary paradigms organized according to shared roots rather than shared semantic content. This approach is a necessity given the many-to-many nature of the Tuparí auxiliary system. To give one example, the roots 'e (singular) and a (plural) show up in a variety of temporal-aspectual contexts: they appear in same-day past, present progressive, and the near future. They are also present (though masked via surface morphophonology) inside of the distant future auxiliary pe...ap. Given the heterogeneous temporal and aspectual values of the various contexts in which 'e and a appear, it does not seem possible to assign these two auxiliaries any semantic features besides [SINGULAR] and [PLURAL], respectively. What is more, 'e acquires a non-horizontal or vertical meaning by virtue of paradigmatically contrasting with horizontal $y\tilde{e}$ in the present progressive. Since this positional contrast obtains only within the present progressive, it cannot be the case that 'e always means [+VERTICAL] or [-HORIZONTAL]. While some auxiliary forms possess very specific positional, aspectual, and/or temporal values – (')apteka, for instance, fuses present tense and habitual aspect – others (including but not limited to 'e and a) surface in a varied set of constructions.

The chapter is organized as follows. §4.1 sketches the way that pronominal proclitics mark arguments on auxiliaries and lexical verbs. §4.2 then presents those auxiliaries (glossed here as AUX_{go}) which share a diachronic relationship with the lexical verb 'go'. Next, §4.3 discusses 'e and a and the various constructions in which they appear. §4.4 addresses the near future and distant future auxiliary constructions, both of which contain the root 'e and a (even though the presence of these roots can be masked by surface morphophonology). §4.5 shows how the auxiliary (')apteka fuses habitual aspect with present tense, whereas 'eka and aka mark habitual aspect without tense. Finally, §4.6 discusses the auxiliaries kop and 'i used (a) to indicate movement on the part of the subject as well as (b) doubt on the part of the speaker. In the conclusion to this chapter I offer a phrase structural interpretation of the various auxiliaries' linear ordering restrictions.

4.1 Person marking on lexical verbs and auxiliaries

Person marking on verbs and auxiliaries is accomplished via the set of pronominal proclitics in Table 4.2, first presented and discussed in §2.2. On lexical verbs these proclitics are deployed in an ABSOLUTIVE pattern (see Silverstein 1976; Moravcsik 1978; Dixon 1979, 1994 for foundational scholarship): on intransitives the proclitic indexes the person and number features of the subject, whereas on transitives it indexes the person and number features of the object. The following paradigm – with intransitive ' $\tilde{e}k$ 'dance' contrasted against transitive top 'see, watch, look' – illustrates.

	SINGULAR	PLURAL	
1 INCL	o-/w-	ki-	
1EXCL	0-/w-	ote-	
2	е-	wat-	
3	$i - \sim y - \sim s - \sim \varnothing$ -		
3coref	te-		

Table 4.2: The set of proclitic pronouns

(204) Lexical verbs show absolutive pattern

- a. E'ẽka 'en.
 e-'ẽk-a 'en
 2SG-dance-TH 2SG
 'You danced.'
 common in everyday speech
- b. Otoa 'en. o-top-a 'en 1SG-see-TH 2SG 'You saw me.'

common in everyday speech

- c. O'ẽka 'on.
 o-'ẽk-a 'on
 1SG-dance-TH 1SG
 'I danced.'
 common in everyday speech
- d. *Etoa* 'on.
 e-top-a 'on
 2sG-see-TH 1SG
 'I saw you.'
 common in everyday speech

It is also possible for a transitive verb to take as its direct object a full NP, rather than a single proclitic. In (205) the direct object of *õpoõpoka* 'to hit/strike repeatedly' is *èkget* 'your-SG house'.

(205) Pep'a eraret èkget õpo'õpoka. pep'a erat-et **e-ek-et** õpo'õpo-ka-a moth big-NUC **2SG-house-NUC** [hit]²-VBZ_{ka}-TH 'The big moth hit/struck your house repeatedly.' casual discourse: 2014-06-09 Consonant-initial transitive verbs sometimes fail to take an overt object; in such circumstances the 'missing' direct object is interpreted as a third person entity, typically something salient in the discourse. In the first sentence of (206) (spoken during a WhatsApp conversation), my friend asks me about a photo of my mother that I had promised to send to him. The null third person object in the second line refers back to that photo.

- (206) Direct object may be omitted prior to consonant-initial transitive verbs
 - a. *Esi irowaet, paketop?* e-si irowap-et paketop 2SG-mother photograph-NUC where.is.it 'Your mother's photo, where is it?'
 - b. Mầkto'om eman 'en.
 Ø-mầk-to-'om eman 'en
 3-send-NMZ_{ro}-NEG FOCUS 2SG 'You still haven't sent [it].'
 casual discourse: 2017-05-23

However, this kind of object drop is not possible prior to vowel-initial transitive verbs; these must always take an overt pronominal proclitic or NP direct object.

(207) No 'object drop' permitted with vowel-initial verbs

- a. *Mã*!
 mã
 place.in.container
 'Place [it] in!'
 common in everyday speech
 b. *Yõrõk*!
- y-õrõk 3-place.on.surface 'Put it down!' common in everyday speech
- c. *Õrõk!

Although the verbs $m\tilde{a}$ 'place in a container' and $\tilde{o}r\tilde{o}k$ 'place on a surface' have comparable semantics, it is only possible to elide the pronominal proclitic or NP direct object prior to the former: it is impossible to say $*\tilde{O}r\tilde{o}k!$. That is, third person \emptyset - is possible only before consonant-initial stems. In this respect the language makes no distinction between derived and non-derived stems. If one were to prefix *erote-* 'all' to $m\tilde{a}$ 'place [in a container]', the derived *erotemã* 'place all of' would now require an overt object – just like any other vowel-initial verb. (See §3.5.2 for more discussion of *erote-*.)

While the argument marking system on lexical verbs follows an absolutive pattern, on auxiliaries the system is superficially nominative: the pronominal proclitics on auxiliaries always index the person and number of the subject, regardless of the valency of the lexical verb. This contrast is shown by the paradigm in (208). In (a) through (d), the proclitics attached to the positional auxiliary $y\tilde{e}$ 'AUX_{hzntl}' and the habitual auxiliary '*apteka* index the person and number features of the subject. But while the intransitive lexical verb '*et* 'sleep' behaves like the auxiliaries in this regard (since the subject of an intransitive verb is both nominative *and* absolutive), the transitive verb *top* 'see, watch' takes a proclitic that indexes the object instead.

(208) Lexical verbs follow an absolutive pattern, while auxiliaries follow a nominative one

- a. O'era oyã õ'apteka.
 o-'et-a o-yẽ-a o-'apteka
 1SG-sleep-TH 1SG-AUX_{hzntl}-TH 1SG-HABIT.SG
 'I sleep lying down.'
 elicitation: 2015-10-15
- b. E'era eyã ẽ'apteka.
 e-'et-a e-yẽ-a e-'apteka
 2SG-sleep-TH 2SG-AUX_{hzntl}-TH 2SG-HABIT.SG
 'You sleep lying down.'
 elicitation: 2015-10-15
- c. *Itoa* oyã õ'apteka.
 i-top-a o-yẽ-a o-'apteka
 3-watch-TH 1SG-AUX_{hzntl}-TH 1SG-HABIT.SG
 'I watch it [=television] lying down.'
 elicitation: 2015-10-15
- d. *Itoa* eyã ẽ'apteka.
 i-top-a e-yẽ-a e-'apteka
 3-watch-TH 2SG-AUX_{hzntl}-TH 2SG-HABIT.SG
 'You watch it [=television] lying down.'
 elicitation: 2015-10-15

The pattern in the third person is more complex, thanks to the distinction between locally bound *te*- (glossed as 3C) and locally free *i*- \sim *y*- \sim *s*- (glossed simply as 3). When the subject is third person an intransitive lexical verb will take *te*-:

- (209) Marking of the third person on intransitive lexical verbs
 - a. *Te'erae.* **te-**'et-a e **3C-**sleep-TH 3 'He/she slept.' common in everyday speech
 - b. *Teaorosae*.
 te-aoros-a e
 3C-arrive.SG-TH 3
 'He/she arrived.'
 common in everyday speech
 - c. *Teatoae*.
 te-ato-a e
 3C-bathe-TH 3
 'He/she bathed.'
 common in everyday speech

The shape of the third person proclitic on the auxiliaries differs depending on the position of the NP subject (if one is present at all). If an NP subject occurs in the clause-initial position – immediately prior to the 2P particle cluster – then the auxiliaries will all take *te*-. If the NP subject occurs somewhere else in the clause or is absent, then the highest auxiliary takes $i-\sim y-\sim s$ - instead:

(210) Person marking on auxiliaries depends on presence/position of NP subject

a.	Òwet	itoa	teyã	te'apteka.		
	o-op-et	i-top-a	te- yẽ-a	te-'apteka-a		
	1sg-father-NUC 3- watch-TH 3 C-AUX _{hzntl} -TH 3 C-HABIT.SG-T					
	'My father watches it [=television] lying down.'					
	elicitation: 2015-10-15					

b. *Itoa* teyã y'apteka.
i-top-a te-yẽ-a y-'apteka
3-watch-TH 3C-AUX_{hzntl}-TH 3-HABIT.SG
'He watches it [=television] lying down.'
elicitation: 2015-10-15

In (a) – where ∂wet 'my father' is the clause-initial constituent – the habitual auxiliary '*apteka* and the positional auxiliary $y\tilde{e}$ both bear *te*-. In (b), on the other hand, ∂wet 'my father' is nowhere to be found, and now the rightmost auxiliary – habitual '*apteka* – takes *y*-, which syllabifies as [c[¬]] in between the theme vowel -*a* and the glottal stop of the habitual auxiliary. The lexical verb *top* 'see, watch' takes *i*- as its object in both of these examples. As *top* 'see' is transitive, its proclitic tells us nothing about the person or number features of the subject.

There exist environments where the difference between third-person marking on lexical verbs and third-person marking on auxiliaries breaks down. If the subject is third person but there is no auxiliary and also no weak nominative enclitic *e*, then it is possible for the lexical verb itself to bear *i*- \sim *y*- \sim *s*- rather than *te*-. This happens in particular with the temporal adverbial *herõwap* 'yesterday', which – for still unclear reasons – does not combine with the weak nominative enclitic *e* '3'.

(211) Intransitives take the non-bound proclitics $i - v_{-} - s_{-}$ following herõwap 'yesterday'

- a. *Herõwap sot.* herõwap s-ot yesterday 3-go.PAUC
 'They-PAUC went yesterday.' casual discourse: 2016-01-13
 (see also casual discourse on 2016-08-02)
- b. *Herõwap yã'ẽ*. herõwap y-ã'ẽ yesterday 3-come.PAUC 'They-PAUC came yesterday.' elicitation: 2016-11-10

Examples such as these demonstrate that, as far as person marking is concerned, there is no clear line separating lexical verbs and auxiliaries in Tuparí: morphologically, auxiliaries are just a subclass of verbs. Examples like (211) also undermine the claim that 'the third person non-reflexive prefix *i*- \sim *s*- never attaches to intransitive roots' ('O prefixo da terceira pessoa comum não-reflexiva *i*- \sim *s*- jamais se conecta com temas intransitivos') (Alves 2004:§4.3.2.2). As (211) shows, intransitives can and do take *i*- \sim *y*- \sim *s*- under the right syntactic conditions. The theoretical ramifications of the Tuparí system of person marking on verbs and auxiliaries are explored in Singerman (In preparation b), where I argue that all of these proclitics – even ones that look intuitively like markers of agreement – should be analyzed as resumptive pronouns (see McCloskey 2017a,b for overviews of resumption). For present purposes the exact status of these morphemes as agreement or resumptive pronouns is not important. The relevant generalization is rather that what we call auxiliaries in Tuparí follow a superficially nominative pattern. In this regard they contrast with lexical verbs, which instead follow an absolutive one.

4.2 The auxiliaries related to 'go'

Tuparí makes use of a set of auxiliaries related in form to the lexical verb 'go'. These auxiliaries, here glossed as AUX_{go} , show up in a heterogenous set of contexts. These include: (*a*) the generic present; (*b*) existentials; and (*c*) graded past tenses.

Table 4.3 provides the paradigm. Observe that the AUX_{go} series – unlike all of the other auxiliaries in the language – exhibits a three-way rather than two-way number contrast. The singular forms are *tet'e* and *tero'e*; the paucal form is *oro'e*; and the plural form is *'eanẽ~'anẽ*.

	SINGULAR	PAUCAL	PLURAL
1incl	otet'e / otero'e	kioro'e	ki'anẽ
1excl	olei e i olei o e	oteoro'e	ote'anẽ
2	etet'e / etero'e	wat'oro'e	wat'eanẽ
3	tet'e / tero'e	soro'e	i'anẽ
3COREF	tero'a	teoro'a	te'anã

Table 4.3: The AUX_{go} paradigm

4.2.1 The AUX_{go} series in the present and in existentials

(212), (213) and (214) provide examples of the AUX_{go} series in the present. In this context the auxiliaries are accompanied by the particle $n\tilde{a}$ 'PROGRESSIVE'; this particle also appears with the auxiliaries 'e, $y\tilde{e}$ and a in the present progressive (see §4.3.3, below). Whereas 'e, $y\tilde{e}$ and a in the present progressive refer to actions that are happening at the moment of speaking, the AUX_{go} series in this construction enjoy a slightly wider range of temporal interpretations. Hence there obtains

a contrast between *Katke nã eyẽ?* 'What are you up to (right now, sitting)?' and *Katke nã etet'e?* 'What are you up to (right now)?' as well as *What have you been up to?*. Note that the AUX_{go} series does not encode any positional distinction.

(212) Examples of AUX_{go} in the present: singular subjects

a. *Kiaraere* otet'e пã 'oneporet èsap'a kiarap-ere **nã** o-tet'e 'oneporet e-s-a-p'a happy-OBL PROG 1SG-AUXgo.SG I.too [2SG-come.SG-TH-NEAR.FUT] 'eronã hère. 'e-ronã hère AUX.SG-again] HÈ.OBL 'I am also happy that you'll be coming back here.' casual discourse: 2016-10-05 b. CONTEXT: I ask a Tuparí mother how many children she has. Kiem nã tet'e. kiem **nã** tet'e one PROG AUXgo.SG 'There is just one / I have just one.' casual discourse: 2016-01-07 c. Esìt nãkop etoap kot'oa nã tero'a, e-si-t kot'oy-a **nã** tero'e-a. nãkop e-top-ap 2SG-mother-NUC MAYBE 2SG-see-NMZ_{ap} want-TH PROG AUXgo.SG-TH mõkeroem nã etet'e hare. mõkeroem nã e-tet'e hare for.a.long.time PROG 2SG-AUXgo.SG here 'Maybe your mother has been wanting to see you, as you've been here for a long time.' casual discourse: 2016-02-10 Examples of AUXgo in the present: paucal subjects a. Aroy eman kà nã soro'e. aroy eman ko-a nã s-oro'e

aroy eman ko-a na s-oro e
rice FOCUS eat-TH PROG 3-AUXgo.PAUC
'They-PAUC only eat rice.'
casual discourse: 2015-12-23
b. Kat'aro mãkêrõ nã wat'oro'e waret.
kat'aro mãkêrõ nã wat-oro'e wat-et

(213)

kat'aro mãkẽrõ **nã wat-oro'e** wat-et how.many DUNNO **PROG 2PL-AUX_{go}.PAUC** 2PL-NUC 'I don't know how many you-PAUC are.' casual discourse: 2016-12-14 (214) Examples of AUX_{go} in the present: non-paucal plural subjects

a. *Otètãramkap* kot'oa nã ote'anẽ kot'oy-a ote-'ane ote-e-tãramka-ap nã 1PL.EXCL-INTRNS-kill.PL-NMZ_{ap} almost.do-TH **PROG 1PL.EXCL-AUX_{g0}.PL** akoere. akop-ere heat-OBL 'We-EXCL are nearly dying from the heat.' casual discourse: 2017-09-17 b. *Katke nãpe* wat'eanẽ? nã wat-'eanẽ katke nãpe nã what REALLY ?! PROG 2PL-AUXgo.PL

'Just what are you-PL doing?' casual discourse: 2016-11-06

c. Tarupa ema'em moem tèma'ã nã i'anẽ. Tarupa ema'ẽ-m moem te-e-ma'ẽ-a nã i-'anẽ non.indigene language-INS by 3C-INTRNS-speak-TH PROG 3-AUXgo.PL
'They [the inhabitants of a different village on the Rio Branco] speak only in Portuguese.'
casual discourse: 2015-11-11

These same auxiliaries also occur in existentials. In existentials they do not appear with the progressive particle $n\tilde{a}$ or with a subordinate lexical verb; furthermore, they must be accompanied by a weak nominative enclitic. As discussed at greater length in Chapter 5, the weak nominative enclitics never appear in present contexts like those given in (212) through (214) but are instead parasitic on certain kinds of tense morphology. (That generalization indicates that existential utterances must contain a null T head; see §5.5.) (215) and (216) present representive paradigms of the AUX_{go} series in existentials, with the auxiliary roots and the weak nominative enclitics are both highlighted. These data are repeated from §2.1.3.

(215) Existential paradigm: third person

a. *Tero'aemmẽ*.
tero'e-a-em e
AUXgo.SG-TH-still 3
'It still exists.' / 'It is still here.'
common in everyday speech

- b. *Teoro'aemmẽ*.
 te-oro'e-a-em e
 3C-AUXgo.PAUC-TH-still 3
 'They-PAUC still exist.' / 'They-PAUC are still here.'
 common in everyday speech
- c. Te'anaemmē.
 te-'anē-a-em e
 3C-AUXgo.PL-TH-still 3
 'They-PL still exist.' / 'They-PL are still here.'
 common in everyday speech

(216) Existential paradigm: first person singular and first person plural, exclusive

- a. Otero'aem 'on. o-tero'e-a-em 'on $1SG-AUX_{go}.SG-TH-still$ 1SG 'I am still here.' common in everyday speech
- b. Oteoro'aem 'ote.
 ote-oro'e-a-em 'ote
 1PL.EXCL-AUXgo.PAUC-TH-still 1PL.EXCL
 'We-EXCL.PAUC are still here.'
 common in everyday speech
- c. Ote'anaem 'ote.
 ote-'anē-a-em 'ote
 1PL.EXCL-AUXgo.PL-TH-still 1PL.EXCL
 'We-EXCL.PL are still here.'
 common in everyday speech

These two paradigms show that the singular-paucal-plural contrast expressed within the roots of the AUX_{go} series is not reflected in the pronominal morphology. With third person subjects, as in (215), the pronominal proclitic *te*- and the weak nominative enclitic *e* are number invariant; in those examples the *only* morphemes which expone the number of the subject are the auxiliary roots. With non-third person subjects more number distinctions can be drawn; but we see from (216) that that contrast may be limited to singular versus plural, without a distinct paucal form.

4.2.2 The AUX_{go} series introduces intermediate past tense gradations

A further usage of the AUX_{go} series is to introduce intermediate past tense gradations. The Tuparí past tense system has several basic gradations, as I discuss at greater length in Chapter 5: the near past suffix *-t* is used for events that took place between two days and several months prior to UT; the distant past particle *õpot* is used for events that took place two or more years prior to UT; and the ancient past particle *kut* (largely restricted to the speech of the elderly) is used for events that took place at or prior to the speaker's birth. More nuanced gradations are introduced by combining these tense morphemes with members of the AUX_{go} series. The textual excerpt in (217) illustrates for the near past suffix. Every clause in this narrative contains both an auxiliary from the AUX_{go} series and near past *-t*, which ensures the proper temporal interpretation: at least a few months prior to, but less than two years before, UT. Note the number agreement inside of the auxiliary root.

(217) Textual example of AUX_{go} combining with -t 'NEAR PAST'

a.	<i>Here otewãrã</i> here ote-wan-a then 1PL.EXCL-go.ne 'Then we-EXCL went	earby-TH 1PL.EXCL-A	: UX _{g0} .PAUC-TH-NEAR.PAS	' <i>ote</i> . 'ote ST 1PL.EXCL
b.	Here okoa here o-kop-a then 1SG-descend-TI 'Then I got down [fro	H 1SG-AUX _{g0} .SG-TH-N	' <i>on,</i> 'on NEAR.PAST 1SG	
c.	<i>here owãrã</i> here o-wan-a then 1SG-go.nearby-7 'and I went a short di	гн 1sg-aux _{go} .sg-тн-	<i>'on ìyam</i> . 'on ìyam •NEAR.PAST 1SG to.him	
d.	Here sesua otero here s-esu-a o- tero then 3-call-TH 1SG-4 'Then I called out to	o'e-a-t AUX _{go} .SG-TH-NEAR.P	' <i>on</i> , 'on AST 1SG	
e.	here o-õyaot-a	AUX _{g0} .SG-TH-NEAR.J .'	e past 3	

The AUX_{go} series can also combine with $\tilde{o}pot$ 'DISTANT PAST'. (218a) was spoken by an elderly woman whose mother died when she was only a few weeks old. She was nursed by her grandmother instead. Consultants confirm that this utterance would be unacceptable without the auxiliary *tet'e*: since the speaker is over eighty years old, using $\tilde{o}pot$ without *tet'e* would give far too recent a temporal interpretation. The auxiliary-free variant in (218b) would be acceptable only if spoken by a child, since in this context the event being related did not take place decades prior to UT.

- (218) AUX_{go} combining with $\tilde{o}pot$ 'DISTANT PAST'
 - a. Opapa kērē õpot 'on okemkà
 o-papa kem-ere **õpot** 'on o-kemko-a
 1SG-grandmother breast-OBL DISTANT.PAST 1SG 1SG-nurse-TH
 otet'epnē.
 o-tet'e-pnē
 1SG-AUXgo.SG-EV.SG
 'I nursed at my grandmother's breast (NON-WITNESSED) [many years before UT].'
 text: Marilza Kabatoá Tupari, narrator
 - b. Opapa kere opot 'on okemkopnam.
 o-papa kem-ere opot 'on o-kemko-pne-am
 1SG-grandmother breast-OBL DISTANT.PAST 1SG 1SG-nurse-EV.SG-ADV.FOC
 'I nursed at my grandmother's breast (NON-WITNESSED) [a few years before UT].'
 elicitation: 2016-01-23
 (based on text: Marilza Kabatoá Tupari, narrator)

It is possible to combine durative *-pbi'a* with these auxiliaries in the same fashion, though such examples are rare in my corpus.

(219) Mãkorapi'earet õpuopma'ã te'anambi'a. Mãkorapi-'eat-et o-õpuopma'ẽ-a te-'anẽ-a-mbi'a Makurap-MANY-NUC 1SG-teach-TH 3C-AUXgo.PL-TH-DUR 'The Makuraps used to teach me [their language].' elicitation: 2018-04-08 (based on casual discourse: 2016-02-04)

4.2.3 The relationship between the AUX_{go} series and the lexical verb 'go'

The auxiliaries *tet'e*~*tero'e*, *oro'e*, and ' $an\tilde{e}$ ~*e'an*\tilde{e} are glossed as AUX_{go} because of their striking resemblance to the roots of the lexical verb 'go'. As shown by the paradigm in (220) 'go' shows a three-way number contrast: singular *tet*, paucal *ot*, and plural *tet'an*\tilde{e}. Observe that the movement auxiliaries which accompany 'go' in this paradigm make only a singular versus non-singular distinction.¹

- (220) Suppletion in the lexical verb 'go'
 - a. Otera okop.
 o-tet-a o-kop
 1SG-go.SG-TH 1SG-AUX.SGmoving
 'I am going.' / 'I ought to be going.'
 common in everyday speech
 - b. Oteora ote'i. ote-ot-a ote'i
 1PL.EXCL-go.PAUC-TH 1PL.EXCL-AUX.PLmoving
 'We-EXCL.PAUC are going.' / 'We-EXCL.PAUC ought to be going.' common in everyday speech
 - c. Otetet'anã ote'i. ote-tet'anẽ-a ote-'i
 1PL.EXCL-go.PL-TH 1PL.EXCL-AUX.PLmoving
 'We-EXCL.PL are going.' / 'We-EXCL.PL ought to be going.'
 common in everyday speech

One can see from these examples that the roots of 'go' look much like the roots of the AUX_{go} series. The singular member of the AUX_{go} series, *tet'e~tero'e*, appears to consist of *tet* 'go.SG' plus some additional functional material; the same is true for the paucal member of the series, *oro'e*, which resembles *ot* 'go.PAUC'. The plural member of the AUX_{go} series, in contrast, is patently smaller than the plural form of 'go': '*anẽ* versus *tet'anẽ*. It appears that *tet'anẽ* 'go.PL' is a fossilized

¹The utterances given in (220) are the typical way that one says goodbye before leaving. These utterances are used when one is going a not insignificant distance – say, to the other end of the village, or to a different village altogether. If the speaker or speakers are instead going just a short distance – between adjacent houses, for example – then the lexical verb changes to *wan* 'go nearby'. This verb does not exhibit any number suppletion: *Owãrã okop* 'I am going nearby', *Otewãrã ote'i* 'We-EXCL are going nearby'.

compound of *tet* 'go.SG' with 'an \tilde{e} . We see a very similar system at work in the lexical verb 'come': for this verb, too, the plural form consists of the singular allomorph plus 'an \tilde{e} .²

- (221) Singular-paucal-plural number suppletion on intransitive root 'come'
 - a. *Òsa* 'on. o-s-a 'on 1SG-come.SG-TH 1SG 'I came.' common in everyday speech $\sim Ote \tilde{a}$ 'ote. b. Oteã'ã 'ote. ote-ã'ẽ-a 'ote 1PL.EXCL-come.PAUC-TH 1PL.EXCL 'We-EXCL came [2 to 5 people].' common in everyday speech c. *Oteip'anã* 'ote. ote-ip'anẽ-a 'ote 1PL.EXCL-come.PL-TH 1PL.EXCL 'We-EXCL came [6 people and up].' common in everyday speech

The presence of 'ane within the plural forms of 'go' and 'come' suggests that the synchronic

(iv) After consonant-final adverbial prefix, the singular allomorph of 'come' is ip rather than $\dot{V}s$

a.	Ham opẽan'ìat 'on.
	ham o- pẽan-ip -a-t 'on
	hither 1SG-first-come.SG-TH-NEAR.PAST 1SG
	'I came here first [before going to my elder sister's].'
	casual discourse: 2017-08-21
b.	Here në ke 'en ham ètäreman'ipto'omkap?
	here nẽ ke 'en ham e- etãreman-ip -to-'om-ka-ap
	then Y/N POLITE.FUT 2SG hither 2SG- not.again-come.SG -NMZ _{ro} -NEG-VBZ-ADV.FOC
	'Then you're not going to come back here again?'
	casual discourse: 2016-12-14

That *ip* exists as a morphophonologically-conditioned singular allomorph helps to make sense of the paradigm for 'come': *ip'anẽ* 'come.PL' consists of singular *ip* plus the morpheme '*anẽ*, just as *tet'anẽ* 'go.PL' contains singular *tet* plus '*anẽ*.

The paucal allomorph, $\tilde{a}'\tilde{e}$, has a tendency to contract from $\tilde{a}'\tilde{a}$ to just \tilde{a} once inflected with theme vowel -*a*. This contraction results from the regular process in Tuparí phonology for intervocalic /?/ to delete when flanked by identical vowels.

²The verb 'come' has two singular allomorphs: $\dot{V}s$, which obligatorily lengthens the preceding vowel, and *ip*. The latter allomorph surfaces when a consonant-final adverbial prefix, such as *pẽan*- 'first' or *tãreman*- 'not again', occurs to the left of the verbal root. The following data are repeated from §3.3.2.

contrast between singulars, paucals, and plurals was built on an earlier contrast that distinguished only between singulars and non-singulars. Comparative Tuparían data support such a reconstruction. Describing verbal suppletion in Wayoró, Nogueira (2011:130–134) gives singular and plural forms for 'go/arrive': *tera* versus *ora*. Tuparí looks like Wayoró but with an additional layer of numerical contrast superimposed. Braga (2005:71–73) also lists four Makurap verbs – including 'arrive' and 'go' – that have distinct singular versus plural forms. Again, Tuparí looks like Makurap but with an extra numerical contrast added.

An additional similarity between 'go' and the AUX_{go} series is that the third person bound proclitic, *te*-, never surfaces immediately prior to *tet* 'go.SG' or *tet'e/tero'e*.

(222) No te- '3COREF' prior to tet 'go.SG' or tet'e/tero'e 'AUXgo.SG'

- a. *Terae*.
 tet-a e
 go.SG-TH 3
 'He/she went.' (never: **Teterae*.)
 b. *Tero'ae*.
- tero'e-a e AUX_{go}.SG-TH 3 'He/she/it exists.' (never: **Tetero'ae*.)

That this is a case of local haplology is shown by the fact that te- can occur on these roots when additional adverbial material intervenes. (223) illustrates with $p\tilde{e}an$ - 'first':

(223) Tepēanterap'a y'e.
te-pēan-tet-a-p'a y-'e
3C-first-go.SG-TH-NEAR.FUT 3-AUX.SG
'He is going to go first.'
casual discourse: 2016-02-13
(see also elicitation on 2016-11-10)

In short, when the linear adjacency between *tet* 'go.SG' and the proclitic is broken – in this case by $p\tilde{e}an$ - – then third person coreferent proclitic *te*- can attach without problem.

It is important to stress that the AUX_{go} series does not have an intrinsic deictic orientation, in contrast to the set of motion verbs. The lexical verb 'go' always indicates motion away from the site

of speaking, whereas 'come' always indicates motion toward that site. The fact that AUX_{go} does not have any built-in deictic orientation is demonstrated by these auxiliaries' ability to combine equally well with both 'go' and 'come'. Example (a) illustrates with $\dot{V}s$ 'come.SG' in combination with *tet'e* 'AUX_{go}.SG'; (b), with paucal *ot* 'go.PAUC' and *oro'e* 'AUX_{go}.PAUC'.

- (224) The AUX_{go} series has no deictic orientation
 - a. Kurem nẽ èsa etet'e? nã kurem nẽ e-s-a nã e-tet'e now Y/N 2SG-come.SG-TH PROG 2SG-AUXg0.SG 'You're coming here just now?' casual discourse: 2015-12-28 b. *Mõket*. José Carlos eanã. e'awa oteora José Carlos eanã mõket e'awa ote-ot-a long.ago José Carlos together.with hunt.TH 1PL.EXCL-go.PAUC-TH oteoro'at 'ote. ote-oro'e-a-t 'ote 1PL.EXCL-AUXgo.PAUC-TH-NEAR.PAST 1PL.EXCL 'Long ago, José Carlos and I went hunting.' text: Nilson Tupari, narrator

4.3 The multipurpose auxiliaries 'e and a

4.3.1 Basics of 'e and a

The auxiliaries '*e*, used with singular subjects, and *a*, used with plural subjects, show up in a variety of contexts. The basic paradigm is given in Table 4.4. The second person singular form has no

	SINGULAR	PLURAL
1 INCL	o'e	kia
1EXCL	0 e	otea
2	'e	wara
3	y'e	sa
3coref	te'a	tea

Table 4.4: Paradigm of 'e and a

proclitic: instead of the expected **e*'*e*, the form is '*e*. This appears to be a kind of haplology, akin to how *te*- '3COREF' is elided immediately prior to the auxiliary root *tet'e/tero'e* (example 222,

above).

When te- '3COREF' appears on the auxiliary, then the theme vowel -*a* must as well (the inverse does not hold; see Singerman In preparation b). As the theme vowel always deletes prior /e/ (§A.4), the vowel contrast between '*e* and *a* is lost when te- attaches: all that distinguishes singular te'*a* from plural tea is the glottal stop.

An initial /h/ will occur on the plural auxiliary a when it follows a consonant-final prefix; that is, in this one context a takes intrusive h (see §2.3.2). In (225) the C-initial prefix which triggers the appearance of intrusive h is *tat*- 'just':

(225) Erop'ae wattathaet.
erop'a e wat-tat-ha-ap-et
bad 3 2PL-just-AUX.PL-NMZ_{ap}-NUC
'It's bad when you-PL are just (hanging) about.'
elicitation: 2017-08-30

Here a 'AUX.PL' behaves just like the intransitive lexical verb (h)a'i 'end' (example 48).

4.3.2 The same-day past

When unaccompanied by additional temporal or aspectual morphology, the auxiliaries 'e and a contribute a temporal interpretation of hodiernal or same-day past: they are used when the event being related occurred on the same day as, but at least some hours before, UT. They contrast with unmarked verbs, which contribute an immediately-before-UT meaning (see §5.5.1). Observe the following pairs, which are representative of everyday utterances:

(226) Immediate past versus same-day past: first person singular

a. Wepaka 'on. w-epak-a 'on 1SG-wake.up-TH 1SG 'I woke up [just now].'
common in everyday speech

b. Wepaka o'e.
w-epak-a o-'e
1SG-wake.up-TH 1SG-AUX.SG
'I woke up [earlier today].'
common in everyday speech

(227) Immediate past versus same-day past: first person plural exclusive

- a. *Otearopkà* 'ote. ote-arop-ko-a 'ote 1PL.EXCL-food-eat-TH 1PL.EXCL 'We-EXCL ate [just now].' common in everyday speech
- b. Otearopkà otea. ote-arop-ko-a ote-a
 1PL.EXCL-food-eat-TH 1PL.EXCL-AUX.PL
 'We-EXCL ate [earlier today].'
 common in everyday speech

Note that 'e and a combine here with regularly-inflected lexical verbs, that is, ones marked with the theme vowel. This contrasts with the future auxiliary pe...ap, which requires its VP complement to bear explicit nominalizing morphology (§4.4.2).

Two further generalizations about the same-day past are important to mention here. First, the weak nominative enclitics never occur in the same-day past: this is why 'on '1SG' and 'ote '1PL.EXCL', given in the (a) examples, are absent from the (b) examples. More information about the temporal and aspectual restrictions of the weak nominative enclitics can be found in Chapter 5. Second, the language's otherwise robust distinction between witnessed and non-witnessed past tense events is neutralized in the same-day past; this construction does not accept the evidential suffix *-pnē/-psira* and must therefore be always interpreted as [+WITNESSED]. A different way of framing this generalization is as follows: the language makes a distinction between witnessed events that occurred immediately before UT (228a) and witnessed events that occurred several hours before – but during the same day – as UT (228b); yet non-witnessed events conflate these two temporal categories (228c).

(228) The same-day past neutralizes the witnessed/non-witnessed evidentiality distinction

a. *Terae*.
tet-a e
go.SG-TH 3
'He/she went (WITNESSED).' → immediately prior to UT
common in everyday speech

- b. Tera y'e.
 tet-a y-'e
 go.SG-TH 3-AUX.SG
 'He/she went (WITNESSED).' → same day as, but several hours before, UT common in everyday speech
- c. *Tetnaẽ*. tet-**nẽ**-a e go.SG-EV.SG-TH 3 'He/she went (NON-)

'He/she went (NON-WITNESSED).' \rightarrow temporally flexible; can refer to an event that took place immediately prior to UT or to one that took place several hours before UT common in everyday speech

4.3.3 The present progressive and present existentials

When combined with the particle $n\tilde{a}$ 'PROGRESSIVE' the auxiliaries 'e and a provide a present progressive interpretation. In this construction singular 'e transmits positional information: it paradigmatically contrasts here with $y\tilde{e}$, which indicates that the subject is horizontal (sitting, reclining, lying, etc.). The use of 'e rather than $y\tilde{e}$ signals that the subject is vertical or moving around. Table 4.5 gives the paradigm, with the progressive particle $n\tilde{a}$ included. The third person proclitic *i*- \sim y-

	SG, horizontal	SG, vertical/not horizontal	PLURAL
1incl	– nã oyẽ	nã o'e	nã kia
1EXCL	- na oye	nu o e	nã otea
2	nã eyẽ	nã 'e	nã wara
3	nã yẽ	nã y'e	nã sa
3coref	nã teyã	nã te'a	nã tea

 Table 4.5: Present progressive paradigm

is lost before horizontal $y\tilde{e}$, so the third person form of the auxiliary is homophonous with the root $y\tilde{e}$ itself. (This elision is consistent with broader properties of Tuparí phonology, as *i*- $\sim y$ - is realized as [n] prior to nasal material.)

(229) and (230) illustrate the positional distinction operative with singular subjects in the present progressive.

- (229) $y\tilde{e}$ is used with singular subjects that are sitting or lying down
 - a. CONTEXT: A mother explains to her daughter that she is busy conducting an interview with me.

	Adãõ-n Adam-NUC 'I am teach	teach-TH	-a nã PRO e Tupa	o -yẽ G 1sg-	AUX _{hznt}	<i>Tupari ema'erẽ</i> . Tupari ema'ẽ-re I Tuparí language-OBL t ing down).'
b.	<i>Èma'em</i> e-ema'ẽ-m 2SG-langua 'You are sp	èma	' <i>ã</i> la'ẽ-a speak-' ur lang	nã Th PRC	e-yẽ DG 2SG-A	
	kot'oy-'oı [want-NEG 'Though he casual discour	rse: 2015-10-1	ko-a eat-TH nt it, he	nã I PROG is still	eating (s	ntl s itting down).' r not horizontal
a.	ʻI'm makin		juice fo		o-'e DG 1SG-A	
b.	'You're nak	a EG-VBZ _{ka} -TH xed (standin rse: 2015-12-2	g uprig		SG	
c.	'He's being		y (stan	y-'e DG 3-A	UX.SG	

(230)

This positional distinction is neutralized with non-singular subjects. In each of the following examples, the same auxiliary form can be used regardless of the physical position of the subject.

(231) Plural *a* is positionally unspecified

- a. Sebola tàn kit kot'oa nã otea. sebola tàn kit kot'oy-a nã ote-a onion tall seed want-TH PROG 1PL.EXCL-AUX.PL
 'We-EXCL are wanting the long onion seeds.' casual discourse: 2016-02-09
- b. Katke nã wara?
 katke nã wat-a
 what PROG 2PL-AUX.PL
 'What are you-PL doing?'
 common in everyday speech
- c. Tepoatkarap kot'oa nã sa. te-poatkat-ap kot'oy-a nã s-a 3C-finish-NMZ_{ap} almost.do-TH PROG 3-AUX.PL
 'They are almost finishing.' casual discourse: 2016-02-07

We find a comparable neutralization of the positional contrast within the resultative suffix. That suffix contrasts singular horizontal *-pse* against singular vertical *-pne*, but has only one, positionally unspecified plural form: *-psira*. See §6.8.

Like the members of the AUX_{go} series – discussed in §4.2, above – the auxiliaries 'e, y \tilde{e} and a can be used in present existential utterances. Here, too, a positional contrast obtains in the singular between horizontal and vertical subjects. Existential utterances lack the progressive particle $n\tilde{a}$ and also require a weak nominative enclitic, just as we saw with AUX_{go} in §4.2.1.

(232) 'e, $y\tilde{e}$ and a in present existentials

a. *Teyãẽ*.
te-yẽ-a e
3C-AUX_{hzntl}-TH 3
'It is there / it exists (sitting).'
common in everyday speech

b. Te'ae.
te-'e-a e
3C-AUX.SG-TH 3
'It is there / it exists (vertical).'
common in everyday speech

c. *Teae*.
te-a-a e
3C-AUX.PL-TH 3
'They are there / they exist.'
common in everyday speech

4.3.4 Concerning the positional contrast between yē and 'e

There is an important distinction between $y\tilde{e}$, on the one hand, and 'e and a, on the other: $y\tilde{e}$ functions outside of the present progressive as a lexical verb while 'e and a are purely functional in nature and distribution. In both of the following examples the lexical verb $y\tilde{e}$ is prefixed with the dismissive (e)tat- 'just', shown in Chapter 3 to occur at the far left edge of the predicate complex.

- (233) Horizontal $y\tilde{e}$ can be used as a lexical verb as well
 - a. *Ètatyẽ! Ètat'epsiksẽ!*e-etat-**yẽ** e-etat-epsik-sẽ
 2SG-just-**be.horizontal** 2SG-just-sit-RSLT.SG.HZNTL
 'Just be there, sitting! Just stay seated!'
 casual discourse: 2016-11-15
 b. *Wetatyã* nã oyẽ.
 w-etat-**yẽ**-a nã o-**yẽ**
 - 1SG-just-be.horizontal-TH PROG 1SG-AUX_{hzntl}
 'I am just being horizontal, sitting.'
 casual discourse: 2016-07-21

Observe that there are two morphemes pronounced as $y\tilde{e}$ [$p\tilde{e}$] in (233b): the main verb, prefixed with (*e*)tat'- 'just', and the auxiliary preceded by the progressive particle $n\tilde{a}$. I have attempted to capture the distinction between these two morphemes by glossing the lexical verb as 'be.horizontal' and the auxiliary as 'AUX_{hzntl}.'

It is common for the lexical verb $y\tilde{e}$ 'be.horizontal' to occur embedded under additional functional morphology in contexts other than the present progressive. (234) illustrates with the near future, discussed in §4.4.1. There is no positional contrast operative in the near future; the auxiliary '*e* is used with all singular subjects in that construction regardless of physical position.

- (234) Horizontal $y\tilde{e}$ can occur in the near future
 - a. CONTEXT: A speaker who lives in Alta Floresta D'Oeste discusses what she will do if her mother doesn't send her fresh *kõãtek* 'palm grubs' from the village.

Here tatkot'oaoyam'ao'e.here Ø-tat-kot'oy-ao-yẽ-a-m'ao-'ethen 3-just-want-TH 1SG-be.horizontal-TH-NEAR.FUT 1SG-AUX.SG'Then I'll just be wanting it/some (sitting down).'casual discourse: 2018-01-22

b. CONTEXT: A speaker comments on how I have strung my hammock outside rather than inside a local house.

 $P \tilde{e} \tilde{o} y p \tilde{e} \tilde{o} y p o a t n \tilde{a}$ e' e r ae y a m' a'e. $p \tilde{e} \tilde{o} y p \tilde{e} \tilde{o} y - p o a t - n \tilde{e} - a$ e' e t - a $e - y \tilde{e} - a - m' a$ 'e $[cold]^2 - good - VBZ_{n \tilde{e}} - TH$ 2SG-sleep-TH2SG-be.horizontal-TH-NEAR.FUTAUX.SG

'You are going to sleep nice and cool (lying down).'

casual discourse: 2016-01-18

c. CONTEXT: My friend is preparing to go upriver to a different village for the day, and I ask him if his wife will accompany him. He says no.

Nẽro'om. Hare teyam'a	y'e.
nerõ'om hare te- yẽ- a- m'a	y- 'e
no here 3C- be.horizontal -TH- NEAR.FU	t 3-aux.sg
'No, she will be staying here (sitting).'	
casual discourse: 2016-12-04	

Because the auxiliary 'e indicates verticality only when it is in paradigmatic contrast with $y\tilde{e}$ 'AUX_{hzntl}' – and because that paradigmatic contrast *does not obtain outside of the present progressive* – the presence of 'e in the near future construction does not imply that the subject is vertical. We see this from the three examples in (234), all of which contain the explicitly horizontal lexical verb $y\tilde{e}$ embedded underneath the functional 'e 'AUX.SG'.

4.4 The future auxiliaries and their relationship to 'e and a

Tuparí has two different auxiliary constructions for the future tense, referred to here as the NEAR FUTURE and DISTANT FUTURE. The former can be used to refer to any event set to take place after UT; the latter, however, cannot be used for same-day future events. These auxiliary constructions

exist alongside the polite future particles *ko* and *ke*, which occupy the same position in the 2P particle cluster as do *õpot* 'DISTANT PAST' and *kut* 'ANCIENT PAST' (Chapter 5).

- (235) Examples of the 2P polite future particles
 - a. *Òsa* ko 'on wat yope. o-s-a ko 'on wat yope 1SG-come.SG-TH POLITE.FUT 1SG 2PL along.with 'Let me come along with you-PL.' / 'I am going to come along with you-PL.' / 'I ought to come along with you-PL.' text: Miraci Aguissi Tupari, narrator b. *Épapokap* tetka ke 'en etoptonamtenã. e-epapok-ap tetka-a ke 'en e-top-tonã-am-tenã 2SG-return-NMZap do.quickly-TH POLITE.FUT 2SG 2SG-see-again-NMZap-PURP

'You should come back quickly in order [for me] to see you.'

casual discourse: 2017-10-29

4.4.1 The near future

The near future construction has three different variants, each tied to a different generation. The variant used by the youngest generation behaves differently in terms of its interaction with 2P clause-typing particles. All three variants share the same division of labor in the auxiliary roots that we have seen so far: 'e is used with singular subjects; a, with plural ones.

	SINGULAR	PLURAL
1incl	-pwa o'e	-pwa kia
1EXCL	- <i>pwu o e</i>	-pwa otea
2	-pwa 'e	-pwa wara
3	-pwa y'e	-pwa sa
3coref	-pwa te'a	-pwa tea

Table 4.6: The near future for the eldest generation

The variants of the near future used by the eldest generation and by middle-aged speakers are given in Table 4.6 and Table 4.7, respectively. In terms of morphosyntactic behavior these two variants are indistinguishable from one another. The only difference is phonological: older speakers pronounce the near future affix as $[p^2.wa\sim m^2.wa]$, whereas middle-aged ones pronounce

	SINGULAR	PLURAL
1incl	-p'a o'e	-p'a kia
1EXCL	- <i>p</i> u o e	-p'a otea
2	-p'a 'e	-p'a wara
3	-p'a y'e	-p'a sa
3coref	-p'a te'a	-p'a tea

Table 4.7: The near future for middle-aged speakers

it as $[p^{2}.2a \sim m^{2}.2a]$.³ This affix occurs on the lexical verb immediately subordinate to the auxiliary.

(236) Examples of the near future as realized by elderly speakers

a. *Katkaere nãpe omemsiremsĩren tèsapwa* katkaere nãpe o-memsiremsin-en te-s-a-**pwa** when REALLY?! 1SG-grandchild.of.woman-NUC 3C-come.SG-TH-NEAR.FUT y'e? y-'e
3-AUX.SG
'Just when is my grandchild going to come here?' / 'When on earth is my grandchild going to come here?'

b. CONTEXT: A grandmother lets her young granddaughter know that once her friend leaves the village, no one will pick her up anymore.

Ekoakiat'omnamwa'e.e-koaki-at-'om-nẽ-a-**mwa**'e2SG-pick.up-ACTOR-NEG-VB $Z_{n\tilde{e}}$ -TH-NEAR.FUT AUX.SG'You will be without anyone to pick you up.'casual discourse: 2017-08-30

(237) Examples of the near future as realized by middle-aged speakers

a. *Iu nam'a* y'e watoaptenã.
iu nẽ-a-m'a y-'e w-ato-ap-tenã rain do-TH-NEAR.FUT 3-AUX.SG 1SG-bathe-NMZ_{ap}-PURP 'It's going to rain in order for me to take a bath.' casual discourse: 2015-10-28

³The teacher Isaias Tarimã Tupari has told me that he prefers in written materials to use the variant *-pwa* as part of a larger effort to publicly affirm the value (Portuguese *valorizar*) of the Tuparí language as spoken by the ethnic group's most senior members. Rather than unifying all instances of the near future construction in this dissertation, I have chosen to distinguish between the three variants for the purpose of descriptive accuracy.

b. *Suk'am kiarop* kap'a kia, wa'usìt suk'am ki-arop ko-a-**p'a** ki-a w-a'usi-t later 1PL.INCL-food eat-TH-NEAR.FUT 1PL.INCL-AUX.PL [1SG-wife-NUC aroit sura *y'a*. y-'a aroy-t sut-a rice-NUC cook-TH 3-when.SG] 'We are going to eat our food once my wife has cooked the rice.' casual discourse: 2014-06-30

The suffix $-pwa \sim -p'a$ is indivisible from the lexical verb to which it attaches. This indivisibility becomes clear when a 2P clause-typing particle is present, since these particles will separate the VP that bears $-pwa \sim -p'a$ from the auxiliary. (238) illustrates with the clause-typing particles $n\tilde{a}kop$ 'MAYBE', $n\tilde{a}pe$ 'REALLY?!' and $n\tilde{e}$ 'YES/NO'. In each of these utterances the clause-typing particle intervenes in the linear string between the suffix $-pwa \sim -p'a$ – which is attached to the lexical verb – and the auxiliary.

(238) Clause-typing particles will separate the verb marked with $-pwa \sim -p'a$ from the auxiliary

a.	Oterap'a o-tet-a- p'a [_{VP} 1SG-go.SG-TH-NEAI 'Maybe I am going to go casual discourse: 2015-11-10		o-'e
b.	Sap'a	nãpe	
	Ø-si-a- p'a	L	
	[VP 3-shoot-TH-NEAR.F	UT] REALLY?	1SG-AUX.SG
	'Am I really going to sho	oot it?'	
	text: Tereza Miraká Tupari, na	arrator	
c.	Iyma'ẽkap	kot'oap'a	nẽ 'e?
	i-yma'ẽk-ap	kot'oy-a- p'a	nẽ 'e
	[VP 3-speak.with-NMZ _{ap}	want-TH-NEAL	R.FUT] Y/N AUX.SG
	'Are you going to want to	o speak to her?'	
	casual discourse: 2016-08-27		
d.	Tèsap'a	nẽ y	'e?
	te-s-a- p'a	nẽ y	'-'e
	[VP 3C-come.SG-TH-NEA	AR.FUT] Y/N 3	-AUX.SG
	'Is he going to come here	e?'	

casual discourse: 2015-02-12

These examples show that the VP whose verb bears $-pwa \sim -p'a$ 'NEAR FUTURE' forms a single, indivisible constituent for the purposes of 2P particle placement.

	SINGULAR	PLURAL
1 INCL	ba o'e	ba kia
1EXCL	<i>bu o e</i>	ba otea
2	ba 'e	ba wara
3	ba y'e	ba sa
3COREF	ba te'a	ba tea

Table 4.8: The near future for the youngest generation

The variant of the near future used by younger speakers behaves differently. In this variant the suffix $-pwa \sim -p'a$ has been reanalyzed as a separate particle with a voiced onset: *ba*. The effect of this reanalysis becomes very salient when a 2P clause-typing particle enters the clause, since the particle *ba* – unlike the suffix $-pwa \sim -p'a$ – will occur to the *right* of the clause typer. Put slightly differently: whereas the suffix $-pwa \sim -p'a$ must stay on the lexical verb, the particle *ba* must stay next to the auxiliary. This means that *ba* cannot form a unit together with a clause-initial VP for the purpose of 2P particle placement.

(239) Clause-typing particles will separate the lexical VP from the particle ba

- a. Oterotetet'anã nãkop ba otea. ote-erote-tet'anẽ-a nãkop ba ote-a
 [VP 1PL.EXCL-all-go.PL-TH] MAYBE NEAR.FUT 1PL.EXCL-AUX.PL
 'Maybe we-EXCL are all going to go.'
 casual discourse: 2017-11-?27
- b. *Teorap tetka nãkop ba sa.* te-ot-ap tetka-a **nãkop ba** *s-a* [VP 3C-go.PAUC-NMZ_{ap} do.quickly-TH] MAYBE NEAR.FUT 3-AUX.PL 'Maybe they are going to go quickly [i.e., not stay long].' casual discourse: 2018-01-22
- c. $T\tilde{a}remanpùnkeromka$ $t\tilde{a}reman-pùnke-ro-'om-ka-a$ $[VP not.again-dally-NMZ_{ro}-NEG-VBZ_{ka}-TH]$ Y/N NEAR.FUT AUX.SG 'Are you never again going to dally here [i.e., spend a while here]?' casual discourse: 2016-11-10

The pairs in (240) and (241) contrast the conservative variant of the near future that the middle-aged and elderly employ (with the suffix $-pwa\sim -p'a$) against the innovative one preferred by younger speakers (with the particle *ba*).⁴

(240) Minimal pair contrasting conservative and innovative variants of the near future

- a. *Iu nam'a nãkop je.*iu nẽ-a-m'a nãkop y-'e
 [VP rain do-TH-NEAR.FUT] MAYBE 3-AUX.SG
 'Maybe it is going to rain.'
 casual discourse: 2016-02-11
- b. *Iu nã nãkop ba* y'e. iu nẽ-a **nãkop ba** y-'e
 [VP rain do-TH] MAYBE NEAR.FUT 3-AUX.SG 'Maybe it is going to rain.' casual discourse: 2015-08-18

(241) Near-minimal pair contrasting conservative and innovative variants of the near future

a.	<i>Katkàp'e</i> katke-a-j [_{VP} do.what-	p'a	<i>mãkẽrõ o'e.</i> mãkẽrõ o-'e DUNNO 1SG-AUX.SG
	'I don't know	v what I'm going	to do.'
	casual discours	e: 2016-11-24	
b.	katke	mãkẽrõ ba mãkẽrõ ba] DUNNO NEAR	otea. ote-a .FUT 1PL.EXCL-AUX.PL
	'I don't know	v what we-EXCL	are going to do.'5
	casual discours	e: 2018-06-03	

In each of the conservative (a) examples, the VP marked with -p'a is in clause-initial position; it therefore precedes the 2P clause typers (*nãkop* 'MAYBE', *mãkẽrõ* 'DUNNO'). In the innovative (b)

⁴Following a consonant, the auxiliary *y'e* is typically realized with a voiced affricate: [dʒe]. Example (240a) is therefore pronounced as [i.u.nãm.?a.nã.kop'.dʒe] or [i.u.nãm.wa.nã.kop'.dʒe], whereas (240b) is pronounced as [iu.nã.nã.kop'.bac'.?e].

⁵The verb *katke* 'do what, do how' is a [+*wh*] anaphor comprised of the *wh*-root *kat* (as in *kat'at* 'what') and the verbal root *ke*. It serves as the base for *katkaere* 'when'. *katke* shares some morphological irregularities with the lexical verb *ke* 'think, say, be like'. It has an unexpected long vowel in (241a), where it is suffixed with the near future -*p'a*. Adding only the theme vowel to *katke* does not have an audible effect unless another affix, such as near future -*p'a*, is also added; this is why the main verb in (241b) is pronounced as *katke* [kat'.ke].

examples, the clause typers follow the VP but precede the particle *ba*. Although the two different versions of the near future index the speaker's generation, this morphosyntactic alternation does not cause any semantic differences. That is, the two variants in (240) (*Iu nam'a nãkop je, Iu nã nãkop bay'e*) are to my knowledge truth-conditionally equivalent.

The different variants of the near future are morphosyntactically indistinguishable in the absence of a 2P clause-typing particle. But when such a article is present, the morphosyntactic differences between them become clear. The innovative variant is considered particularly bad by older speakers; those speakers often refer to the particle *ba* as an example of the erroneous speech of young Tuparí. But as virtually all speakers under age twenty use this construction, it is likely to itself become the community standard one day.

Note that the near future particle *ba* that younger speakers use enjoys the same distribution as the present progressive particle $n\tilde{a}$ (§4.2.1, §4.3.3). Just like *ba*, $n\tilde{a}$ will surface to the right of a clause typer. This is true in the speech of young and old Tuparí alike.

(242) Clause-typing particles will separate the lexical VP from the particle *nã*

a.	Eapsi'a	nẽ nã	eyẽ	wema'erẽ	poatkia?
	e-apsi'e-a	nẽ nã	e-yẽ	w-ema'ẽ-re	poatkia
	[VP 2SG-hear-TH] Y/N PRO	g 2sg-au	X_{hzntl} 1 SG-language-C	BL well
	'Are you hearing	my voice w	vell (sitting	g)?'	
	casual discourse: 20	16-11-16			
				~ ~	

b. Wapsi'ap kot'oa pa'a nã oyẽ heporet! w-apsi'e-ap kot'oy-a pa'a nã o-yẽ heporet
[VP 1SG-hear-NMZ_{ap} want-TH] ASSERTIVE. O' PROG 1SG-AUX_{hzntl} also
'I too am really wanting to listen (sitting)!'
casual discourse: 2017-04-13

The progressive particle $n\tilde{a}$ forms a unit with the auxiliary, not with the lexical VP; hence a 2P clause typer can separate the lexical verb from the pre-auxiliary particle in the linear string. So the variant of the near future used by the youngest generation behaves structurally just like the present progressive.

4.4.2 The distant future

The near future construction can be used for any event that will take place after UT; that event may be far off or may be set to take place imminently. The distant future, in contrast, can only be used for events that will take place at least one day after UT. (This is a strict constraint on temporal reference. Speakers have corrected me for using the distant future to speak of same-day events.)

	SINGULAR	PLURAL
1 INCL	peo'ap	pekiap
1EXCL	peo up	peoteap
2	pe'ap	pewarap
3	pey'ap	pesap
3coref	pete'a	petea

Table 4.9: Distant future paradigm

In terms of its morphological structure the distant future is the most aberrant of all of the auxiliary constructions in Tuparí. This is due to two factors. First, the pronominal morphemes that attach as proclitics to all other auxiliaries instead behave like *meso*clitics on the distant future auxiliary: they occur in the middle of the discontinuous morpheme pe...ap. Second, the lexical verb that is subordinate to the distant future auxiliary must enter into a special non-finite form marked with the nominalizer *-ro/-to*. Table 4.9 provides the basic paradigm. Here I will argue (*a*) that the distant future's synchronic aberrance enjoys at least a partial diachronic explanation and (*b*) that the distant future can be shown to contain the auxiliaries '*e* and *a*.

Examples (243) and (244) offer utterances in which the distant future cooccurs with singular and plural subjects, respectively. Observe that with singular subjects the auxiliary appears with a glottal stop following the pronominal clitic; with plural subjects there is no glottal.

(243) Distant future auxiliary with singular subjects: singulative glottal stop is present

a. *Eret txau kãuwarõ peo'ap.* eret txau kãuwã-ro **peo'ap** tomorrow manioc.flour roast-NMZ_{ro} **FUT.1SG** 'Tomorrow I will be toasting manioc flour.' casual discourse: 2016-01-19

- b.Here ẽrenkeewaktope'ap.here en-etkee-wak-tope'apand2SG-NUC like.this2SG-cry-NMZ_{ro}FUT.2SG'And as for you, you will cry like this.'text: Miraci Aguissi Tupari, narrator
- c. Sirotetop pey'ap tera te'a.
 s-irote-top pey'ap tet-a te-'a
 3-all-see FUT.3SG [go.SG-TH 3C-when.SG]
 'He will see all of them [=his children] when he goes there.'
 casual discourse: 2017-07-26
- (244) Distant future auxiliary with plural subjects: singulative glottal stop is absent
 - a. *Kieuetop pekiap*.
 ki-eue-top **pekiap**1PL.INCL-RCP-see **FUT.1PL.INCL**'We will see one another.'
 common in everyday speech

b. *Here otemàka sa oteoro peoteap*.
here ote-màk-a s-a ote-ot-ro peoteap
so [1PL.EXCL-send-TH 3-when.PL] 1PL.EXCL-go.PAUC-NMZ_{ro} FUT.1PL.EXCL
'So when they send us-EXCL off, we-EXCL will go.'

casual discourse: 2018-02-19

c. Wat'oat tèpatwara y'a, ke watwakto te-epatwat-a y-'a wat-wak-to wat-oa-t ke [2PL-brother.of.woman-NUC 3C-die-TH 3-when.SG] like.this 2PL-cry-NMZ_{ro} pewarap. pewarap FUT.2PL 'When your-PL brother dies, you-PL will cry like this.' text: Miraci Aguissi Tupari, narrator d. Eret teip'anerõ

d. *Eret teip'anerõ pesap.* eret te-ip'anẽ-ro **pesap** tomorrow 3C-come.PL-NMZ_{ro} **FUT.3PL** 'Tomorrow they will come here.' casual discourse: 2016-01-04

The final labial of the distant future is lost altogether when the theme vowel is added. Compare (245a) against (245b):

(245) Final /p/ of the distant future auxiliary is lost prior to the theme vowel: singular subject

- a. Serrinham tero pey'ap. Serrinha-m tet-ro pey'ap Serrinha-INS go.SG-NMZ_{ro} FUT.3SG 'He/she will go to Serrinha.' elicitation: 2015-10-15
 b. *Òwet Serrinham tero pete'a.*
- o-op-et Serrinha-m tet-ro **pete** a. 1SG-father-NUC Serrinha-INS go.SG-NMZ_{ro} **FUT.3SG+TH** 'My father will go to Serrinha.' elicitation: 2015-10-15

Since final labial consonants always delete prior to vowel-initial suffixes, we would predict the form **pete'awa* in (245b) (just as *pap* 'get drunk, die' becomes *pawa* when inflected with the theme vowel). However, it would appear that an idiosyncratic process of vowel contraction applies in the distant future to yield third person singular *pete'a*. The same contraction applies with the third person plural form:

(246) Final /p/ of the distant future auxiliary is lost prior to the theme vowel: plural subject

a.	<i>Serrinham</i> Serrinha-m Serrinha-INS		<i>pesap.</i> pesap MZ _{ro} FUT.3P	L	
	'They will go	o to Serrinha.'			
	elicitation: 201	5-10-15			
b.	Òwet	osi	eanã	Serrinham	teoro
	o-op-et	o-si	eanã	Serrinha-m	te-ot-ro
	1SG-father-N	UC 1SG-mother	r together.with	n Serrinha-INS	3C-go.PAUC-NMZ _{ro}
	petea.				
	petea FUT.3PL+TH	I			
	'My mother	and my father v	vill go to Serri	inha.'	
	elicitation: 201	5-10-15			

Note also the number contrast within the lexical verbs themselves: singular *tet* in (245) but paucal *ot* in (246).

In the distant future construction the lexical verb is (usually) inflected with the deverbal nominalizer *-ro/-to*. (See Singerman 2018 for the rationale behind analyzing *-ro/-to* as a nominalizer.) The choice between *-ro* and *-to* is phonologically conditioned: *-ro* occurs following a vowel-final verbal root or one which ends with an alveolar stop. The allomorph *-to* occurs in all other contexts. A final alveolar consonant on the lexical verb is lost prior to *-ro*, and nasal spreading will target *-ro* following a nasal segment (examples 243a and 244d, above). It is common however for *-ro/-to* to be absent when the lexical verbal root ends in a labial, palatal, or velar consonant. This is shown with the roots *top* [top[¬]] 'see, watch' and $m\tilde{a}k$ [mã:ŋ[¬]] 'send' in (247).

(247) Examples of the distant future with *-ro/-to* 'missing'

- a. *Kieuetop pekiap*.
 ki-eue-top pekiap
 1PL.INCL-RCP-see FUT.1PL.INCL
 'We will see one another.'
 common in everyday speech
- Wa'up nã o'a mấk peo'ap esope èma'erẽ b. mằk peo'ap e-sope w-a'up nẽ-a o-'a e-ema'ẽ-re [1SG-son do-TH 1SG-when.SG] send FUT.1SG 2SG-with 2SG-language-OBL tepuop'oraptenã. te-puop'ot-ap-tenã 3C-learn-NMZap-PURP "When I have a son, I am going to send him with you, in order for him to learn your language.' casual discourse: 2015-10-12

The presence of *-ro/-to* is subject to interspeaker variation. As the following pair of utterances shows, certain verbal roots are attested with and without *-ro/-to* in the distant future construction:

(248) Variation with regards to the appearance of -ro/-to in the distant future

a.	kat'at what		nã C FOCU	e- s-to s 2sg-c	ome.SG-NMZ _{re}	<i>pe`ap?</i> pe`ap , FUT.2SG
b.	casual d <i>Katkae</i>	-	7-12-05 P	e'ap	ham?	
	'When	re e-s 2SG-con will you co liscourse: 201'	ne.SG F		5 hither	

The factors that condition this variation are not understood at this point but may be prosodic or metrical in nature.

The circumfix-like nature of pe...ap – which surrounds the pronominal clitic on both sides – is peculiar within the broader context of the Tuparí auxiliary system: in all other constructions the pronoun attaches as a proclitic at the auxiliary's left edge. This synchronic aberration probably enjoys a diachronic explanation. The distant future appears to have evolved out of an adverbial construction meaning 'before doing X'. This construction, still in use today, consists of a VP nominalized with *-ro/-to* plus the locative case *-pe*:

(249) Examples of the 'before doing X' construction

a. *Epo* o'a *earopkorope!* e-po o'e-a e-arop-ko-**ro-pe** 2SG-hand wash-TH [2SG-food-eat-NMZ_{ro}-LOC] 'Wash your hands before eating your food!' casual discourse: 2015-12-31

b. *Watoa* ko 'on irik'enerõpe.
w-ato-a ko 'on irik'e-nẽ-ro-pe
1SG-bathe-TH POLITE.FUT 1SG [work-VBZ_{nẽ}-NMZ_{ro}-LOC]
'Let me go bathe before working.'
casual discourse: 2016-01-10
c. *Nãpe* kurem kuret pùnkero pey'ap teosirope.

nãpe kurem kut-et pùnke-ro pey'ap te-osit-**ro-pe** that's.why today child-NUC dally-NMZ_{ro} FUT.3SG [3C-stand.up-NMZ_{ro}-LOC] 'That's why a child today will dally / take a while before standing up on his own.' text: Raul Pat'awre Tupari, author

The diachronic hypothesis for the origin of pe...ap is as follows. At an earlier stage in the language's history, the locative-marked adverbial combined with an auxiliary of the shape (')ap. Like all other auxiliaries in Tuparí, (')ap would have taken a pronominal proclitic indexing the subject. But at some point the locative -pe ceased to serve as a locative suffix on the non-finite lexical verb and was instead reanalyzed as part of the auxiliary stem itself. This gave rise to the distant future auxiliary as it exists today.

In the next subsection I argue that the hypothesized (')ap would have consisted of singular 'e

and plural *a* plus an additional morpheme of the shape *-ap*. The auxiliary roots '*e* and *a* can in fact be recovered inside of the distant future auxiliary in certain contexts.

4.4.3 Morphological decomposition of the distant future

The data in §4.4.1 demonstrate that the near future construction transparently contains the auxiliaries 'e and a. In what follows I argue that 'e and a are also present in the distant future pe...ap, though a little more investigation is required to reveal their presence. The relevant data come from the verb $n\tilde{a}$ 'do again', which always takes a verbal complement nominalized by *-ro/-to*. (I gloss *-ronã* as a single affix in order to keep the morpheme-by-morpheme segmentation readable.)

- (250) Examples of -ronã 'again'
 - a. Õke kioronã!
 õke ki-ot-ronã
 IMPERATIVE 1PL.INCL-go.PAUC-again
 'Let's go again!'
 casual discourse: 2015-12-25
 - b. *Iu nã y'eronã*.
 iu nẽ-a y-'e-**ronã**rain do-TH 3-AUX.SG-again
 'It has rained again.'
 casual discourse: 2016-02-05
 - c. Wepapokap'a o'eronã.
 w-epapok-a-p'a o-'e-ronã
 1SG-return-TH-NEAR.FUT 1SG-AUX.SG-again
 'I am going to return here again.'
 text: Miraci Aguissi Tupari, narrator
 - d. Eõyê haet nê tepòtkara nã tearonã?
 e-õyê hap-et nê te-pòtkat-a nã te-a-ronã
 2SG-mouth hair-NUC Y/N 3C-grow-TH PROG 3C-AUX.PL-again
 'Are your beard hairs growing longer again?'
 casual discourse: 2015-12-30
 - e. *Kurem otetpe* òsa okoptonã. kurem o-tet-pe o-s-a o-kop-**tonã** today 1SG-go.SG-after 1SG-come.SG-TH 1SG-AUX.SG_{moving}-**again** 'Today, after going, I am coming back again.' casual discourse: 2016-02-03

As shown by (250b) through (250e), *-rona* will sit on top of a post-verbal auxiliary rather than attach to the lexical verb itself. If the auxiliaries head syntactic projections located above the VP/vP, then the projection that *-ronã* heads must occupy an even higher position.⁶ But *-ronã* does not sit on top of the distant future pe...ap; rather it 'unpacks' this auxiliary's final (')ap sequence. (251) illustrates with singular subjects, and (252), with plural ones. When the subject is singular then the 'unpacked' auxiliary contains a clear 'e; with plural subjects it contains a clear *a*. The final labial of the auxiliary obligatorily nasalizes to /m/ when *-ronã* is present, as shown by pairs like *peo'ap* [peo.?ap[¬]] 'FUT.1SG' but *peo'eronam* [peo.?e.ro.nãm[¬]] 'FUT.1SG+again'.

(251) 'Do again' in the distant future, with singular subjects: 'e appears

- a. Otero peo'eronam.
 o-tet-ro peo'eronam
 1SG-go.SG-NMZ_{ro} FUT.1SG+again
 'I will go again.'
 common in everyday speech
- b. Yan pe'eronam toa etetpe, èy otetoa. pe'eronam yã-n top-a e-tet-pe e-s ote-top-a mom-NUC see-TH 2SG-go.SG-LOC 2SG-come FUT.2SG+again 1PL.EXCL-see-TH 'After you go visit your mother, you will come back to see us-EXCL.' casual discourse: 2016-01-13 kàpbi'ae. c. Nerõ pey'eronam pey'eronam ke-a-pbi'a e nẽ-ro do.so-NMZ_{ro} FUT.3SG+again say-TH-DUR 3

'She used to say 'it will do so again."

text: Iracema Taydyup Tupari, narrator

⁶-ron \tilde{a} occupies a position so high in the structure that it will embed not only post-verbal auxiliaries but even the evidential suffix -*pn\tilde{e}*/-*psira*.

(v) Teotsiraronã nẽ? te-ot-sira-ronã nẽ e 3C-go-EV.PL-again Y/N 3
'Did they-PAUC leave again (NON-WITNESSED)?' casual discourse: 2016-02-19

Chapters 5 and 6 argue that $-pn\tilde{e}/-psira$ occupies a position just beneath the Tense Phrase. On the theory of Cinque (1999) – who famously relates adverbial morphemes to particular functional heads in the clausal spine – this means that projection headed by $-ron\tilde{a}$ must sit in between the EvidP and the TP. I do know of any scopal effects that correlate with this ordering. While $-ron\tilde{a}$ scopes over the negative affix -'om (Singerman 2018:§6), whether it also scopes over evidential $-pn\tilde{e}/-psira$ – per the surface morpheme order – is not clear at present.

- d. Miran e'a 'Paketop Adãon?' kero etera e-'a mirã-n paketop Adão-n ke-ro e-tet-a little.girl-NUC [2SG-go.SG-TH 2SG-when.SG] where is Adam-NUC say-NMZ_{ro} pete'eronã. pete'eronã-a FUT.3SG+again+TH "When you go, the little girl will once again say: "Where is Adam?" casual discourse: 2016-12-12
- (252) 'Do again' in the distant future, with plural subjects: *a* appears
 - a. *Eret kieue'iyma'ẽk pekiaronam.* eret ki-eue-iyma'ẽk peki**arona**m tomorrow 1PL.INCL-RCP-speak.with FUT.1PL.INCL**+again** 'Tomorrow we-INCL will speak to one other again.' casual discourse: 2016-05-24
 - b. *Otèpapokto peotearonam.* ote-epapok-to peote**arona**m 1PL.EXCL-return-NMZ_{ro} FUT.1PL.EXCL**+again** 'We-EXCL will return.' casual discourse: 2017-07-12
 - c. *Teoro pesaronam.* te-ot-ro pes**arona**m 3C-go.PAUC-NMZ_{ro} FUT.3PL**+again** 'They-PAUC will go again.' common in everyday speech (see also casual discourse on 2016-07-23)

The same alternation between locally bound *te*- and locally free *i*- \sim *y*- \sim *s*- that was shown in (210), above, obtains here too. In (251c) there is no clause-initial third person subject, so the auxiliary bears *y*-: *pey'eronam*. But in (251d) the NP subject *miran* 'the little girl' is clause-initial, so the auxiliary bears *te*- as well as the theme vowel -*a*: *pete'eronã*. The theme vowel is responsible for deleting the final labial stop of the auxiliary, which has nasalized from /p/ to /m/ because of -*ronã*.

These examples demonstrate that a proper analysis of the distant future auxiliary demands morphological decomposition. As shown by the paradigm in Table 4.9, this auxiliary ends with '*ap* when used with singular subjects and *ap* when used with a plural one. When *-ronã* 'again' enters the picture, '*ap* and *ap* split into two separate pieces: '*e*/*a* plus *-ap*. While the exact nature

of that final *-ap* is unknown (it might descend from the nominalizer *-ap*, discussed in §3.7.2, or from the homophonous adverbial focus suffix), '*e* and *a* are just the singular and plural auxiliaries surveyed in the previous section. The full paradigm is provided in Table 4.10.

	SINGULAR	PLURAL
1incl	peo'eronam	pekiaronam
1excl	peo eronam	peotearonam
2	pe'eronam	pewararonam
3	pey'eronam	pesaronam
3coref	pete'eronã	petearonã

Table 4.10: Future paradigm plus -ronã 'again'

4.5 Habitual auxiliaries

4.5.1 Present habitual auxiliaries

Table 4.11: Present	habitual	paradigm
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	SINGULAR	PLURAL
1 INCL	o'apteka	kiapteka
1EXCL	ο αριεκά	oteapteka
2	e'apteka	warapteka
3	y'apteka	sapteka
3C	te'apteka	teapteka

Present habitual readings are supplied by the auxiliary (')apteka ['(?)ap'.te.ka], which takes a singulative glottal stop with non-plural subjects. To reduce clutter in the morphological segmentation I do not treat that glottal stop as a separate prefix but instead gloss it as part of the auxiliary itself.

(253) Habitual readings with apteka, singular subjects; singulative glottal stop is present

a. Herem tarape'ĩrẽ opop'a o'apteka.
herem tarape'ĩ-re o-pop'e-a o-'apteka since.then stingray-OBL 1SG-fear-TH 1SG-HABIT.SG
'Since then I have been afraid of stingrays.'
text: Rita Sisa Tupari, narrator

- b. Kat'aro èpu'ua e'apteka e'a etera kat'aro e-'apteka e-'a e-epu'u-a e-tet-a how.many 2SG-pass.day-TH 2SG-HABIT.SG [2SG-go.SG-TH 2SG-when.SG èkgo? e-ek-o 2SG-house-TH] 'How many days does it take you when you go back to your home?' casual discourse: 2015-10-31 c. Teytop'õerẽ teniã y'apteka.
- te-y'-top-'om-ere te-nĩ-a y-**'apteka** 3C-OBJ.NMZ-see/know-NEG-OBL 3C-be.embarassed-TH 3-**HABIT.SG** 'She gets embarassed around people that she doesn't know.' casual discourse: 2016-02-10

(254) Habitual readings with apteka, plural subjects; no singulative glottal stop

- a. *Oteapsitkara oteapteka ẽrõ ote eporet.* ote-apsitkat-a ote-**apteka** ẽn-o 'ote eporet 1PL.EXCL-think-TH 1PL.EXCL-**HABIT.PL** 2SG-INS 1PL.EXCL also 'We-EXCL think about you, too.' casual discourse: 2016-11-15
- b. Wat'atoa warapteka soka 'ero'are. wat-ato-a wat-apteka soka 'ero'are
 2PL-bathe-TH 2PL-HABIT.PL [cold while.SG]
 'You-PL bathe, even though/while it's cold.'
 casual discourse: 2015-12-22
- c. *Hare tambaki sa sapteka kuret.* hare tambaki si-a s-**apteka** kut-et here tambaqui spear-TH **3-HABIT.PL** child-NUC 'The children spear tambaqui here.' casual discourse: 2015-11-08

The fact that (')*apteka* takes a singulative glottal stop recalls the pattern seen in the distant future and other auxiliary forms surveyed above. Could it be that (')*apteka* decomposes into singular '*e* and plural *a*, just as the distant future does? As it so happens, I know of no evidence to support such a decomposition; it is not possible to break apart the initial syllable of (')*apteka* in the fashion attested with the distant future (§4.4.3). What is more, there is a telling morphological difference between present habitual (')*apteka*, on the one hand, and all of the auxiliaries built on '*e*/*a*, on the other. Whenever *e*- '2SG' attaches to '*e*, the proclitic disappears: instead of the predicted **e*'*e* we get just '*e*. (See examples 230b, 236b, 238c, and 239c.) The second person singular proclitic disappears in the distant future auxiliary series, as well: contrast *peo*'*ap* 'FUT.1SG' and *pey'ap* 'FUT.3SG' against *pe'ap* 'FUT.2SG'. With habitual (')*apteka*, however, the second person singular proclitic is never elided: *e'apteka*. (See example 253b for this form in its sentential context.) This difference constitutes evidence that habitual (')*apteka*, unlike the auxiliaries surveyed in the previous sections, does not decompose morphologically into '*e* and *a*.

The auxiliary (')*apteka* occurs only in present habitual contexts; it never combines with any other tense morphology. To achieve past habitual readings one typically uses the durative tense suffix *-pbi'a*, which can supply present generic interpretations as well. The morphosyntactic properties and the semantics of this suffix are discussed in greater detail in Chapters 5 and 6.

(255) Examples of durative -pbi'a

a.	Hare òwet	ipot sapbi'ae.		
	hare o-op-et	ipot si-a- pbi'a	e	
	here 1SG-father-NUC	C fish spear-TH- DUR	3	
	'My father used to ca	tch fish here.'		
	casual discourse: 2016-0	1-07		
b.	Ham nẽ mõket e	èsap	kot'oapbi'a	'en?
	ham nẽ mõket e	e-s-ap	kot'oy-a- pbi'a	'en
	hither Y/N long.ago 2	2SG-come.SG-NMZ <i>ap</i>	want-TH-DUR	2sg
	'Did you want to con	ne here already long	ago?'	

casual discourse: 2016-02-10

In a declarative clause durative *-pbi'a* entails that the speaker personally witnessed the action that she is relating. Periphrasis with the auxiliaries *'eka* and *aka* is required if the speaker is relating a non-witnessed past habitual event. These auxiliaries are addressed in the next subsection.

4.5.2 Temporally unspecified habitual auxiliaries: 'eka and aka

The auxiliaries '*eka* and *aka* express habitual aspect without specifying the temporal relationship between the event being related and the utterance time. So while (')*apteka* expresses present habitual events only, '*eka* and *aka* can occur in a much wider range of tenses; in my corpus they are attested everywhere from the ancient past to the distant future.

	SINGULAR	PLURAL
1 INCL	o'eka	kiaka
1EXCL	Оеки	oteaka
2	'eka	waraka
3	i'eka	saka
3COREF	te'eka	teaka

Table 4.12: Paradigm of the habitual auxiliaries 'eka and aka

It is very common for '*eka* and *aka* to occur in narratives in combination with the 2P tense particles *õpot* 'DISTANT PAST' and *kut* 'ANCIENT PAST'. (256) provides an excerpt from a text by Isaias Tarimã Tupari. The highlighted auxiliary '*eka* indicates that the action was repeated over and over: on multiple occasions the boy in this story goes into his sister's hammock and has sex with her.

(256) Textual example of kut 'ANCIENT PAST' combining with 'ekalaka

a.	Here kut	koepat	sim'em	tekoy	wapsim	temã
	here kut	koepa-t	sim'ẽ-m	te-koy	wap-sim	te-mã-a
	then ANCIENT.P	AST moon-NUC	night-INS	3C-sister	hammock-inside	3с-lay-тн
	tewãrã	i'ekapnẽ.				
	te-wan-a	i-'eka-pnẽ				
	3C-go.nearby-TH	3-AUX.SGhabit	-EV.SG			
	'And the moon,	at night, would	go a shor	t distance	to lay down in I	his own sister's
	hammock (NON-	witnessed).'				
1.	(NI~ 1-	,	· - '	1	4	

tewapsim b. 'Nã ko 'on!' ke te'a kut 'on] ke te-'a kut te-wap-psim [nẽ-a ko [do-TH POLITE.FUT 1SG] say 3C-when.SG ANCIENT.PAST 3C-hammock-inside sukan *i'ekapnẽ* тã te'aepatnã. sukã-n mã-a i-'eka-pnẽ te-'aepatnã pestle-NUC place-TH 3-AUX.SGhabit-EV.SG 3C-place/role 'While saying 'I want to do it [=have intercourse]', he would put a pestle in his place in his hammock (NON-WITNESSED).' text: Isaias Tarimã Tupari, author

Examples of 'eka/aka occurring with distant past õpot are provided in (257):

(257) Examples of *opot* 'DISTANT PAST' combining with 'ekalaka

a. Poatpoatkut'anã õpot wat warakapsira. poatpoat-kut'a-ne-a õpot wat wat-**aka**-psira [good]²-DIMIN-VBZ_{nẽ}-TH **DISTANT.PAST** 2PL 2PL-AUX.PL_{habit}-EV.PL 'You-PL were cute (NON-WITNESSED).' casual discourse: 2016-12-15 b. *Tekurere* teuenõnõka teoro'a õpot te-kut-ere õpot te-eue-nõnõka-a te-oro'e-a 3C-childhood-OBL DISTANT.PAST 3C-RCP-befriend-TH 3C-AUXg0.PAUC-TH sakapsira Nazare Arikapu eanã. s-**aka**-psira Nazare Arikapu eanã 3-AUX.PLhabit-EV.PL [PP Nazaré Arikapu together.with] 'In their childhood, she and Nazaré Arikapu became friends with one another.'

casual discourse: 2017-08-15

The auxiliaries 'eka and aka are also attested with non-past tense morphology, including the distant

future auxiliary *pe...ap*.

(258) Auxiliaries 'eka and aka in combination with the distant future

a.	Ot'awak ara	te'ekaro	pey'ap	tepòtkara	te'a.
	ot'awak at-a	te-'eka-ro	pey'ap	te-pòtkat-a	te-'a
	music play-TH	H 3C-AUX.SG _{habit} -NMZ _{rc}	, FUT.3SG	[3C-grow.up-TH	[3C-when.SG]
	'He [=a musicall	y talented child] will reg	ularly play	music when he	grows up.'
	casual discourse: 20	016-11-13			
b.	Kiepatwatpe,	kiepapoktonã,	ke	kiakaro	
	ki-epatwat-pe	ki-epapok-tonã,	ke	ki- aka -ro	
	1PL.INCL-die-aft	ter 1PL.INCL-return-again	n that's.how	/ 1pl.incl-aux	.PL _{habit} -NMZ _{ro}
	pekiap.				
	pekiap				
	FUT.1PL.INCL				
	'After we-INCL o	die, we will return again,	that's how	we will do it aga	ain and again.'
	text: Miraci Aguissi	Tupari, narrator			

That '*eka* and *aka* can occur with both past and future morphology demonstrates that these auxiliaries are temporally unspecified; their sole semantic contribution is that of habitual aspect. In this respect they differ sharply from (')*apteka*, which fuses present tense and habitual aspect into a single, synchronically unanalyzable form. As mentioned in the conclusion of §4.5.1, the durative tense morpheme *-pbi'a* expresses both habitual aspect and present/past tense. In declarative contexts *-pbi'a* entails that the speaker personally witnessed the action that he or she is relating; it never combines with the evidential suffix *-pnẽ/-psira*. Because *-pbi'a* is semantically [+WITNESSED], speakers must resort to periphrasis with *'eka* and *aka* if they wish to relate past tense events that they did not personally see. The following pair illustrates:

(259) Durative *-pbi'a* equals [+WITNESSED]

- a. *Puopnambi'ae Tupari ema'erē*.
 puop-nē-a-mbi'a e Tupari ema'ē-re know-VBZ_{nē}-TH-DUR 3 Tuparí language-OBL 'He knew the Tuparí language (WITNESSED).' casual discourse: 2015-10-08
- b. *Puopnã õpot i'ekapnẽ Tupari ema'erẽ.*puop-nẽ-a **õpot** i-'eka-pnẽ Tupari ema'ẽ-re
 know-VBZ_{nẽ}-TH DISTANT.PAST 3-AUX.SG_{habit}-EV.SG Tuparí language-OBL
 'He knew the Tuparí language (NON-WITNESSED).'
 elicitation: 2015-10-10

Example (a) describes a deceased non-indigenous man who had learned the Tuparí language. Because the speaker of this utterance knew this man and had witnessed his knowledge of Tuparí firsthand, she uses the explicitly [+WITNESSED] durative suffix *-pbi'a*. That suffix would cease to be acceptable, however, if the speaker wished to describe the linguistic competence of someone she had never met. In such a context the habitual auxiliary *'eka/aka* – which has no intrinsic evidential specification – must enter the clause to host the evidential suffix. This is shown by (b).

It is probable that '*eka* and *aka* are diachronically related to '*e* and *a*, but synchronically unifying the two pairs of auxiliaries is not feasible. There is, for example, no easy way to explain the syllable [ka] that appears in '*eka* and *aka*. The only independently-attested morpheme that this syllable resembles is the verbalizer *-ka*, but that verbalizer attaches only to nominals and to reduplicated verbal roots (§3.2.2). To say, then, that *-ka* 'VBZ_{ka}' builds '*eka* from '*e* and *aka* from *a* would be inconsistent with the kind of morphological base that that verbalizer requires. So the auxiliaries '*eka* and *aka* are synchronically distinct from '*e* and *a*.

4.6 Auxiliaries of movement and of doubt

The auxiliaries *kop* and '*i*, lain out in Table 4.13, occur in two contexts that resist immediate unification. The first such context is one of movement: these auxiliaries indicate that the subject is moving in space or is about to move in space. The paradigm in (260) (repeated from 220)

	SINGULAR	PLURAL
1incl	okop	ki'i
1excl	υκορ	ote'i
2	ekop	wat'i
3	(i)kop	'i
3C	tekoa	te'ia

Table 4.13: Paradigm of kop and 'i

shows these auxiliaries paired with the lexical verb 'go'. The three utterances given here are the customary way that one says goodbye when departing.

- (260) Movement auxiliaries *kop* and '*i* in expressions of leave-taking
 - a. Otera okop.
 o-tet-a o-kop
 1SG-go.SG-TH 1SG-AUX.SGmoving
 'I am going.' / 'I ought to be going.'
 common in everyday speech
 - b. Oteora ote'i.
 ote-ot-a ote-'i
 1PL.EXCL-gO.PAUC-TH 1PL.EXCL-AUX.PLmoving
 'We-EXCL.PAUC are going.' / 'We-EXCL.PAUC ought to be going.'
 common in everyday speech
 - c. Otetet'anã ote'i. ote-tet'anẽ-a ote-'i
 1PL.EXCL-gO.PL-TH 1PL.EXCL-AUX.PLmoving
 'We-EXCL.PL are going.' / 'We-EXCL.PL ought to be going.'
 common in everyday speech

Observe that whereas 'go', 'come', and certain other motion verbs express a three-way number contrast – singular versus paucal versus plural – the movement auxiliaries discussed here make only a binary distinction: singular *kop* contrasts with non-singular '*i*.

The movement auxiliaries do not indicate how far the speaker is going to go in space, only that movement of some sort will take place. Hence *kop* and '*i* may occur both with *tet/ot/tet*'anẽ 'go', used when going to a place that is far off or not visible, and *wan* 'go nearby', used when going to a nearby or visible place. (See also Footnote 1.)

- (261) Auxiliaries *kop* and '*i* can occur with *wan* 'go nearby'
 - a. Igrejam owãrã nã okop, igrejam.
 igreja-m o-wan-a nã o-kop, igreja-m
 church-INS 1SG-go.nearby-TH PROG 1SG-AUX.SG_{moving} church-INS
 'I am off [a short distance] to the church, to the church.'
 casual discourse: 2016-07-30
 - b. Otewãrã nã ote'i. ote-wan-a nã ote-'i
 1PL.EXCL-go.nearby-TH PROG 1PL.EXCL-AUX.PLmoving
 'We-EXCL are going [a short distance].'
 casual discourse: 2016-01-19

The auxiliaries kop and 'i may cooccur with the present progressive particle $n\tilde{a}$, as in (261); but this cooccurrence is not obligatory and is sometimes dispreferred. The question of what conditions the presence/absence of $n\tilde{a}$ 'PROG' with kop/'i requires future research.

A second use of *kop* and '*i* is to express doubt or uncertainty; with these auxiliaries speakers hedge their commitment to the proposition at hand. Note that whereas the contexts for (262a) and (262b) both involve movement, the context for (262c) does not.

- (262) Auxiliaries *kop* and '*i* can express doubt or uncertainty
 - a. CONTEXT: An elderly woman and I are sitting by the river when she hears the sound of a motorboat.

Mòtòt tèsa tekoa. omemsire nã te-kop-a o-memsit mòtò-t te-s-a e nã boat-NUC 3C-come.SG-TH 3C-AUX.SG_{moving}-TH 1SG-child.of.woman 3 FOCUS tèyto koat. kop-a-t te-s-to 3C-come.SG-NMZ_{ro} AUX.SG_{moving}-TH-NUC 'A boat is/may be coming. It is/it may be my son who's coming.' casual discourse: 2016-01-08

b. CONTEXT: My friend remarks that a little girl and her parents are walking to the shower, located farther down in the village.

Glessianinteatoateorate'ia.Glessiane-nte-ato-ate-'i-aGlessiane-NUC 3C-bathe-TH 3C-go.PAUC-TH 3C-AUX.PLmoving-TH'Glessiane [and her parents] are going off to shower.' / 'Glessiane [and her parents]may be going off to shower.'casual discourse: 2016-11-20

c. CONTEXT: I ask a friend about the well-being of his in-laws' pet parrot. Since he hasn't seen the bird recently, he hedges his response with *kop*.

Poaremannãikop,itopto'om'on okwat'onẽporet.poareman-nẽ-ai-kopi-top-to-'om'on okwat'onẽporetjust.fine-VBZ $_{n\tilde{e}}$ -TH3-AUX.SGmoving3-see-NMZ $_{ro}$ -NEG1SG recently.1SG1SG.also'It might be doing just fine. I haven't seen it lately either.'casual discourse: 2017-11-14

It is possible that the kind of doubt present in these three examples may be operative even in utterances like (261a) or (261b). In those cases the presence of *kop* and '*i* may be comparable to the modal that can occur in polite English expressions of leave-taking. Better translations for the customary expressions of leave-taking given in (260) would then be 'I must be going / ought to be going' and 'We must be going / ought to be going.'

It is common for *kop* and '*i* to embed the near future construction (§4.4.1), in which case the speaker's certainty about the future action taking place is reduced. Speakers consistently judge such utterances as equivalent to ones that contain the dubitative clause-typing particle $n\tilde{a}kop$ in leiu of *kop* or '*i*. So the following two utterances are deemed synonymous:

(263) Auxiliaries *kop* and '*i* can embed the near future

a. Osap'a o'a okop.
o-s-a-p'a o-'e-a o-kop
1SG-come.SG-TH-NEAR.FUT 1SG-AUX.SG-TH 1SG-AUX.SGmoving
'Maybe I am going to come.'
casual discourse: 2016-02-18
(see also casual discourse on 2017-08-12)

b. Osap'a nãkop o'e.
o-s-a-p'a nãkop o-'e
1SG-come.SG-TH-NEAR.FUT MAYBE 1SG-AUX.SG
'Maybe I am going to come.'
common in everyday speech

Utterances like (263a) continue to display the now familiar number suppletion found inside of verbal roots. (264) provides the full paradigm. Observe that the auxiliaries make only a singular-plural contrast, whereas the lexical verb 'come' also has a distinct paucal form.

(264) Expression of number when *kop* and '*i* embed the near future

a. *Osap'a* o'a okop. o-'**e**-a o-s-a-p'a o-kop 1SG-come.SG-TH-NEAR.FUT 1SG-AUX.SG-TH 1SG-AUX.SGmoving 'Maybe I am going to come.' casual discourse: 2016-02-18 (see also casual discourse on 2017-08-12) b. Oteã'am'ã otea ote-**ã'ẽ**-a-m'a ote-a-a 1PL.EXCL-come.PAUC-TH-NEAR.FUT 1PL.EXCL-AUX.PL-TH ote'i. ote-'i 1PL.EXCL-AUX.PLmoving 'Maybe we-EXCL.PAUC are going to come.' elicitation: 2017-08-14 c. Oteip'anam'ã otea ote'i. ote-**ip'anẽ**-a-m'a ote-'i ote-**a**-a 1PL.EXCL-come.PL-TH-NEAR.FUT 1PL.EXCL-AUX.PL-TH 1PL.EXCL-AUX.PLmoving 'Maybe we-EXCL.PL are going to come.' elicitation: 2017-08-14

I have only ever heard utterances like (264) – where the auxiliaries *kop* and '*i* embed the near future – spoken by middle-aged or elderly Tuparí. In my experience younger speakers instead use the 2P clause-typing particle *nãkop* 'MAYBE', as in (263b). It is highly probable that *nãkop* 'MAYBE' (discussed at greater length in §6.6) grammaticized from the progressive particle *nã* and the dubitative movement auxiliary *kop*. Yet the obligatory number contrast expressed by the

movement auxiliaries *kop* and '*i* did not survive this grammaticization process: *nãkop* is numberinvariant, as shown by the fact that it occurs with singular and plural subjects alike. Two examples of *nãkop* occurring in clauses with non-singular subjects are given in (265). In (a) the number of the subject is expressed in the weak nominative enclitic *wat* '2PL'; in (b) the number is expressed in the root of the lexical verb (\tilde{a} ' \tilde{e} 'come.PAUC') and in the auxiliary (*a* 'AUX.PL').

(265) *nãkop* can occur with singular and plural subjects alike

a. Wetom'en'ẽã nãkop wat.
w-etom'en-'em-a nãkop wat
1SG-TOM'EN-fight.with-TH MAYBE 2PL
'Perhaps you-PL are fighting with me, without my being aware.'
elicitation: 2017-08-03
(based on casual discourse: 2016-12-11)
b. *Teã'ã nãkop sa.*te-ã'ẽ-a nãkop s-a
3C-come.PAUC-TH MAYBE 3-AUX.PL
'Maybe they-PAUC have arrived.'

casual discourse: 2015-12-23

So whereas the auxiliaries *kop* and '*i* agree in number with the subject, the 2P clause-typing particle $n\tilde{a}kop$ – descended from kop – does not.

4.7 Discussion of the Tuparí auxiliary system

This chapter has detailed the major auxiliary verb constructions used within Tuparí to signal physical position, aspect, and tense. While some of these auxiliaries specify multiple categories at once – (')apteka, for instance, fuses habitual aspect together with present tense – others do not; for example, the auxiliaries 'eka (singular) and aka (plural) mark habitual aspect but provide no temporal information. As a result, eka and aka are compatible with past, present, and future morphology alike. Positional information is restricted to present progressive contexts only, where the default or 'vertical' form 'e contrasts with explicitly horizontal yẽ. In this respect Tuparí differs quite strikingly from its close relative Sakurabiát, in which multiple positional contrasts – sitting, lying, standing, moving – can be expressed in present and past contexts alike (see Galucio 2018). Whether Tuparí has lost positional contrasts since the time of Proto-Tuparían, Sakurabiát has developed additional positional contrasts, or some combination of the two is a question that must await further comparative work.

In this chapter we have seen many examples in which more than one auxiliary occurs within a single clause. The person marking in such examples follows the scheme outlined in §4.1 and interrogated further in Singerman (In preparation b). Before concluding this chapter I wish to address some of the ordering restrictions that obtain in those clauses that contain more than one auxiliary. The following three utterances illustrate. In (266a) the temporally-unspecified habitual auxiliary '*eka* occurs to the left of the distant future *pey'ap*; in (266b) the singular member of the AUX_{go} series, *tero'e*, occurs to the left of habitual '*eka*; and in (266c) the singular positional $y\tilde{e}$ occurs to the left of '*eka* (here contracted to just *ka*).

(266) Examples of multi-auxiliary clauses

- a. Ot'awak ara te'ekaro pey'ap tepòtkara te'a.
 ot'awak at-a te-'eka-ro pey'ap te-pòtkat-a te-'a music play-TH 3C-AUX.SGhabit-NMZro FUT.3SG [3C-grow.up-TH 3C-when.SG]
 'He [=a musically talented child] will regularly play music when he grows up.' casual discourse: 2016-11-13
- malokare b. Pamékgen őpot mõket ototonã Pamẽk-en mõket maloka-re õpot o-toto-ne-a Pamek-NUC DISTANT.PAST long.ago maloca-OBL 1SG-grandfather-VBZne-TH tero'a te'ekapnã. tero'e-a te-'eka-pnẽ-a AUXgo.SG-TH 3C-AUX.SGhabit-EV.SG-TH 'Pamek was my grandfather in the maloca [communal long house] (NON-WITNESSED).' casual discourse: 2017-08-04
- c. Kat'aro nãpe wapsikatsã nã nã kat'at-o nãpe nã w-apsikat-se-a nã what-INS REALLY?! FOCUS 1SG-think.about-RSLT.SG.HZNTL-TH PROG õka? oyã o-yẽ-a o-ka 1SG-AUXhzntl-TH 1SG-AUX.SGhabit 'Just what am I thinking about, sitting here?' casual discourse: 2016-11-30

The kind of ordering restrictions shown here are, to my knowledge, invariable. Working from right

to left in the linear string we arrive at the following general restrictions:

- When a clause contains auxiliary encoding temporal information such as present habitual (')apteka or distant future pe...ap – this auxiliary must be the rightmost one; any aspectual or positional auxiliaries must occur to its left. This is shown by (266a) as well as the paradigm in (208).
- 2. When a member of the the AUX_{go} series cooccurs with the habitual auxiliaries '*eka* and *aka*, '*eka/aka* must be to the right in the linear string. This is shown by (266b).
- 3. The positional auxiliary $y\tilde{e}$ 'AUX_{hzntl}' is always the leftmost auxiliary in the linear string; that is, $y\tilde{e}$ must precede any and all other auxiliaries. This is shown by (266c).

We can capture these three restrictions through the template in (267), where < means 'occurs to the left of'.

(267) <u>Linear ordering template among the various auxiliaries</u> $\{ Positional aux, AUX_{go} \} < 'eka/aka < Tense aux$

The lack of variation with regards to (267) makes sense on an analysis which derives the different positions of the various auxiliaries from the syntactic hierarchy.⁷ In particular, that (*a*) positional auxiliaries must precede '*eka/aka*, (*b*) AUX_{go} must precede '*eka/aka*, and (*c*) '*eka/aka* must precede tense auxiliaries suggests the functional structure in Figure 4.1. In this tree the Evidential Phrase occurs above the Aux_{habitual} Phrase headed by '*eka* or *aka*. Support for this position of EvidP comes from examples like (266b) (see 218a and 256 as well). In all of those utterances the evidential suffix *-pnẽ/-psira* attaches to the rightmost auxiliary, a fact used in Chapters 5 and 6 to argue for a high EvidP located immediately beneath TP. Immediately above the *v*P lies a projection where either a member of the AUX_{go} series or a positional auxiliary (horizontal *yẽ*, vertical '*e*, unspecified plural *a*) may occur.

⁷My analysis builds upon the Cartographic ideas explored in Rizzi (1997); Cinque (1999); Cinque and Rizzi (2009), among others, but it does not require us to commit to the more radical universal claims advanced in those works. It is logically consistent to argue that the different ordering restrictions at work among the Tuparí auxiliaries reflect the syntactic organization of the Tuparí clause without demanding that the same syntactic organization be universally present in all languages.

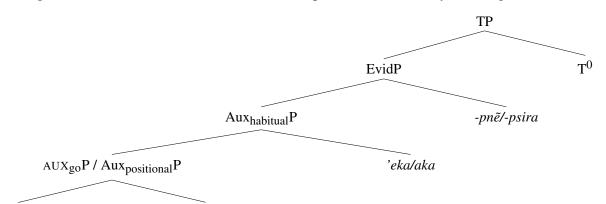


Figure 4.1: The functional structure of the Tuparí clause: auxiliary ordering restrictions

vP member of AUX_{go} series or a positional auxiliary

Three further comments are in order here. First, it is not yet clear where the movement/dubitative auxiliaries *kop* and '*i* would reside in this overall hierarchy. This is because these two auxiliaries are extremely limited in distribution: they occur only in (*a*) a subset of present contexts where movement is implied and (*b*) in conjunction with present/near future morphology to indicate doubt on the speaker's part. More research is required to investigate whether *kop* and '*i* can cooccur with a wider set of auxiliaries. Second, it is difficult to ascertain the precise linear order between the positional auxiliaries $y\tilde{e}$ 'AUX_{hzntl}', '*e* 'AUX.SG' and *a* 'AUX.PL' and the members of the AUX_{go} series. This is because all of these auxiliaries can be used in the present progressive and in present existentials. I have therefore decided to treat AUX_{go}P and Aux_{positional}P as occupying the same syntactic position in Figure 4.1 and in the trees in Chapters 5 and 6. Third, because the Tuparí witnessed/non-witnessed contrast is limited to past tense contexts only, it is not possible to combine evidential *-pnē/-psira* with distant future *pe... ap* or the present habitual (')*apteka*. The only kinds of T⁰ which can cooccur with evidential *-pnē/-psira* are 2P particles or predicate-final suffixes. (268) illustrates with near past *-t*:

(268) Near past -t occurs outside of evidential -pnē/-psira

a. Pot'at tearopkà teakapsirat.
pot'a-t te-arop-ko-a te-aka-psira-a-t
peccary-NUC 3C-food-eat-TH 3C-AUX.PL_{habit}-EV.PL-TH-NEAR.PAST
'The peccaries were eating their food (NON-WITNESSED).'
text: Nilson Tupari, narrator

b. Teremoem nã tewara teoro'epsirare. teremoem nã te-wat-a te-oro'e-psira-a-t e
by.themselves FOCUS 3C-go.away-TH 3C-AUXgo.PAUC-EV.PL-TH-NEAR.PAST 3
'They went away (NON-WITNESSED) of their own accord.'
casual discourse: 2017-08-17

Observe that in both of these examples the lexical verb is followed by a functional auxiliary: plural habitual *aka* in (a), paucal AUX_{go} *oro'e* in (b). And (266b), above, is an utterance with even more functional structure overtly realized: the lexical verb is followed by *tero'e* ' AUX_{go} .SG' as well as '*eka* ' $AUX.SG_{habit}$ '; singular evidential *-pnẽ* attaches to '*eka*; and the tense particle *õpot* 'DISTANT PAST' sits in 2P. Examples like (266b) provide strong evidence for the articulate syntactic spine that I propose in the next chapter.

Chapter 5

Headedness, tense, and pronouns in the Tuparí clause

Certain head-final patterns recur throughout the Tupían family: VPs tend to be verb-final; adpositions follow the nouns they select for; possessors precede possessed nouns; and so on (Moore 1994; Rodrigues and Cabral 2012:§3.13). What is less well-understood is how this head-finality plays out on a clausal level in the different branches of the family. It is very common for *wh*-words to front in Tupían languages (Brandon and Seki 1981, 1984), but the relationship between this property and the structure of the highest level of the clause remains understudied. Furthermore, the preponderance of second position effects suggests that many members of the family may possess a high layer of head-initial phrase structure. The most impressive example of 2P effects in Tupían comes from Karitiana, in which embedded clauses are verb-final but matrix clauses typically exhibit VERB SECOND (V2) (Storto 1999, 2003, 2014, Forthcoming; Everett 2006). Also impressive are the many 2P particles in Kamaiurá (Seki 2000b:91–98); their meanings include deictic, evidential, and frustrative components.

The objective of this chapter is to describe and analyze the organization of the Tuparí clause with a particular focus on the distribution of headedness and the interaction between tense and agreement. This chapter advances four major claims about the structure of the Tuparí clause. The first concerns the order of overt functional categories. The Tuparí clause obeys the schema in Figure 5.1. Aspectual and physical positional distinctions are encoded just above the Verb Phrase proper; evidentiality is next; tense follows; and, finally, clause typing sits at the top. This ordering of functional categories is unexceptional on the layered approach to clausal design arrived at in various schools of syntactic analysis over the past few decades (Foley and Van Valin Jr. 1984; Pollock 1989; Koopman and Sportiche 1991; Bowers 1993; Kratzer 1996; McCloskey 1997; Rizzi 1997; Carnie 2010, among many others).

The second claim advanced here concerns the distribution of headedness in Tuparí. All functional categories below the Tense Phrase exhibit complement-head (which is to say, head-final) order. Yet there exists a layer of unambiguous head-initiality at the top of the Tuparí clause. This

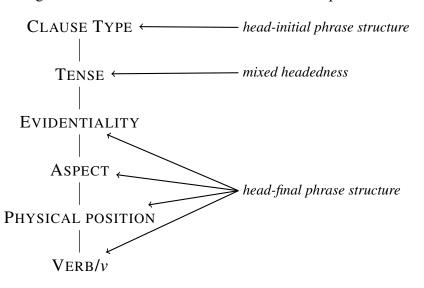


Figure 5.1: Distribution of headedness in the Tuparí clause

head-initiality is instantiated by 2P particles, the placement of which is always defined according to syntactic – rather than phonological or prosodic – criteria. Tense itself exhibits a combination of head-initial and head-final properties, with the result that the underlying headedness of the TP is mixed.

The third claim deals with the status of those morphemes identified as subject pronouns in prior literature on Tuparí and its closest relatives (Caspar and Rodrigues 1957; Alves 2004; Galucio and Nogueira 2011). These 'pronouns' are restricted to a limited set of TAM contexts, are positionally parasitic on particular pieces of tense morphology, cannot occur in imperatives, and so on. This set of properties makes sense only if these morphemes (here referred to as WEAK NOMINATIVE ENCLITICS) are in fact the realization of a distinct Agreement node located in the inflectional layer of the clause.

With the relationship between the erstwhile 'subject pronouns' and the TP established, I arrive at my fourth and final claim: there exist at least two distinct null tense morphemes in Tuparí. One of these combines with verbal predicates while the other combines only with nominal ones. Though both are null, these two tense morphemes have sharply different effects on the placement of the weak nominative enclitics. The behavior of negated predicates (shown in Singerman 2018 to behave like nouns rather than verbs) further buttresses the assertion that Tuparí makes use of two different sorts of phonologically empty – but syntactically contentful – Tense heads.

This chapter is organized as follows. \$5.1 demonstrates that the lower levels of the Tuparí clause follow a head-final rather than head-initial pattern, and \$5.2 shows that the highest layer of the clause – the CP – is unambiguously head-initial. \$5.3 then turns to the TP, which exhibits a mixture of head-final and head-initial properties. With this overall picture in place, \$5.4 reassesses the status and distribution of the weak nominative enclitics (the morphemes formerly known as subject pronouns). These enclitics are not true pronominal arguments but instead realize a high functional projection. \$5.5 then uses the close relationship between the weak nominative enclitics and the Tense projection to argue for the existence of two different phonologically null tense morphemes in Tuparí. \$5.6 concludes. Appendix 5.A discusses an alternative placement pattern for weak nominative enclitics in superficially tenseless verbal clauses, and Appendix 5.B provides multiple textual excerpts attesting to the internal coherence of the class of morphemes that instantiate T^0 .

5.1 Head-finality at the lower levels of the Tuparí clause

As in many other Tupían languages of Rondônia (see Moore 1984 on Gavião, Gabas Jr. 1999 on Karo, Galucio 2001, 2011b, 2014a on Sakurabiát and Storto 1999, 2014, Forthcoming on Karitiana, among others), Tuparí exhibits a host of head-final properties. Within the nominal domain, adpositions follow the nouns they select for; case marking is suffixal; and the possessor must always precede the possessum. (269) through (271) highlight these properties.

- (269) Adpositions following their complements
 - a. yã eanã
 yã eanã
 mother together.with
 'together with mother'
 - b. eyope
 e-yope
 2SG-along.with
 'along with you, in your vehicle'

(270) Case marking is suffixal

- a. *Tupari ema'erẽ*Tupari ema'ẽ-re
 Tuparí language-OBL
 'concerning the Tuparí language'
- b. wekgo
 w-ek-o
 1SG-house-INS
 'toward my house'

(271) Possessor precedes the possessum

- a. *esi* e-si 2SG-mother 'your mother'
- b. *esi memsit* e-si memsit 2SG-mother child.of.woman 'your mother's child'

Whether Tuparí can be said to have true adjectives is controversial; §2.5 (Chapter 2) argues that apparent adjectives are just a subclass of nouns. In terms of word order, however, adjective-like nouns must follow rather than precede the nouns which they modify. In this sense 'adjectival' modification bucks the language's preference for complement-head order.

(272) Adjectival modifiers follow the head NP

a. *tarupa tần* tarupa tàn non.indigene tall 'the tall white person'

b. *esi memsit pẽan* e-si memsit pẽan 2SG-mother child.of.woman first 'your mother's first child'

This deviation from complement-head order is crosslinguistically unsurprising, as adjective-noun order does not show strong correlations with other word order properties (Dryer 1992; Hawkins

2004, 2014). Note also that there is no relative clause modification within NPs in Tuparí, since all relative clauses are internally headed and consist of clause-sized nominalizations (Singerman 2018 [to appear]).

Head-complement order obtains just as rigidly in the verbal domain as in the nominal one. Direct objects must precede the transitive verbs which select for them. OV order obtains with both pronominal objects (273a) and full NPs (273b).

(273) Direct objects occur immediately prior to the transitive verb

- a. *etoa* e-top-a 2SG-see-TH 'see you'
- b. Arua ' \tilde{e} kaet toa Arua ' \tilde{e} k-ap-et top-a Aruá dance-NMZ_{ap}-NUC see-TH 'see the dance of the Aruá'

Observe the layered head-finality in (273b): the lexical verb *top* 'see' takes as its direct object *Arua* ' $\tilde{e}kaet$ 'dance of the Aruá', where *Arua* – the ethnic designation of another Tupían group from southern Rondônia – is itself the possessor of the case-marked ' $\tilde{e}kaet$ (a nominalization of the lexical verb ' $\tilde{e}k$ 'dance').

The lexical VP must precede any and all positional, aspectual, or temporal auxiliaries:

(274) Lexical VP must precede any and all auxiliaries

- a. Etoa nã oyẽ.
 e-top-a nã o-yẽ
 2SG-see-TH PROG 1SG-AUX_{hzntl}
 'I am seeing you, sitting down.'
 common in everyday speech
- b. *Etoa* o'e.
 e-top-a o-'e
 2SG-see-TH 1SG-AUX.SG
 'I have seen you.'
 common in everyday speech

More than one auxiliary may be stacked within a single clause as long as the rigid ordering restrictions discussed in §4.7 are obeyed. As that section showed, there are (at least) three distinct auxiliary projections in between vP and EvidP: Aux_{positional}P is the lowest, AUX_{go}P lies in the middle, and Aux_{habitual}P sits at the top.

As detailed in Chapter 6, past tense declarative clauses in Tuparí must specify whether the speaker personally witnessed the event being related or not. Non-witnessed utterances bear the suffix *-pnẽ/-psira*, which agrees in number with the subject; witnessed utterances are unmarked.

- (275) Basic evidential contrast in past tense declaratives
 - a. *Owet teaorosa.* o-op-et te-aoros-a 1SG-father-NUC 3C-arrive.SG-TH 'My father arrived (WITNESSED).' common in everyday speech
 - b. *Òwet teaoroynã*.
 o-op-et te-aoros-**nẽ**-a
 1SG-father-NUC 3C-arrive.SG-EV.SG-TH
 'My father arrived (NON-WITNESSED).'
 common in everyday speech

The position of *-pnẽ/-psira* is fixed: it attaches to the highest verbal head. When the clause contains no auxiliaries, the evidential will attach to the lexical verb itself; this is shown in (275b). When one auxiliary is present, *-pnẽ/-psira* attaches to the auxiliary rather than the lexical verb; and when two auxiliaries are present, it attaches to the rightmost – which is to say, structurally highest – one:

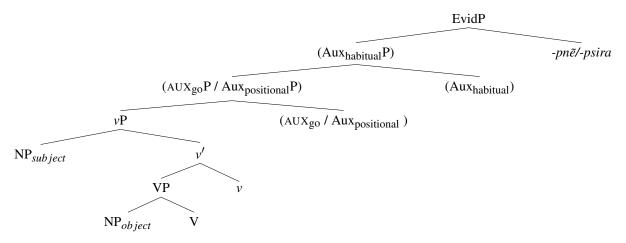
(276) Evidential suffix -pnē/-psira attaches to highest verbal head

a.	Teremoem	nã	tewara	teoro'epsirare.			
	teremoem	nã	te-wat-a	te- oro'e-psira -a-t	e		
	by.themselves	5 FOCUS	3C-go.away-TH	$\texttt{3C-AUX}_{\textbf{g0}}\textbf{.PAUC-EV.PL}\textbf{-}\texttt{TH-NEAR}\textbf{.}\texttt{PAST}$	3		
	'They went away (NON-WITNESSED) of their own accord.'						
	casual discourse: 2017-08-17						

b. $Tan'omn\tilde{a}$ kut osit tero'a tàn-'om-nẽ-a kut o-si-t tero'e-a tall-NEG-VBZ_{nẽ}-TH ANCIENT.PAST 1SG-mother-NUC AUX_{go}.SG-TH *i'ekapnẽ*. i-'**eka-pnẽ** 3-AUX.SG-EV.SG 'She wasn't tall, my mother (NON-WITNESSED).' elicitation: 2014-07-19 (based on casual discourse: 2014-07-10)

That the suffix *-pnẽ/-psira* always attaches to the highest verbal head demonstrates that the position of the EvidP sits immediately above the highest auxiliary projection. When no auxiliaries are present, *-pnẽ/-psira* will thus attach to the lexical verb. (See §5.3.2 for discussion of precisely what mechanism gets *-pnẽ/-psira* to its final position in the linear string.)





It is important to stress that the EvidP proposed in this tree is not optional in any sense. Rather, declarative past tense clauses must always make the distinction between witnessed and non-witnessed events; the former are unmarked while the latter bear *-pnẽ/-psira*. Hence if an entire narrative's worth of events were not witnessed by the speaker, every clause must contain either *-pnẽ* or *-psira*. The excerpt in (332), given in §5.B, illustrates. Each clause in that excerpt contains the evidential suffix as well as the ancient past particle *kut*. This particle is but one member of the language's set of tense morphology (§5.3). Because the headedness of the Tense Phrase is mixed,

we will first look at the highest level of the Tuparí clause – instantiated by the set of 2P clause typers – and only afterwards examine the TP, sandwiched in between CP and EvidP.

5.2 Head-initiality in the CP layer

5.2.1 The clause-typing particles

Many different sentence types in Tuparí are distinguished by a set of clause typers located in 2P. The work that these clause typers perform is comparable in certain respects to that performed by the sentence-final particles in Japanese (Shibatani 1990:chapter 11); within the Tupían context, many similar distinctions are encoded by the inflected auxiliaries of Gavião (Moore 1984:chapter 6) and by the mood prefixes of Karitiana (Storto 2001, 2018 [to appear]; Ferreira 2017).

(277) presents the list of overt clause typers. As discussed at greater length in Chapter 6, it is necessary to distinguish between the homophonous $m\tilde{a}k\tilde{e}r\tilde{o}$ [mã.'kẽ.rõ] 'DUNNO' and $m\tilde{a}k\tilde{e}r\tilde{o}$ [mã.'kẽ.rõ] 'RIGHT?' on multiple grounds. They have distinct prosody ($m\tilde{a}k\tilde{e}r\tilde{o}$ 'RIGHT?' is accompanied by a salient rising intonation through the end of the clause) and trigger opposite effects on the deictic orientation of the evidential suffix *-pnẽ/-psira* (§6.6).¹

- (277) Overt clause-typing particles
 - a. nẽ 'YES/NO'
 - b. nãkop 'MAYBE'
 - c. *pa'a/ta'a* 'ASSERTIVE'²
 - d. nãpe 'REALLY ?!'
 - e. '*aet* 'NEGATIVE LAMENT' (i.e., 'it is a shame that $\neg p$ ')
 - f. mãkẽrõ 'DUNNO'
 - g. mãkẽrõ 'RIGHT?'

(278) gives an idea of the kind of semantic effects that these clause typers can have. Note that if the clause typer were removed from these utterances, the result would be a neutral declarative: *Kafet*

¹Caspar and Rodrigues (1957:§3.5) list *nẽ*, *nãpe* and '*aet* as members of a broader set of particles.

²The choice between the two allomorphs of the assertive particle is determined by the speaker's gender: pa'a is used only by men and ta'a, only by women. This gender indexicality is extremely strict: adult speakers never select the wrong assertive particle, but I have heard adults correct young children who do so.

te'a 'There's coffee.'

(278) Examples of clause typers in existentials

- a. Kafet nãkop te'a. kafe-t nãkop te-'e-a coffee-NUC MAYBE 3C-AUX.SG-TH
 'There might be coffee.' / 'I can't say for sure whether there's coffee.' casual discourse: 2015-12-22
- b. Kafet nẽ te'a?
 'Is there coffee?'
 common in everyday speech
- c. Kafet pa'a te'a.
 'There is indeed coffee.' / 'I assert that there is coffee.' common in everyday speech

The clause typers are sensitive to whether the CLAUSE-INITIAL CONSTITUENT (CIC) is [+wh]

or not. Only *nãpe* 'REALLY?!' and *mãkērõ* 'DUNNO' may occur in wh-questions:

- (279) Sensitivity of clause typers to $[\pm wh]$ status of the clause-initial constituent
 - a. *Katkaere nãpe* omemsiremsĩren tèsapwa katkaere nãpe o-memsiremsin-en te-s-a-pwa REALLY ?! 1SG-grandchild.of.woman-NUC 3C-come.SG-TH-NEAR.FUT when *y'e?* y-'e 3-AUX.SG 'When on earth is my grandchild going to come here?' casual discourse: 2016-11-11 b. Katkaere **mãkērõ** omemsiremsīren tèsapwa y'e. 'I don't know when my grandchild will come here.' elicitation: 2017-08-06

(based on casual discourse: 2016-11-11)

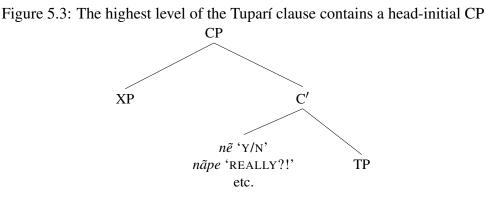
c. *Katkaere* *ta'a / *nẽ / *'aet / *nãkop omemsiremsĩren tèsapwa y'e elicitation: 2017-08-06

The sensitivity of the various clause typers to the kind of CIC that they follow can be interpreted as a reflex of the *wh*-criterion (Rizzi 1996). On this analysis the clause typers are complementizers

that head a projection located in the highest layer of the clause, and a subset of them will be lexically listed as compatible with a [+wh] XP in their specifier. More specifically, $m\tilde{a}k\tilde{e}r\tilde{o}$ 'DUNNO' requires a [+wh] specifier; $n\tilde{a}pe$ 'REALLY?!' may take one that is [+wh] but does not demand it; and the remaining clause typers require an explicitly [-wh] clause-initial XP. (See also Figure 6.2 in Chapter 6.)

An important fact about the clause typers is that they only ever combine with fully-formed utterances. Whereas a missing evidential, tense or aspectual morpheme can render a sentence ungrammatical, a clause that lacks an overt clause typer in 2P is never ill-formed; it just instantiates an unmarked sentence type. Hence the version of (279a) and (279b) with no overt clause typer is just normal *wh*-question, one without any special emphatic or emotive content: *Katkaere omemsiremsĩren tèsapwa y'e?* 'When is my grandchild going to come here?'.

That the 2P clause typers appear in sentences which are themselves grammatically well-formed utterances supports an analysis in which the syntactic projection headed by the clause typers occupies an extremely high position in the clausal spine, one above TP, EvidP, and other inflectional projections. If the clause typers' projection may host one and only one constituent in its specifier, then this account will also explain why the clause typers consistently surface in 2P. The next



subsection presents evidence that the placement of the clause typers in 2P is indeed determined by syntactic factors, rather than prosodic or phonological ones.

5.2.2 Second position effects in Tuparí are a syntactic phenomenon

It is a well-established fact in the literature that morphemes may end up in 2P by a variety of mechanisms. 2P effects (including Verb Second [V2]) bear the hallmarks of Head Movement – a syntactic operation – in many languages, including German (den Besten 1983), Kashmiri (Bhatt 1999; Manetta 2011) and, within the Tupían context, Karitiana (Storto 1999, 2003, Forthcoming). In other cases, however, phonological and/or prosodic mechanisms are needed to account for the placement of certain morphemes in 2P: this is the motivation behind the Prosodic Inversion of Halpern 1995 and the constraint-driven model of clitic placement advocated by Anderson (2000, 2005). Slavic languages are particularly famous for exhibiting not only second *position* but also second *word* effects, in which case the syntactic constituency of the initial XP can be violated (see Bošković 2000, 2001, 2004; Franks and King 2000; Progovac 2000; Diesing and Zec 2017, among others). This subsection shows that 2P effects in Tuparí are purely syntactic; the Tuparí CIC is not amenable to a phonological or prosodic characterization but must instead be defined in terms of syntactic integrity.

(280) <u>WELL-FORMEDNESS CONDITION ON THE TUPARÍ CIC</u> A clause-initial constituent in Tuparí must be an XP from which further material may not be extracted.

The constituent immediately preceding the 2P cluster can vary in syntactic category and also in overall size. It can be as small as a monomorphemic adverbial (281a) or an NP subject (281b).

(281) Examples of CICs

- a. *Ke nẽ ko 'on yõkõum?* **ke** nẽ ko 'on y-õkõum [AdvP like.this] Y/N POLITE.FUT 1SG 3-put.on 'Should I put it on like this?' casual discourse: 2016-12-09
- b. Akurap erop'at nẽ eweka te'a? akurap erop'a-t nẽ e-wek-a te-'e-a [NP monkey bad-NUC] Y/N 2SG-bite-TH 3C-AUX.SG-TH 'Did a bad monkey bite you?' text: Iracema Taydyup Tupari, narrator

The CIC can also be a full VP. The lexical verb may be intransitive (in which case it will bear a pronominal proclitic cross-referencing the subject) or transitive (with the direct object to the immediate left of the verb). These two options are shown in (282).

(282) VPs serving as the CIC

a.	Eaorosa	nãpe	en?							
	e-aoros-a	nãpe	'en							
	[vp 2sg-arrive.sg-th] really?! 2sg									
	'Why, have you really arrived?'									
	casual discourse: 2016-01-11									
b.	Otèpa'asinã	nẽ	e'apteka	etera	e'a?					
	ote-epa'asinẽ-a	nẽ	e-'apteka	e-tet-a	e-'a					
	[VP 1PL.EXCL-miss-TH	[] Y/N	N 2SG-HABIT.S	5G [2SG-go.SG-	TH 2SG-when.SG]					
	'Do you miss us-EXCL v	when y	you go from h	ere?'						
	casual discourse: 2016-12-08	8								

The VP in Tuparí is an indivisible unit; there is no way to separate an object from the transitive verb which selects it. Hence VPs with sizable objects can serve as CICs:

(283) Objects must move together with the transitive verb

a.	Arua 'ẽk Arua 'ẽk [vp [_{NP} Aruá dau 'Did you see the c	a-ap-et nce-NMZ <i>ap</i> -NUC] see-TH]	nẽ	'e		
	casual discourse: 201	7-08-12					
b.	1	e i'anam e i-'anẽ-am DBL 3-AUX _{go} .PL	-ADV.FOC	kire		hèt hèt] HÈ.NUC]	toa top-a] know-TH]
	'Do you know the casual discourse: 201	1 1	alongside	[=in	villages a	longside]	the road?'

In (a) the object of *top* 'see, watch, know' is the nominalization *Arua 'ẽkaet* 'the dance of the Aruá'. In (b) the object is a whole finite embedded clause: *'àpere i'anam kiret hèt* 'the people who live alongside the road'. We see, then, that the Tuparí VP remains indivisible whatever the size of

the direct object: it can be a pronominal proclitic, a lexical NP, or an entire embedded clause that contains tense morphology. More examples of such finite embedded clauses are given below in (285b) and (287); see also §6.7 and Singerman (2018 [to appear]).

Adverbial clauses that are non-finite (i.e., that lack tense and evidentiality marking) may also serve as a CIC. (284) illustrates with adverbial clauses headed by '*a* 'if/when.SG'. Each of the two adverbial clauses is followed by two adjacent 2P particles: *ne* 'YES/NO' and *ke* 'POLITE FUTURE'.

(284) <u>Non-finite adverbial clauses can serve as the CIC</u>

Papeo nikaere epoatkara e'a nẽ ke a. papeo nĩk-ap-ere e-poatkat-a e-'a nẽ ke [AdvP paper write-NMZap-OBL 2SG-finish-TH 2SG-when.SG] Y/N POLITE.FUT 'en ham ètareman'ipto'omka? 'en ham e-etareman-'ip-to-'om-ka 2SG hither 2SG-not.again-come.SG-NMZ_{ro}-NEG-VBZ_{ka} "When you finish with writing on paper [=studying], will you not come here again?" elicitation: 2017-08-06 (based on casual discourse: 2017-08-05)

b.	Èkgo	eaora	etera	e'a	nẽ		
	e-ek-o	e-aot-a	e-tet-a	e-'a	nẽ		
	[AdvP 28G-house-IN	S 2SG-leave.SG-TH	H 2SG-go.SG	G-TH 2SG-whe	n.SG] Y/N		
	ke 'en har	n eapsikatsam?					
	ke 'en har	n e-apsikat-sẽ-am	1				
	POLITE.FUT 2SG hither 2SG-think-RSLT.SG.HZNTL-ADV.FOC						
	'When you arrive at	your home, are you	going to thi	ink of this plac	e (sitting)?'		
	casual discourse: 2016-0	2-17					

The 2P particles $n\tilde{e}$ and ke follow papeo $n\tilde{i}kaere$ epoatkara e'a 'when you finish with writing on paper' in (a) and ∂kgo eaora etera e'a 'when you arrive at your home' in (b). The syntactic integrity of these adverbial phrases is paramount; the 2P particles $n\tilde{e}$ and ke cannot interrupt them.³

As Singerman (2018 [to appear]) discusses in greater detail, Tuparí has little in the way of finite

³The presence of both *aot* 'go.out.SG' and *tet* 'go.SG' inside of the adverbial clause in (284b) is required on deictic grounds. Tuparí verbs of motion are deictically sensitive. The roots of 'come' and of 'arrive' are used only when the site of coming/arriving is where the speaker is; hence the the matrix verb in (284a), *ètãreman'ipto'omka* 'not come here again', is anchored deictically to the location of the speaker. When one speaks of coming to or arriving at a place other than the site of speaking, the kind of compound form shown in (284b) must be used: here the root of 'go out, leave' combines with the root of 'go'. Note that both of these roots agree in number with the subject, which in this example is singular.

complementation; the only verbs which select for whole finite clauses are the quotatives ke 'say, be like' and $ma'\tilde{e}$ 'say, speak of, command'. These verbs can serve as a CIC together with their clausal object. In (285a), the VP headed by $ma'\tilde{e}$ is in first position together with its complement, the finite quotation *Gabrieot ke tèsa*. Inside both the quotation and the matrix clause we find the 2P tense particle ke 'POLITE FUTURE'. In the case of internally headed relative clauses, too, a finite clause nominalized by $h\tilde{e} \sim he$ can serve as a CIC (Singerman 2018 [to appear]). This is shown by (285b), in which the 2P clause typer $n\tilde{a}kop$ 'MAYBE' follows the entire finite embedded clause (see also example 283b, above, where 'àpere i'anam kiret hèt 'the people who live alongside the road' is the direct object of *top* 'know').

(285) <u>Clause-initial constituents can contain whole finite clauses</u>

a. Gabrieot ke tèsa ma'ã ke 'en. Gabrieo-t ke te-s-a ma'ẽ-a ke 'en [VP [S Gabriel-NUC POLITE.FUT 3C-come.SG-TH] say-TH] POLITE.FUT 2SG 'Please tell Gabriel to come here.' / 'May you say, 'May Gabriel come here.'' casual discourse: 2014-07-19

b.	Sitèsa	õpot	'en	hè	nãkop.	
	s-ite-s-a	õpot	'en	hè	nãkop	Ø
	[NP [S 3-COM-come.SG-TH DISTANT.PAST 2SG] HÈ] MAYBE					
	'Perhaps it is the thing that you brought long ago.'					
	casual discourse: 2016-11-	-19				

The highlighted nominalization *sitèsa õpot 'en hè* in (285b) behaves indistinguishably from *okio* 'male' and *aramirã* 'female' in (286), a disjunction in which a speaker speculates about the sex of his family's pet parrot.

(286) Okio nãkop pare aramirã nãkop.
okio nãkop Ø pare aramirã nãkop Ø
[NP male] MAYBE 3 or [NP female] MAYBE 3
'It might be a male or it might be a female.'
casual discourse: 2016-01-10

In short, the placement of the 2P clause typers does not distinguish between the monomorphemic nominals *okio* 'male' and *aramirã* 'female', on the one hand, and the clausal nominalization *sitèsa õpot 'en hè* 'the thing that you brought long ago', on the other.

It is even possible for a CIC to consist of a finite embedded clause that itself contains a quotation, as in (287). As expected the clause typer $n\tilde{e}$ 'YES/NO' immediately follows the entire first constituent, which is marked as oblique because the matrix verb *apsi'e* 'hear, listen' optionally takes an oblique argument (§2.4.4).

(287)Yã. apait tèynã ke y'e Adãon te-s-nẽ-a ke v-'e Adãõ-n yã apay-t mom [NP [S [S aunt-NUC 3C-come.SG-EV.SG-TH] say 3-AUX.SG Adam-NUC] here nẽ 'en eapsi'ap? here nẽ 'en e-apsi'e-ap **HÈ.OBL**] Y/N 2SG 2SG-hear-ADV.FOC 'Mom, did you hear that Adam said that my aunt arrived (NON-WITNESSED)?' casual discourse: 2017-08-03

To summarize, the chunk of syntactic structure prior to the 2P cluster can vary considerably in size. It may be as small as the adverbial *ke* 'like this' or the NP subject *akurap erop'at* 'bad monkey'. It can consist of a fronted VP (*otèpa'asinã* 'miss us-EXCL') or a non-finite adverbial clause (*èkgo eaora etera e'a* 'when you arrive at your home'). And it can be as large as the quotation-within-an-embedded-clause *apait tèynã ke y'e Adãon here* 'that Adam said that my aunt arrived (NON-WITNESSED)'. The placement of 2P particles in all such examples is consistent; there is zero evidence of variation based upon gender, age, or other demographic factors. That 2P particle placement is consistent across CICs of varying sizes – and across speakers – indicates that 'second position' in this language does not enjoy a unified prosodic or phonological definition. Rather, a syntactic well-formedness condition of the kind given in (280) is in order: the CIC must be a single, integral XP, one indivisible by further movement or extraction operations.

The role of this syntactic well-formedness condition in the placement of 2P particles in Tuparí is clear from *wh*-questions. All *wh*-words in Tuparí must occur clause-initially; *wh*-in-situ is categorically unattested. (See Brandon and Seki 1981, 1984 for early discussion of *wh*-movement in Tupían.)

- (288) wh-words must always occur clause-initially in Tuparí
 - a. Apoe te'era nerõ yan? nerõ yẽ-a-n **apo** e te-'et-a who 3 3C-sleep-TH PROG AUX_{hzntl}-TH-NUC 'Who is sleeping, lying down?' casual discourse: 2016-11-25 b. Pare mãkẽrõ õpot 'en ewaet *ãpeap*. pare mãkẽrõ õpot 'en e-wap-et ãpe-ap where DUNNO DISTANT.PAST 2SG 2SG-hammock-NUC hang-ADV.FOC 'I don't know where you hung up your hammock.' casual discourse: 2017-08-09 'e c. Kat'are eykoro kiakoere earopnã? **kat'at** e e-y'-ko-ro 'e kiakop-ere e-aropnã what 3 2SG-OBJ.FOC-eat-NMZ_{ro} AUX.SG sun/noon-OBL 2SG-for 'What did you eat today at midday?' casual discourse: 2015-11-09 d. Kanã nãpe ko 'ote eõpo? kanã nãpe ko 'ote e-õpo why REALLY?! POLITE.FUT 1PL.EXCL 2SG-kill 'Just why on earth ought we-EXCL to kill you?' text: Marilza Kabatoá Tupari, narrator

When a *wh*-word is the complement of a postposition or the possessor of another noun, the entire phrase will pied-pipe:

(289) Pied-piping of NPs/PPs that contain a wh-word

Apo yope 'en nã *èsap?* a. apo vope 'en nã e-s-ap [PP who along.with] 2SG FOCUS 2SG-come.SG-ADV.FOC 'Whose vehicle did you come here on?' casual discourse: 2017-08-21 kire mãkẽrõ b. Apo nẽkat nerõ tero'at. mãkērõ Ø nerõ tero'e-a-t kire apo nẽkat [NP who kind/type person] DUNNO 3 PROG AUX_{go}.SG-TH-NUC 'I don't know what kind of person that is.' casual discourse: 2016-11-29

As shown with (284a), above, a whole adverbial clause may serve as the CIC. And if such a clause contains a *wh*-word, then it will need to pied-pipe to clause-initial position:

(290) Pare etet'ero'are iut esumka y'e?
pare e-tet'e-ro'are iu-t e-sumka-a y-'e
where 2SG-AUXg0.SG-while rain-NUC 2SG-get.wet-TH 3-AUX.SG
'The rain drenched you while you were where?'
elicitation: 2017-08-05
(based on casual discourse: 2016-12-13)

As there is no overt clause typer in (290), the precise boundary of the CIC in the surface string is unclear. Yet speakers have very clear intuitions about where such a clause typer can go. Speakers approve putting the clause typers *mãkẽrõ* 'DUNNO' and *nãpe* 'REALLY?!' after *pare etet'ero'are*, but doing so after just the *wh*-word is rejected without hesitation.

- (291) 2P particles must follow an entire pied-piped constituent
 - a. Pare etet'ero'are mãkērõ iut esumka y'e.
 pare e-tet'e-ro'are mãkērõ iu-t e-sumka-a y-'e
 [AdvP where 2SG-AUXgo.SG-while] DUNNO rain-NUC 2SG-get.wet-TH 3-AUX.SG
 'The rain drenched you while you were I don't know where.'
 elicitation: 2017-08-05
 - b. **Pare mãkẽrõ etet'ero'are iut esumka y'e* elicitation: 2017-08-05

Data like (291a) clear evidence that pied-piping has taken place: since the *wh*-word *pare* 'where' must occur clause-initially but cannot be extracted out of the adverbial phrase, the only option is to pied-pipe the entire AdvP to the left edge of the clause.

Though I cannot go into detail about island effects (Ross 1967) in Tuparí here, the reader should note that the adverbial clause *pare etet'ero'are* 'while you were where' in (290) behaves as an adjunct island for extraction. This is especially clear in the English translation **Where did the rain drench you while you were* ____?. The Tuparí strategy for obviating islandhood is to simply piedpipe the entire offending constituent, as shown by *pare etet'ero'are* in (290). The same strategy is found elsewhere in Tupían: Moore (1984:§7.3.1) gives examples of comparable pied-piping with *wh*-words in Gavião, and Vivanco (2018) provides extensive discussion of how pied-piping brings entire non-finite embedded clauses (which are islands) to clause-initial position in Karitiana.⁴

⁴Although Basque of course bears no historical relationship to Tupían, it pied-pipes islands in a fashion similar

The data discussed in this section have demonstrated that syntactic constituency is of paramount importance for the placement of clause typers in 2P. The rigidity of the clause-typing particles' location in the Tuparí clause shows that the 2P effects in this language constitute a syntactic phenomenon. Analytically we can implement this finding by positing a head-initial C projection at the top of the Tuparí clause, as in Figure 5.3. (Comparable comments apply for the 2P tense particles discussed in the next section: these too must sit in a head-initial projection.) So while the lower levels of the Tuparí clause show clear head-*finality*, at the top we find unambiguously head-*initial* phrase structure.

5.3 Mixed headedness in the TP

The previous sections have shown that the Tuparí clause contains at least two different headedness domains. From the VP proper through the Evidential Phrase, complements precede heads; but in the CP layer we find head-complement structure instead. This section explores the headedness of the Tense Phrase, which is located in between CP and EvidP. I will argue that this region of the clause instantiates a mixture of head-initial and head-final properties. In particular, I will advance that the claims that (*a*) the predicate-final suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE' arrive at their surface position via Lowering and (*b*) the 2P tense particles *ko/ke* 'POLITE FUTURE', *õpot* 'DISTANT PAST' and *kut* 'ANCIENT.PAST' head a high head-initial projection that lacks a specifier.

5.3.1 An overview of tense marking

The full set of tense marking in Tuparí is heterogenous; it includes a set of mutually exclusive verbal suffixes, post-verbal auxiliaries, and 2P particles. Post-VP auxiliaries are used for the future tense and also for present progressive, present habitual, and same-day past readings. The distinction between tense, aspect and modality gets murky here; for example, the future auxiliary pe...ap (292a) can also be used for generic present readings. The present progressive, shown in (b), also encodes positional information.

to Tuparí and Karitiana; see Ortiz de Urbina (1989, 1993, 2003), Etxepare and Ortiz de Urbina (2003), and Arregi (2003).

(292) Examples of post-verbal auxiliaries

a.	atpotka	<i>koro</i> Ø-ko-ro	peo'ap	
	'I will drink			G time.' / 'I drink it from time to time.'
b.	<i>Otaray'ap</i> o-taray'e-ap	rse: 2016-11-27 <i>ket'eka</i> o ket'eka-a AZ do somey	a nã	
	'I am gettin	ng somewhat ti rse: 2017-08-12		
c.	herem t	<i>arape'īrē c</i> arape'ī-re c stingray-OBL 1	pop'e-a	1
	'Since then	I have been at	fraid of stin	ngrays.'
	text: Rita Sisa	a Tupari, narrator		

Since the morphosyntactic properties of these and other auxiliaries were detailed in Chapter 4, this discussion concentrates on the two other sets of tense markers: the predicate-final suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE' and the 2P particles *ko/ke* 'POLITE FUTURE', *õpot* 'DISTANT PAST' and *kut* 'ANCIENT PAST'. Naturally occurring examples of the the predicate-final tense suffixes and of the 2P tense particles are given in (293) and (294), respectively.

(293) Tense morphology realized as predicate-final suffixes

- a. *Etopnarẽ*.
 e-top-nẽ-a-n
 2SG-see-EV.SG-TH-NEAR.PAST 3
 'She saw you (NON-WITNESSED).'
 casual discourse: 2015-10-10
- b. Hare owet 'ipot sapbi'ae. hare o-op-et 'ipot si-a-pbi'a e here 1SG-father-NUC fish spear-TH-DUR 3
 'My father used to spear fish here.' casual discourse: 2016-01-07

(294) Tense morphology realized as 2P particles

a.		<i>ke</i> a ke ak.of-TH POLIT	'en	<i>esi</i> e-si G 2SG-mother	<i>yam</i> . yam r to	
		speak of me [i.e., course: 2016-01-04	, give my 1	regards] to yo	our mothe	r.'
b.	here õp then DI 'Then/at	ot 'on ot 'on STANT.PAST 150 that time I just s course: 2017-08-14	G 2SG-just	p-ap -see-ADV.FO	С	
c.	<i>tet'epna</i> tet'e-pna AUX _{go} .S 'And the	kut ANCIENT.PAST m. ě-am &G-EV.SG-ADV.F	OC 9 fool arou	te-koy-t 3C-sister.of.t		<i>meop</i> meop fool.around.with (NON-WITNESSED).'

Though their morphosyntactic position is not uniform, the predicate-final tense suffixes and the overt 2P tense particles do constitute a single grammatical class. First, these morphemes all perform the same task in Tuparí discourse: they anchor the event time with respect to the utterance time. The near past suffix *-t*, the distant past particle δpot and the ancient past particle *kut* divide the before-now timeline into carefully delineated intervals: *-t* is used for events that took place at least two days before the utterance time (UT) through several months into the past; δpot , for events from approximately two years before UT to the speaker's early childhood; and *kut*, for events that took place prior to or at the speaker's birth. Durative *-pbi'a*, meanwhile, conflates tense and aspect: it is used for non-future habitual actions that the speaker has witnessed firsthand. Speakers are very strict about the meaning of each of these morphemes. Misusing them gives rise to inaccurate temporal (and aspectual, in the case of *-pbi'a*) interpretations and will be corrected by one's interlocutors.

A second reason to analyze all of these morphemes as instantiating a single grammatical cate-

gory is that they combine with the same auxiliary series – singular *tet'e/tero'e*, paucal *oro'e*, plural '*anẽ* – to introduce intermediate temporal gradations (§4.2). So whereas the near past -*t* in (293a) marks the event being described as one that took place between two days and several months before the present, the combination of this suffix with the AUX_{go} series in (295) gives a slightly more removed temporal interpretation. This text relates a series of events that took place more than just a few months ago (and therefore too far back for one to use near past -*t*) but less than two years ago (and therefore too recent for one to use distant past *õpot*). Observe that each finite clause in this excerpt contains both near past -*t* and a member of the AUX_{go} series: paucal *oro'e* in (a), singular *tero'e* in (b) through (d).

(295) Textual example of -t 'NEAR PAST' combining with auxiliaries

a.	Here otewãrã	oteoro'at	'ote.			
	here ote-wan-a	ote- oro'e-a-t	'ote			
	then 1PL.EXCL-go.nearby-TH 1PL.EXCL-AUXgo.PAUC-TH-NEAR.PAST 1PL.EX					
	'Then we-EXCL went a short distance.'					

- b. *Here okoa otero'at 'on*, here o-kop-a o-**tero'e-a-t** 'on then 1SG-descend-TH 1SG-AUXgo.SG-TH-NEAR.PAST 1SG 'Then I got down [from the tree],'
- c. here owãrã otero'at 'on ìyam. here o-wan-a o-tero'e-a-t 'on ìyam then 1SG-go.nearby-TH 1SG-AUXgo.SG-TH-NEAR.PAST 1SG to.him 'and I went a short distance to him.'
- d. Here sesua otero'at 'on... here s-esu-a o-tero'e-a-t 'on then 3-call-TH 1SG-AUXgo.SG-TH-NEAR.PAST 1SG 'Then I called out to him...' text: Nilson Tupari, narrator

Just like the predicate-final suffix *-t*, the 2P particle $\tilde{o}pot$ 'DISTANT PAST' will combine with the AUX_{go} series to produce more nuanced temporal gradations. (296a) is how an elderly woman described being breastfed by her grandmother, her mother having passed away soon after her birth. The speaker of this example is around eighty years old, and consultants confirm that both the distant past particle $\tilde{o}pot$ and the auxiliary *tet'e* are obligatory here. Using $\tilde{o}pot$ without *tet'e*, as in

(296b), would work only if a young child were to describe events that had taken place just a few years before the time of utterance.⁵

- (296) AUXgo introduces intermediate temporal gradations with õpot 'DISTANT PAST'
 - a. Opapa kērē õpot 'on okemkà
 o-papa ke(m)-re **õpot** 'on o-kemko-a
 1SG-grandmother breast-OBL DISTANT.PAST 1SG 1SG-nurse-TH
 otet'epnē.
 o-tet'e-pnē
 1SG-AUXgo.SG-EV.SG
 'I nursed at my grandmother's breast (NON-WITNESSED) [many years before UT].'
 text: Marilza Kabatoá Tupari, narrator
 - b. Opapa kere õpot 'on okemkopnam. o-papa ke(m)-re õpot 'on o-kemko-pne-am 1SG-grandmother breast-OBL DISTANT.PAST 1SG 1SG-nurse-EV.SG-ADV.FOC
 'I nursed at my grandmother's breast (NON-WITNESSED) [just a few years before UT].' elicitation: 2016-01-23 (based on text: Marilza Kabatoá Tupari, narrator)

We have now seen two reasons to analyze the predicate-final tense suffixes and 2P tense particles as belonging to a single grammatical class, despite their non-uniform distribution within the clause. First: with the exception of future-oriented *ko/ke* 'POLITE FUTURE', all of these morphemes divide up the before-now timeline in comparable fashion. Second: they combine with the same auxiliary series to create intermediate temporal gradations. A third reason to pursue a unified analysis for these morphemes is that they behave identically in actual discourse. Running texts see the right tense morpheme repeated in every clause. This was shown for the near past in (295), where *-t* and a member of the AUX_{go} series appear in each clause. The various textual excerpts given in Appendix 5.B provide comparable examples for distant past *õpot*, ancient past *kut*, and durative *-pbi'a*. In sum, these morphemes all share comparable semantics, enjoy similar distribution in discourse, and are mutually exclusive. For all these reasons they ought to be analyzed as

⁵Recall from §5.1 that evidential *-pnē/-psira* must attach to the highest verbal head in the predicate complex. This is why in (296a) *-pnē* attaches to the auxiliary *tet'e* but why in (296b) – which has no auxiliary – it instead attaches to the lexical verb *kemko* 'nurse, suckle' (itself built from the verb *ko* 'eat, drink' and the incorporated object *kem* 'breast'). The evidential is obligatory in both examples since an infant cannot volitionally witness her own breastfeeding. See §6.5 for more examples of *-pnē/-psira* combining with first person subjects.

realizing the same overarching grammatical category.

5.3.2 How do the suffixes *-t* and *-pbi'a* end up at the right edge of the predicate?

Having established that the various tense markers all belong to the same category, I now turn to the mechanisms responsible for ensuring that each morpheme ends up in the right position in the clause. This subsection focuses on the suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE'. How do these morphemes attach to the right edge of the predicate complex? Building upon the picture of the lower levels of the Tuparí clause arrived at in §5.1 and §5.2, we could envision a tree in which the TP – like the EvidP but unlike the CP – is head-final. (To keep the trees readable, the various auxiliary phrases from Figure 5.2 are represented as a single AuxP in much of what follows.) If the analysis in Figure 5.4 is on the right track, then the linear order of the various verbal morphemes follows from the relative heights of the functional projections themselves – regardless of whether any string-vacuous Head Movement (see Harley 2013a,b) from V⁰ to T⁰ applies.

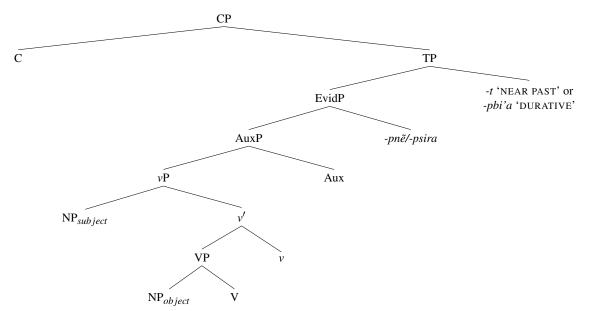


Figure 5.4: A potential analysis of the Tuparí clause, with head-final TP beneath head-initial CP

However, the facts from predicate fronting demonstrate that other mechanisms must participate in ensuring that *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE' (as well as evidential *-pnẽ/-psira*) end up

attaching at the right edge of the predicate complex. When a lexical verb cooccurs with one or more auxiliaries, only the VP headed by the lexical verb may occur to the left of a 2P clause typer. That is, the chunk of syntactic structure consisting of the lexical VP plus the auxiliaries does not count as a single CIC:

(297) Lexical VP counts as a CIC to the exclusion of postverbal auxiliaries

a.	<i>Arua 'ẽkaet</i> Arua 'ẽk-ap-et [VP Aruá dance-NMZ _{ap} -		<i>toã</i> top-a see-TH	nẽ	'e	
	'Did you see the dance of					
	casual discourse: 2017-08-12					
b.	Otèpa'asinã		-			e'a?
	ote-epa'asinẽ-a	nẽ	e-'apte	ka	e-tet-a	e-'a
	[VP 1PL.EXCL-miss-TH]] Y/N	V2SG-н/	ABIT.	SG [2SG-go.SG-	TH 2SG-when.SG]
	'Do you miss us-EXCL v	vhen	you go t	from	here?'	

casual discourse: 2016-12-08

If the auxiliaries 'e and e'apteka in such examples instantiate T, then we have evidence that a full TP cannot front to the specifier of the projection headed by the clause typers (which is CP on the analysis in §5.2.1). This same restriction applies to the EvidP: an auxiliary hosting the evidential suffix -pnẽ/-psira cannot front together with the lexical VP to Spec,C. So in (298) the auxiliary etet'epnẽ – which bears -pnẽ 'EV.SG' – does not form a CIC together with the lexical verb puop'omnã 'not know'. Just as in (297a) and (297b), the clause-typing particle nẽ 'YES/NO' demarcates the right edge of the CIC in (298).

(298) Puop'omnã nẽ nã etet'epnẽ eke ema'erẽ? puop'omnẽ-a nẽ nã e-tet'e-pnẽ eke ema'erẽ?
[VP not.know-TH] Y/N FOCUS 2SG-AUXgo.SG-EV.SG ?that word-OBL 'Did you not know that word (NON-WITNESSED)?' casual discourse: 2018-01-07

In short, the language has neither EvidP fronting nor TP fronting. Yet when there is no auxiliary present, a fronted lexical VP will take evidential and/or tense morphology along for the ride when it moves to clause-initial position:

(299) Tense- and evidential-marked lexical VPs in clause-initial position

- a. Sitèsat nẽ 'en?
 s-ite-s-a-t nẽ 'en
 3-COM-come.SG-TH-NEAR.PAST Y/N 2SG
 'Did you bring it?'
 common in everyday speech
 b. Satnã ta'ae.
- s-at-**nẽ**-a **ta'a** e 3-get-**EV.SG**-TH **ASSERTIVE.**Q 3 'He really got them (NON-WITNESSED).' casual discourse: 2016-02-18

For such examples we do not wish to posit fronting of the EvidP or of the TP, since EvidP movement and TP movement are independently known to be illicit. These examples instead look like normal fronting of the lexical VP – with the catch that evidentiality and tense are here marked on the lexical verb itself, rather than on an auxiliary.

I propose that in utterances like those shown in (299), Evid^0 and T^0 undergo Lowering (Halle and Marantz 1993; Harley and Noyer 1999; Embick and Noyer 2001) to the highest verbal head. That head will be the structurally highest auxiliary, if any auxiliary is present; otherwise, Lowering will bring the Evid^0 and T^0 all the way down to the lexical verb itself. This operation will have to apply *before* the lexical VP fronts to Spec,C. Figures 5.5 and 5.6 illustrate the application of this operation.

If Lowering always brings the tense suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE' (generated in T^0) down to a lower functional head, then whether the Tense projection is underlyingly head-initial or head-final becomes impossible to determine. This is shown in Figures 5.7 and 5.8, which provide the head-initial counterparts to the head-final TPs given in Figures 5.5 and 5.6. That the suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE' always attach at the right edge of the predicate complex does not prove that the TP is underlyingly head-final. Once Lowering is involved, then a head-initial TP works as well as a head-final one. The predicate-final tense suffixes therefore do not help to disambiguate the basic headedness of the TP.

Taking this reasoning to its logical end, one could argue that the Evidential Phrase is also

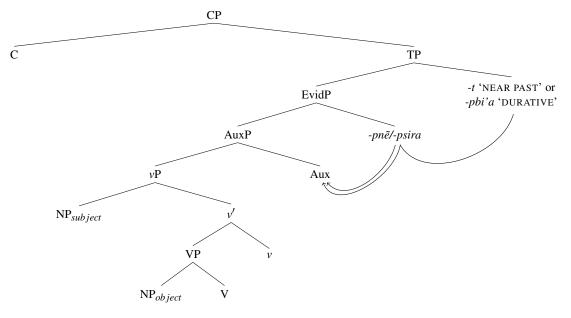
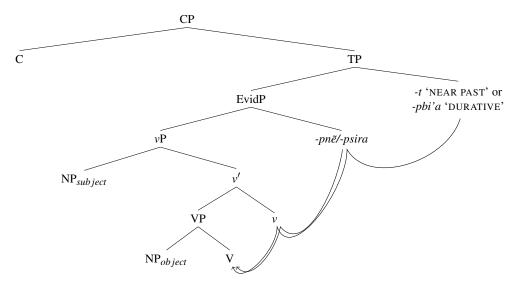
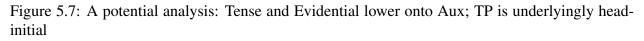


Figure 5.5: A potential analysis: Tense and Evidential lower onto Aux; TP is underlyingly head-final

Figure 5.6: A potential analysis: Tense and Evidential lower onto the lexical verb; TP is underlyingly head-final





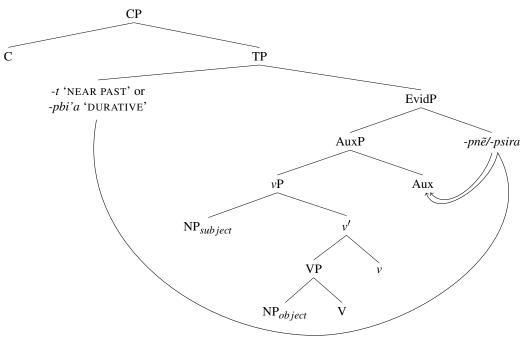
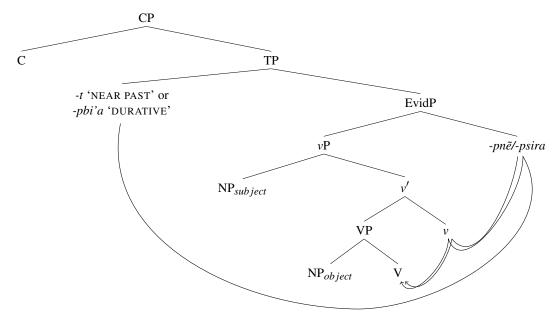


Figure 5.8: A potential analysis: Tense and Evidential lower onto lexical verb; TP is underlyingly head-initial



underspecified for headedness: if *-pnē/-psira* always undergoes Lowering to attach onto the highest verbal head, we lack independent grounds to decide the headedness of the EvidP. Putting aside the complication of the Final-over-Final Condition (Sheehan et al. 2017; see §5.3.5, below), then, the language could possess a head-final or head-initial EvidP in addition to a head-final or head-initial TP. But as evidential *-pnē/-psira* never shows up anywhere other than the right edge of the predicate complex, it differs from the heterogeneous category of Tense (which has head-initial realizations such as the 2P particles discussed in the next subsection). The trees in this chapter and in Chapter 6 will therefore continue to present an underlyingly head-final EvidP, as was first proposed in §5.1, though nothing crucial to the analysis hinges on this claim.

5.3.3 How do the particles *ko/ke*, *opot* and *kut* end up in second position?

The previous subsection argued that the tense suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE' and the evidential suffix *-pnē/-psira* arrive at their position in the Tuparí predicate complex by means of the Lowering operation utilized in Distributed Morphology (Halle and Marantz 1993; Embick and Noyer 2001; see also McCloskey 1996 for an early case study of C-to-Infl lowering in Irish). I now turn my attention to how the three tense particles *ko/ke* 'POLITE FUTURE', *õpot* 'DISTANT PAST' and *kut* 'ANCIENT PAST' end up in 2P. I will discuss two different analyses that can account for these particles' placement: one where Head Movement applies from T⁰ to C⁰, with the underlying headedness of the TP unspecified; and one where there is no Head Movement, thanks to a headinitial TP lacking a specifier altogether. The latter option ultimately provides better empirical coverage, but to make the case I must first review the options involving Head Movement.

Two empirical observations must be made up front. First, the exact same principles govern the placement of *ko/ke* 'POLITE FUTURE', δpot 'DISTANT PAST' and *kut* 'ANCIENT PAST' as govern the placement of the clause typers. Tshe kinds of constituents shown in §5.2.2 to qualify as a CIC for the clause typers also qualify as a CIC for the tense particles, and vice versa. This generalization invites an analysis on which the tense particles are realized in a projection which – just like the CP – is head-initial rather than head-final. Second, when a single sentence contains both a clause

typer and a tense particle, these occur in exactly that order and without any intervening material.

(300) provides a representative sample of examples.

- (300) Clause typers and 2P tense particles are always string-adjacent
 - a. Katkaere mãkẽrõ ko 'on aodeyam oterap. katkaere **mãkẽrõ ko** 'on aodeya-m o-tet-ap DUNNO POLITE.FUT 1SG village-INS 1SG-go.SG-ADV.FOC when 'I don't know when I will go to the village.' casual discourse: 2016-11-11 b. *Eret* nãkop ke òwet ìap. eret nãkop ke o-op-et ip-ap tomorrow MAYBE POLITE.FUT 1SG-father-NUC come.SG-ADV.FOC 'Perhaps my father will come here tomorrow.' casual discourse: 2017-08-04 'en iko? c. Iremnã nẽ õpot iremnã **nẽ õpot** 'en i-ko Y/N DISTANT.PAST 2SG 3-eat raw 'Did you eat it [=palm weevil larva] raw?' casual discourse: 2017-08-?18 d. Ero'are ta'a kut isìt itopnam 'ero'are ta'a **kut** i-si-t i-top-ne-am meanwhile ASSERTIVE.Q ANCIENT.PAST 3-mother-NUC 3-see-EV.SG-ADV.FOC sepa 'ùtpe. s-epa 'ù-tpe 3-eye painted-NUC+LOC 'All the while, his mother really did see it – his painted eye (NON-WITNESSED).' text: Marilza Kabatoá Tupari, narrator

Given the absolute linear adjacency between the clause typers and the tense particles, we could invoke Head Movement (Travis 1984; Matushansky 2006; Harley 2013a,b; Zeller 2013; McCloskey 2016; Harizanov and Gribanova To appear) from T⁰ to C⁰ to ensure that clause typers and tense particles always occur adjacent to one another. But if Head Movement is operative with the 2P tense particles then either an underlyingly head-initial or an underlying head-final TP will work equally well, just as \$5.3.2 demonstrated for the Lowering operation that attaches *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE' to the right edge of the predicate. This is schematized in Figures 5.9 and 5.10.

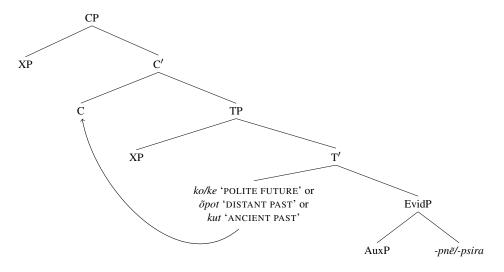
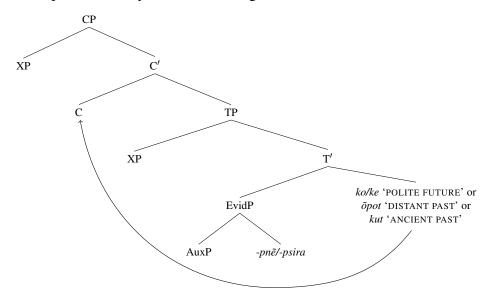


Figure 5.9: A potential analysis: Tense undergoes Head Movement to C from head-initial TP

Figure 5.10: A potential analysis: Tense undergoes Head Movement to C from head-final TP



There is an alternative option, one which does not involve Head Movement and which discards altogether with the specifier to the Tense Phrase. In much Generativist work (Koopman and Sportiche 1991; Bobaljik and Jonas 1996; Bobaljik and Thráinsson 1998, among others) Spec,T is a crucial derived position for subjects. The following question therefore arises: do we have evidence that subjects must occupy Spec,T in Tuparí? The answer is negative. The upper layer of the Tuparí clause does not include a dedicated position for subjects; subjects instead compete with foci for the same clause-initial position. Evidence for this competition between foci and NP subjects comes from the verbal morphology. When an NP subject is clause-initial then the highest auxiliary will bear the third person coreferential/reflexive proclitic *te-* as well as the theme vowel *-a*; this is shown by (301a). When however a focused XP is clause-initial then the morphology on the highest auxiliary changes: the coreferential/reflexive third person proclitic gives way to its locally free counterpart, *i-~y-~s-*, and the theme vowel disappears. This is shown by (301b). Note that in both of the utterances in (301) the right edge of the clause-initial constituent is demarcated by a 2P clause-typing particle: *nãkop* 'MAYBE', *nãpe* 'REALLY?!'.

(301) NP subjects and foci compete for the same clause-initial position

a. Paulinan nãkop kurem teaorosap'a te'a.
Paulina-n nãkop kurem te-aoros-a-p'a te-'e-a
Paulina-NUC MAYBE today 3C-arrive.SG-TH-NEAR.FUT 3C-AUX.SG-TH
'Maybe Paulina will arrive today.'
casual discourse: 2016-02-10

b. Katkaere nãpe omemsiremsĩren tèsapwa katkaere nãpe o-memsiremsin-en te-s-a-pwa when REALLY?! 1SG-grandchild.of.woman-NUC 3C-come.SG-TH-NEAR.FUT y'e? y-'e 3-AUX.SG
'Just when is my grandchild going to come here?' / 'When on earth is my grandchild going to come here?'

In (301b) the *wh*-word *katkaere* 'when?' occurs clause-initially, thereby displacing the NP subject *omemsiremsĩren* 'my grandchild' to the right of the clause typer *nãpe* 'REALLY?!'. This is not

the only position in which an NP subject can occur in the presence of a [+wh] CIC, however; a right-peripheral position is also possible. This is shown by the following pair of utterances:

(302) NP subjects and foci compete for the same clause-initial position

a. Esìt nãkop etoap kot'oa nã tero'a. e-si-t nãkop e-top-ap kot'oy-a nã tero'e-a 2SG-mother-NUC MAYBE 2SG-see-NMZ_{ap} want-TH PROG AUX_{g0}.SG-TH 'Maybe your mother is wanting to see you.' casual discourse: 2016-02-10

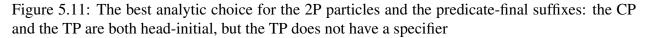
b. Kat'at kà mãkẽrõ nã tero'e esìt. kat'at ko-a mãkẽrõ nã tero'e e-si-t
[VP what eat-TH] DUNNO PROG AUXgo.SG 2SG-mother-NUC
'I do not know what your mother is eating.'
casual discourse: 2016-12-12

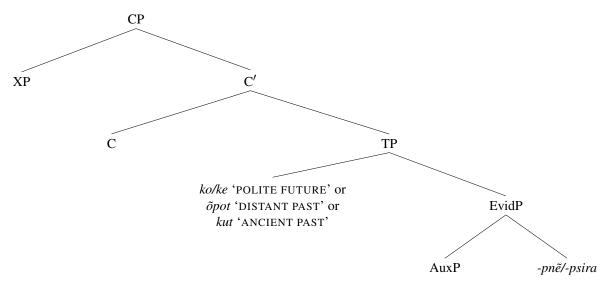
As shown by (a), the theme vowel -*a* appears on the auxiliary when the NP subject is clause-initial. But the auxiliary in (b), *tero'e*, lacks the theme vowel -*a*.⁶ The theme vowel is missing from the auxiliary in (b) because the CIC is not the NP subject; rather, it is the [+wh] VP *kat'at kà* 'eating what' that occurs clause-initially. The verbal morphology is the same whether the NP subject occurs in some sentence-internal position, as in (301b), or right-peripherally, as in (302b); in neither case may the highest auxiliary bear *te*- '3COREF' or the theme vowel -*a*. An NP subject needs to occur in clause-initial position if the highest auxiliary is to bear *te*- and -*a*, but NP subjects compete for that clause-initial position against *wh*-words and other foci. This generalization indicates that Spec,C – not Spec,T – is where subjects move to in Tuparí.

We have seen, then, that NP subjects do not have their own dedicated position in the highest level of the Tuparí clause. They can occur clause-initially when no other constituent is required to do so, but are displaced when a *wh*-word is present. And when displaced they can surface either right-peripherally or sentence-internally, immediately after the 2P clause-typing particle that is assumed to reside in C⁰. It is only when they sit in Spec,C that NP subjects license *te*- '3COREF' and *-a* 'TH' on the highest auxiliary.

⁶The auxiliaries in (302a) and (302b) do not show the alternation with and without te- because of haplology. See §4.2.3.

From these facts I conclude that Spec,T is not a subject position in Tuparí. In the absence of positive evidence for Spec,T we do not need to invoke the operation of Head Movement to account for the linear adjacency between the 2P tense particles and the clause typers. Rather, this linear adjacency will follow if CP and TP are both head-initial and TP lacks a specifier, as in Figure 5.11. This structure can also account for the predicate-final suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE'. Since these suffixes undergo Lowering to arrive at their final position (\$5.3.2), they can be generated in a head-initial projection like the one in Figure 5.11 without issue.





5.3.4 Evidence for a phonologically null C layer

The previous subsection discussed two different ways to account for the occurrence of the tense particles *ko/ke* 'POLITE FUTURE', $\tilde{o}pot$ 'DISTANT PAST', and *kut* 'ANCIENT PAST' in 2P. These particles could undergo Head Movement from T⁰ to C⁰, in which case the underlying headedness of the TP becomes irrelevant; alternatively, they could be generated in an underlylingly head-initial TP that lacks a specifier. The fact that the language does not show any evidence of using Spec,T as a subject position has led me to support the latter account, as in Figure 5.11.

The analysis advocated here requires finite clauses to contain a C layer even in the absence

of a phonologically contentful complementizer. If the C layer were to be absent, then the tense particles *ko/ke*, *õpot* and *kut* could occur sentence-initially. This is an inaccurate prediction; those particles must always occur in 2P, immediately after a clause-typing particle (if one is present). I therefore conclude that all finite clauses in Tuparí contain a projection above TP; the CP is a promising candidate.

The assumption that all finite clauses contain a C layer is commonplace for languages that show V2 or 2P effects; see den Besten (1983) for an early treatment of German and Holmberg (2015) for state-of-the-art discussion. As it so happens, there is independent evidence for the presence of the C layer even in utterances that lack an overt clause typer. There are two kinds of utterances which do not have an overt clause typer in Tuparí: neutral declaratives and unmarked *wh*-questions. If the obligatory fronting of *wh*-words to clause-initial position is due to the presence of a [+*wh*] feature on a high functional head, then even superficially unmarked *wh*-questions will contain a [+INTERROGATIVE] complementizer. This null complementizer will be just like overt *mãkẽrõ* 'DUNNO' in demanding that a [+*wh*] XP occupy its specifier. It is also plausible that declaratives must themselves be typed, with the phonological nullness of declarative morphology due to familiar pressures of frequency (Zipf 1935; Bybee and Hopper 2001; Bybee 2007; Haspelmath 2008). (303) provides examples with the null clause-typing morphology highlighted.

(303) Examples of null clause-typing particles

a.	Katke	õpot	'en	itoppe?	
	katke Ø	õpot	'en	i-top-pe	
	what wh-QUESTION	N DISTANT.PAST	280	3-see/meet-after	
	'What did you do after meeting him [years ago]?'				
	casual discourse: 2016-02	2-13			
b.	Here	õpot	'on	ètattoap.	
	here \varnothing	õpot	'on	e-etat-top-ap	
	then DECLARATIVE DISTANT.PAST 1SG 2SG-just-see-ADV.FOC				
	'Then I just saw you [years ago].'				
	casual discourse: 2017-08	8-14			

The interpretation of the evidential suffix *-pnẽ/-psira* provides evidence for the existence of the two null complementizers shown in (303). As discussed in more extensive detail in Chapter 6,

the witnessed/non-witnessed distinction must be marked in past tense contexts. Importantly, the deictic origo of evidential *-pnẽ/-psira* depends on the kind of clause-typing particle present. While *-pnẽ/-psira* is deictically anchored to the speaker in declaratives, in normal *wh*-questions and in polar questions with $n\tilde{e}$ 'YES/NO' the origo switches from speaker to addressee; that is, a speaker will use *-pnẽ/-psira* in a question if and only if she anticipates that her addressee will have to mark their own response as non-witnessed (Murray 2017; San Roque et al. 2017; Bhadra 2018; see also §6.6.2). For example, (304) is how I would ask my friend about his marriage to Porite's daughter. The question contains no evidential, since the addressee had been present at his own wedding:

(304) Porite hak eanã nẽ wat'eueparat wat?
Porite hak eanã nẽ wat'eueparat wat?
Porite daughter together.with Y/N 2PL-RCP-marry-TH-NEAR.PAST 2PL
'Did you and Porite's daughter get married to one another?'
elicitation: 2017-08-02
(based on casual discourse: 2016-12-14)

Tag or biased questions that contain $m\tilde{a}k\tilde{e}r\tilde{o}$ 'RIGHT?' trigger different behavior than yes/no questions marked with $n\tilde{e}$ or unmarked wh-questions. With $m\tilde{a}k\tilde{e}r\tilde{o}$ 'RIGHT?' the deictic center of the evidential systematically fails to invert. (305) is a question put to me about one month after my brother's wedding. Since this speaker had already heard about the wedding, she used biased $m\tilde{a}k\tilde{e}r\tilde{o}$ instead of neutral $n\tilde{e}$. Here the singular evidential -*pn* \tilde{e} must appear – because even though I, the addressee, had been present when my brother got married, the speaker had not:

(305) Adãõ, easat mãkērõ tea'usi patnan? Adãõ, e-asa-t mãkērõ te-a'usi pat-nē-a-n Adam, 2SG-older.brother-NUC RIGHT? 3C-wife marry-EV.SG-TH-NEAR.PAST 'Adam, your older brother got married, right (NON-WITNESSED)?' casual discourse: 2017-08-04

Consultants confirm that omitting the evidential from this utterance would be pragmatically peculiar: the explicitly [+WITNESSED] alternative to (305), *#Easat mãkērõ tea'usi parat?*, would mean that the question-asker had personally witnessed the marrying event that she is asking about.

In sum, the deictic origo of *-pnē/-psira* stays with the speaker in biased questions marked with *mãkērõ* 'RIGHT?' even though it flips to the addressee in neutral polar questions marked with *nẽ*

'YES/NO' and in superficially complementizer-less *wh*-questions. So there is an asymmetric dependency between Evid⁰ and C⁰: the latter determines the deictic orientation of the former. What is more, clause typers that express doubt, uncertainty or surprise on the speaker's part neutralize the witnessed/non-witnessed distinction altogether; that is, certain instantiations of C affect whether *-pnẽ/-psira* can be used at all. (See §6.6 for details.) Given that (*a*) evidential *-pnẽ/-psira* receives a specific deictic interpretation in all past tense clauses and (*b*) the deictic interpretation of *-pnẽ/-psira* is determined by C⁰, clauses that superficially lack a 2P clause-typing particle must nonetheless contain a phonologically null but semantically contentful complementizer of the sort shown in (303). The presence of these null complementizers means that all CICs – including utterance-initial NP subjects – sit in Spec,C.

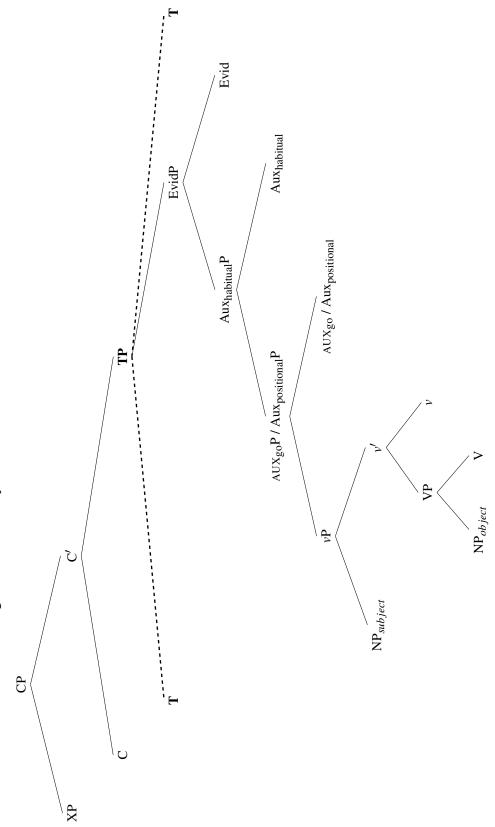
5.3.5 Summary

In this section we have seen that T may be realized in Tuparí by a heterogeneous set of morphemes. Post-VP auxiliaries provide present progressive, present habitual, future, and same-day past interpretations. (This is not a natural class semantically; these auxiliaries do not encode a shared set of temporal or aspectual features.) There are two suffixes that occur at the far right edge of the predicate complex, *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE', as well as three particles that sit in 2P: *ko/ke* 'POLITE FUTURE', *õpot* 'DISTANT PAST', and *kut* 'ANCIENT PAST'.

This picture does not point to a clear underlying headedness for the TP. The present progressive, present habitual, future, and same-day past auxiliaries follow the lexical VP, thereby suggesting the kind of head-final structure given in Figure 4.1. But the tense particles *ko/ke* 'POLITE FUTURE', $\tilde{o}pot$ 'DISTANT PAST', and *kut* 'ANCIENT PAST' are generated in a head-initial TP that lacks a specifier. (The predicate-final suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE' do not give us much information about the underlying headedness of the TP, since they reach their surface position by means of Lowering; that is, they can be generated in a head-initial or head-final projection.) The indeterminate nature of the TP in Tuparí is illustrated in Figure 5.12 by means of dotted lines.

Though it would be satisfying to definitively answer the question 'what is the headedness of the

Figure 5.12: The Tuparí Tense Phrase exhibits mixed headedness

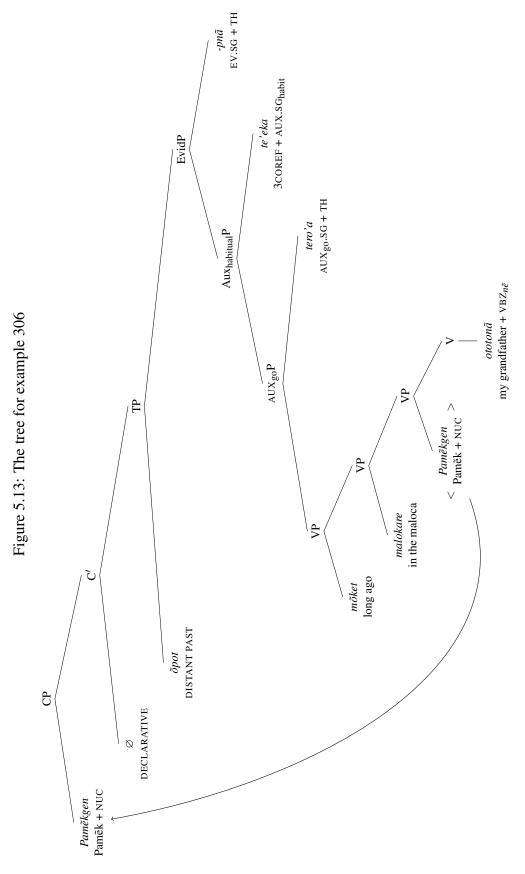


Tuparí TP?', the underspecified proposal given in Figure 5.12 is actually in keeping with what is known about changes in headedness over time. Research into disharmonic syntactic configurations has shown that head-initiality works 'top down' and head-finality 'bottom up' within Extended Projections (in the sense of Grimshaw 2000, 2005). If only one head-initial phrase occurs within an Extended Projection, it will be the highest one; if only one head-final phrase occurs within an Extended Projection, it will be the lowest. This observation has grown out of a range of scholarship on Final-over-Final Condition (formerly: the Final-over-Final Constraint), first proposed in Holmberg (2000) and later relativized to Extended Projections by Biberauer et al. (2014) (see also the more recent contributions in Sheehan et al. 2017). Matrix clauses in Tuparí conform to FOFC in that clearly head-final phrase structure is found at the bottom of the spine whereas unambiguous head-initiality occurs only at the top. In between these two domains of uncontroversial headedness we encounter the murky, indeterminate TP. It is plausible that this kind of clausal organization is widespread within the Tupían family given that various Tupían languages are head-final at the bottom of the clause but exhibit V2/2P effects and obligatory *wh*-movement to the left periphery.

Figure 5.13 shows how the understanding of the Tuparí clause put forward here can capture examples such as (306). I have chosen to highlight this example because of its articulate functional structure: tense is marked by the 2P particle *õpot* 'DISTANT PAST', the evidential suffix *-pnẽ* sits at the right edge of the predicate complex, and there are two different auxiliaries present.

malokare (306) Pamẽkgen mõket õpot ototonã Pamẽk-en õpot mõket maloka-re o-toto-nẽ-a Pamek-NUC DISTANT.PAST long.ago maloca-OBL 1SG-grandfather-VBZne-TH tero'a te'ekapnã. tero'e-a te-'eka-pnẽ-a AUXgo.SG-TH 3C-AUX.SGhabit-EV.SG-TH 'Pamek was my grandfather in the maloca [communal long house] (NON-WITNESSED).' casual discourse: 2017-08-04

In Figure 5.13 *mõket* 'long ago' and *malokare* 'in the maloca' are adjoined to the VP, and the NP subject *Pamẽkgen* moves from its base position inside of the VP to Spec,C. For expository ease this tree does not differentiate between vP and VP.



5.4 Reassessing the erstwhile 'subject pronouns'

The analysis of the Tuparí clause arrived at the previous section posits considerable complementhead structure – essentially, from the bottom of the tree up through the EvidP – on top of which sits at least one unambiguously head-complement projection: the CP. As exactly one XP will front to the specifier of CP, this clausal ofganization – together with the fact that *ko/ke* 'POLITE FUTURE', $\tilde{o}pot$ 'DISTANT PAST' and *kut* 'ANCIENT PAST' head a head-initial TP that lacks a specifier – accounts for the appearance of both the clause typers and tense particles in 2P. Singerman (2018 [to appear]) and separate in-progress work show that the exact same distribution of head-finality and head-initiality obtains in finite embedded clauses as well.

With these generalizations in place, I now turn to the morphemes called subject pronouns in previous scholarship on Tuparí grammar (Alves 2004:§4.3.1.6) and as free pronouns in recent comparative work on the Tuparían branch of Tupían (Galucio and Nogueira 2011).

- (307) Basic examples of the 'subject pronouns'
 - a. Here õpot 'on *ètattoap*. here õpot 'on e-etat-top-ap then DISTANT.PAST 1SG 2SG-just-see-ADV.FOC 'Then/at that time I just saw you.' casual discourse: 2017-08-14 b. '*Ùt* tokoppe ke 'en eosire yõrõkap. 'ù-t tokop-pe ke 'en e-osire y-õrõk-ap genipapo-NUC chew-after POLITE.FUT **2SG** 2SG-beneath 3-place.flat-ADV.FOC 'After you have chewed the genipapo, you should place it flat underneath yourself.' text: Marilza Kabatoá Tupari, narrator c. Kiepe arophit yen'amsiro 'okitwat. kiepe arophit yen'ã-msiro 'okitwat now animal meat-POSS **1PL.INCL** 'Now we-INCL have animal meat.' casual discourse: 2016-02-14
 - d. *Pare haret toat wat?* pare hat-et top-a-t **wat** where snake-NUC see-TH-NEAR.PAST **2PL** 'Where did you-PL see the snake?' casual discourse: 2016-01-01

The placement of these morphemes is parasitic on tense marking in a manner suggestive of functional morphology rather than true arguments of the predicate. The label chosen here for these morphemes (WEAK NOMINATIVE ENCLITICS) is intended to capture three crucial facts:

- 1. The weak nominative enclitics function only in the nominative grammatical role (S and A to the exclusion of O/P, in terms of Dixon 1979 and Comrie 1981).
- 2. The weak nominative enclitics must always occur with a host on their left, such that they are barred from occurring in clause-initial position.
- 3. The weak nominative enclitics are parasitic on the position of tense morphology within the clause and are licensed only when a specific kind of tense marking is present.

These facts lead us to an analysis on which the weak nominative enclitics realize a high Agreement head, one which selects for only a subset of the T^0 heads.

5.4.1 The basic distribution of the weak nominative enclitics

	SG	DUAL	PL	
1incl	'on	'okit	'okitwat	
1EXCL	on	ote		
2	'en	١	vat	
3	$e{\sim}\emptyset$			

Table 5.1: The set of weak nominative enclitics

Table 5.1 shows the seven weak nominative enclitics, first introduced in §2.1. (See §2.1.4 for discussion of how my analysis of these morphemes differs from that found in prior literature.) In what follows, I will show that these enclitics are subject to the following requirement: they must occur immediately after the tense morpheme, whether this is a 2P particle or predicate-final suffix. In only one circumstance can the weak nominative enclitics be separated from such morphology, namely when a 2P clause typer intervenes. The crucial conditioning factor that determines the availability and placement of the weak nominative enclitics is the kind of tense marking present.

This is a fundamental difference between Tuparí, on the one hand, and closely-related languages such as Sakurabiát, on the other (§5.6).

If a sentence contains a 2P tense particle and a weak nominative enclitic, then these two morphemes must be linearly adjacent to one another with the tense particle to the left. The minimal pair in (308) – offered back-to-back in conversation by an elderly speaker – illustrates.

(308) Weak nominative enclitics will follow tense particles in the 2P cluster

a.	<i>Wepsika</i> w-epsik-a 1sG-sit-TH		'on	o-n	<i>emsiremsin</i> nemsiremsin G-grandchild.c	of.wo	<i>yare</i> . yare man next.to
		down next to arse: 2016-12-12	my g	rano	dchild.'		
b.	-	msin		e xt.to		'on	<i>wepsikap</i> . w-epsik-ap 1SG-sit-ADV.FOC

casual discourse: 2016-12-12

In example (a) the CIC is the verbal predicate *wepsika* and the postpositional phrase *omemsiremsin yare* occurs to the right of the 2P cluster; in (b) that postpositional phrase now serves as the CIC, while the VP *wepsikap* (bearing special adverbial focus morphology) occurs post-2P. Yet in both examples 'on '1SG' occurs to the immediate right of *ko* 'POLITE FUTURE', in 2P. The syntactic category of the CIC and the location of the lexical verb are irrelevant for the placement of the weak nominative enclitic; the only important factor is the presence of the tense particle *ko*. This particle occurs in in 2P, and it forces first person singular 'on to surface in 2P as well.

When tense is realized as one of the two predicate-final suffixes -t 'NEAR PAST' or -pbi'a'DURATIVE', the weak nominative enclitic surfaces immediately after the suffix. The clause typers and weak nominative enclitics are highlighted in (309) so as to emphasize that while the former invariably occur in 2P (just like the tense particles *ko/ke*, δpot and *kut*), the latter do not always do so. That is, the weak nominative enclitics are not confined to 2P the way that clause-typing and tense particles are.

(309) Weak nominative enclitics will follow predicate-final tense suffixes

- a. Pare mãkērõ yõrõkare Nilson.
 pare mãkērõ y-õrõk-a-t e Nilson
 where DUNNO 3-place-TH-NEAR.PAST 3 Nilson.NUC
 'I don't know where Nilson put it.'
 casual discourse: 2017-08-14
- b. Ham nẽ mõket èsap kot'oapbi'a 'en? ham nẽ mõket e-s-ap kot'oy-a-pbi'a 'en hither Y/N long.ago 2SG-come.SG-NMZ_{ap} want-TH-DUR 2SG 'Did you want to come here already long ago?' casual discourse: 2016-02-10

In both of these examples an overt clause typer sits in 2P, thereby demarcating the right boundary of the CIC (*pare* 'where', *ham* 'hither'). But the weak nominative enclitics *e* '3' and '*en* '2SG' do not appear in 2P; they instead follow the tense suffix (*-t* 'NEAR PAST', *-pbi'a* 'DURATIVE'). So there exists no direct connection between the weak nominative enclitics and 2P. Rather, the position of the weak nominative enclitics depends on that of tense – a grammatical category that is itself split in realization between predicate-final suffixes and 2P particles. Whenever a weak nominative enclitic occurs in 2P, then, some other element in the sentence must have drawn it there. (In §5.5 this generalization will be used to argue that the position of weak nominative enclitics in superficially tenseless clauses provides evidence for the presence of a null T head.)

There is only one morphosyntactic configuration where the weak nominative enclitic can be linearly separated from tense morphology: when both (a) a tense-marked VP occurs in clause-initial position and (b) a clause-typing particle is present. In this circumstance the clause typer will violate the otherwise strict linear adjacency that obtains between the weak nominative enclitics and tense morphology.

a. Sitèsat nẽ 'en?
s-ite-s-a-t nẽ 'en
3-COM-come.SG-TH-NEAR.PAST Y/N 2SG
'Did you bring it?'
common in everyday speech

⁽³¹⁰⁾ Clause typers can separate weak nominative enclitics from predicate-final tense suffixes

b. Arimẽ kapbi'a nẽ 'en? arimẽ ko-a-pbi'a nẽ 'en monkey eat-TH-DUR Y/N 2SG 'Do you eat monkey?' casual discourse: 2016-12-07

The weak nominative enclitics shown in (307) through (310) are in no way optional: they cannot be removed without rendering the utterances ungrammatical. But whereas these enclitics are obligatory with the predicate-final tense suffixes and with the 2P tense particles, they never cooccur with the auxiliaries that provide present, future, and same-day past interpretations. The second person singular enclitic is also absent from imperatives. This means that one never finds weak nominative enclitics in utterances like the following:

(311) Auxiliary constructions that never include weak nominative enclitics

a.	Heremtarape'Ĩrẽopop'ao'apteka.heremtarape'Ĩ-reo-pop'e-ao-'aptekasince.thenstingray-OBL1SG-fear-TH1SG-HABIT.SG
	'Since then I have been afraid of stingrays.' (never occurs with enclitic 'on '1SG')
	text: Rita Sisi Tupari, narrator
b.	Sebola tàn kit kot'oa nã otea. sebola tàn kit kot'oy-a nã ote-a onion tall seed want-TH PROG 1PL.EXCL-AUX.PL
	'We-EXCL are wanting onion seeds.' (never occurs with enclitic 'ote '1PL.EXCL')
	casual discourse: 2016-02-09
c.	Yonyonke nãwatwakaropewarap.yonyonke nãwat-waka-ropewarapwhistlingFOCUS2PL-cry-NMZ _{ro} FUT.2PL
	'You-PL will cry by whistling.' (never occurs with enclitic <i>wat</i> '2PL')
	text: Miraci Aguissi Tupari, narrator
d.	E'eraeyẽ!e-'et-ae-yẽ2SG-sleep-TH2SG-AUXhzntl'Sleep, lying down!'
	casual discourse: 2017-08-17 (never occurs with enclitic 'en '2SG')

The absence of the weak nominative enclitics in these contexts is due to the fact that the right sort of tense morphology is missing: they lack a predicate-final tense suffix or 2P tense particle for the enclitic to parasitically attach to. In the next subsection this generalization is used to argue for an analysis on which the weak nominative enclitics realize a high functional head, one located immediately above T.

5.4.2 Analysis: the Tuparí clause contains an Agr head

We have now seen that the weak nominative enclitics (*a*) may only occur with a specific subset of tense morphology and (*b*) track the position of that tense morphology very closely. These two facts suggest an analysis on which the weak nominative enclitics are not true subjects (generated by hypothesis in Spec,v) but rather functional heads located in the vicinity of the Tense Phrase. In this subsection I argue that the weak nominative enclitics are the realization of a distinct AgrS projection.

Many syntacticians have argued that subjects enter into the derivation in a low position and move into a higher layer of the clause later on (Koopman and Sportiche 1991; Woolford 1991; Guilfoyle et al. 1992; McCloskey 1997, among many others). As Tense resides in the inflectional layer of the spine, it should not determine the availability of a pronominal subject; while the T head may assign a specific case to a subject, the presence of the subject has in a sense already been decided at the bottom of the clause. If 'on '1sG', 'en '2sG', and the other weak nominative enclitics were true subjects it would be difficult to understand their restriction to a particular subset of T heads. If however these enclitics are not actual subjects but rather some kind of functional head, their circumscribed availability does not pose an analytic challenge. Recent work on the agreement/clitic distinction exploits this same logic: Nevins (2011) and Kramer (2014) argue that insensitivity to T and related functional categories is diagnostic of argument clitics rather than agreement morphology. In that the Tuparı´ weak nominative enclitics are exquisitely sensitive to T – they are licensed only when certain kinds of tense marking are present – there is good reason to believe that they are not true arguments.

But if the weak nominative enclitics do not qualify as actual arguments of the predicate, what kind of functional morphology are they? One possibility is that 'on '1SG', 'en '2SG', and so on are

just part of the Tense head itself – the reflex of an Agree relationship having applied between T^0 and the sentential subject, which is by assumption generated in Spec, *v* and which may be phonologically null. Given that the evidential suffix *-pnẽ/-psira* (and many other verbal morphemes; see Chapters 4 and 6) agree with the subject in number, the idea that T also enters into an Agree relationship with the subject in Tuparí has language-internal precedent.

Alternatively, the weak nominative enclitics could head their own functional projection, one adjacent to the TP. There are several reasons to prefer this option. Although the weak nominative enclitics are parasitic on T^0 , they remain segmentable from it; there are few portmanteau forms that conflate tense and the person/number features of the subject.⁷ This contrasts sharply with prototypical cases of agreement between tense and verbal arguments, which often express tense features and phi-features in a non-segmentable fashion. A second reason to think that the weak nominative enclitics are not part of the T head itself but instead realize their own projection comes from the kind of predicate fronting discussed in §5.3.2. There we saw that a lexical verb bearing *-t*

(vi) Portmanteaux with polite future and first person inclusive subjects

a.	Patõampe kit	ika	р.	
	patõã-mpe kit	i-k	o-ap	
	roast-after POLITE.FUT+1DUAL.INCL 3-eat-ADV.FOC			
	'Let us-INCL.DUAL eat it after roasting it.' / 'We-INCL.DUAL ought to eat it after roasting it.			
	text: Paulina Tomĩka Tup	ari, narrator		
b	Kiema'erẽ	kitwat	kiansitwàromkan	

b.	Kiema'erẽ	kitwat	kiapsitwàromkap.	
	ki-ema'ẽ-re	kitwat	ki-apsitwat-ro-'om-ka-ap	
	1PL.INCL-language-OBL POLITE.FUT+1PL.INCL 1PL.INCL-forget-NMZ _{ro} -NEG-VBZ _{ka} -ADV.FC			
	'Let us-INCL.PL not forget our language.' / 'We-INCL.PL ought not to forget our language.'			
	text: Nilson Tupari, narr	ator		

Given that the first person inclusive enclitics are otherwise '*okit* and '*okitwat*, we would expect **ko* '*okit* in (via) and **ko* '*okitwat* in (vib); but the only possible forms are *kit* and *kitwat*, respectively.

As there are no comparable portmanteaux with any of the other tense markers, I suggest that what we are seeing here is suppletive allomorphy: if the Tuparí lexicon contains the special entries *kit* 'POLITE.FUT+1DUAL.INCL' and *kitwat* 'POLITE.FUT+1PL.INCL', the Elsewhere Principle will ensure that **ko* '*okit* and **ko* '*okitwat* never surface. Alternatively, it could be that *kit* and *kitwat* are produced by a phonological rule that specifically deletes /ko?o/ when the polite future combines with first person plural inclusive forms. Karlos Arregi (p.c.) points out that deriving these irregular forms via a phonological rule rather than listing them as suppletive predicts their close resemblance to the expected (but unattested) **ko* '*okit* and **ko* '*okitwat*.

⁷The only such portmanteaux are found in the polite future (\$2.1.4). The shape of the polite future varies according to the person and number of the subject: *ko* is used with the first person singular and first person plural exclusive; *ke* is used with the second and third persons, regardless of number. Yet special portmanteaux appear when the subject is first person inclusive:

'NEAR PAST' or *-pbi'a* 'DURATIVE' can front to the clause-initial position, in which case the tense morphology will occur immediately prior to a 2P clause typer. In this context – and only in this context – the weak nominative enclitic will no longer be string-adjacent to the tense suffix. The clause typer will instead separate the two from one another, as shown by $n\tilde{e}$ 'YES/NO' in (312) (repeated from 310):

- (312) Clause typers can separate weak nominative enclitics from tense suffixes on fronted VPs
 - a. Sitèsat nẽ 'en?
 s-ite-s-a-t nẽ 'en
 3-COM-come.SG-TH-NEAR.PAST Y/N 2SG
 'Did you bring it?'
 common in everyday speech
 - b. Arimẽ kapbi'a nẽ 'en? arimẽ ko-a-pbi'a nẽ 'en monkey eat-TH-DUR Y/N 2SG 'Do you eat monkey?' casual discourse: 2016-12-07

Examples like (310) show that the weak nominative enclitics are structurally independent from the tense morphology on which they lean: their otherwise strict linear adjacency may be violated. David Pesetsky (p.c.) suggests handling data like these via a local readjustment rule that inverts the linear order of the weak nominative enclitic and the clause typer. We can state this rule as follows:

(313) <u>Linear readjustment rule to account for example (312) and comparable utterances</u> $\frac{T^{0} - \text{Enclitic} - C^{0} \rightarrow T^{0} - C^{0} - \text{Enclitic}}{T^{0} - \text{Enclitic}}$

This rule presupposes that we can identify '*en* as a morpheme distinct from -*pbi*'a 'DURATIVE'; that is, the weak nominative enclitic must constitute a morphosyntactic unit separate from T^0 proper.

The preliminary tree that was given in Figure 5.12, above, must therefore be revised as in Figure 5.14. Here there is an additional functional projection present: AgrS, located immediately above T. (For expository ease AgrS is shown here as head-initial, but this is not crucial.) By stipulation the AgrS projection will select only that particular subset of tense marking compatible with the weak nominative enclitics. Furthermore, $AgrS^0$ will enter into an Agree relationship with the subject

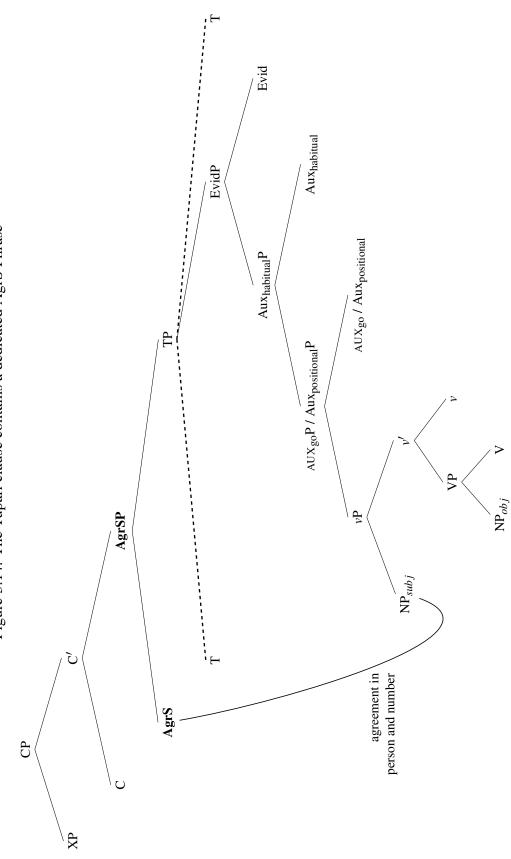


Figure 5.14: The Tuparí clause contains a dedicated AgrS Phrase

(generated in Spec,*v*); the transfer of phi-features from the subject to $AgrS^0$ will ensure that the proper form of the weak nominative enclitic is realized. And just as the operation of Lowering brings the tense suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE' (and evidential *-pnẽ/-psira*) to the right edge of the predicate complex (§5.3.2), Lowering will ensure that the weak nominative enclitic generated in $AgrS^0$ will attach to T^0 .

The clausal structure proposed in Figure 5.14 makes a prediction about the distribution of the morphemes formerly known as subject pronouns outside of matrix clauses. If the weak nominative enclitics are not true subjects but instead the realization of a functional projection in the inflectional layer of the clause, we do not expect them to surface in syntactic contexts smaller than a full TP. This prediction is correct. Although the weak nominative enclitics occur without issue inside of fully finite embedded clauses (Singerman 2018 [to appear]), they never appear in non-finite constructions. (314) provides examples of non-finite 'if/when' and 'while' adverbial clauses, with the subordinating morphology bolded. These adverbial clauses never include tense or evidentiality morphology – and they never contain weak nominative enclitics, either.

(314) Non-finite 'while' and 'if/when' clauses never contain weak nominative enclitics

a. Epuop'oraetpem nã etet'ero'are etero
e-puop'ot-ap-et-pem nã e-tet'e-ro'are e-tet-ro
[2SG-learn-NMZ_{ap}-NUC-still PROG 2SG-AUX_{go}.SG-while] 2SG-go.SG-NMZ_{ro} pe'ap.
pe'ap
FUT.2SG
'Even though you are still learning [the Tuparí language], you are going to go.' casual discourse: 2016-12-11

b. Nõ kot'oa e'a, mã ẽwan! nõ kot'oy-a e-'a mã-a e-wan
[other want-TH 2SG-if.SG] place-TH 2SG-go.nearby
'If you want another serving, go a short distance and place some [on your plate]!' casual discourse: 2015-12-30

Yet the same types non-finite clauses can contain full NP subjects, marked as expected with the nuclear case *-et/-t*. Examples of NP subjects within non-finite 'if/when' and 'while' are bolded in the following pair of examples.

- (315) Non-finite 'while' and 'if/when' clauses can contain NP subjects
 - a. *Here peren* tèsa òwet tet'ero'are ara here o-op-et tet'e-ro'are pen-et at-a te-s-a [gun-NUC grab-TH 3C-come.SG-TH 1SG-father-NUC AUXgo.SG-while] SO õpot takarat searap'õam, okaram. takara-t õpot s-earap'õã-am o-karam DISTANT.PAST tapir-NUC 3-take.off-ADV.FOC 1SG-towards 'And as my father was coming, drawing his gun, the tapir took off toward me.' text: Pedro Kup'eoyt Tupari, narrator
 - Kiret tesot'asa y'a, katke kiema'ammẽ b. kire-t te-sot'as-a y-'a katke ki-e-ma'e-am e [person-NUC 3C-die-TH 3-when.SG] how 1PL.INCL-INTRNS-speak-NMZ_{ap} 3 tarupa ema'em? ema'ẽ-m tarupa non.indigene language-INS 'When a person dies, how must we speak [=what must we say] in the white folks' language?' casual discourse: 2016-11-12 (see also elicitation on 2017-08-05)

These non-finite adverbial clauses all contain at least as much structure as a vP, and true subjects are by hypothesis generated in Spec, v. But these clauses do not contain a full TP, and the weak nominative enclitics are parasitic on a specific subset of T heads. The account of the Tuparí clause given in Figure 5.14 thus accounts for the availability of NP subjects – and the unavailability of weak nominative enclitics – within non-finite 'while' and 'if/when' clauses.

In the following chapter the tree provided in Figure 5.14 will be revised one final time: Figure 6.1 includes an additional projection, the Resultative Phrase, located above the VP/vP but beneath all of the auxiliary projections.

5.4.3 The true pronominal arguments

If the weak nominative enclitics are not in fact subject pronouns but instead the realization of a functional head, we must ask if Tuparí has any pronouns aside from the bound proclitics. The answer is affirmative: the language makes use of a set of strong pronouns (§2.1.1). These morphemes are not subject to the rigid restrictions that circumscribe the distribution of the weak nominative

enclitics. Whereas the weak nominative enclitics never occur with present progressive, present habitual, same-day past, or future auxiliaries and are excluded from imperatives, the strong pronouns are allowed in any and all TAM contexts. (316) illustrates with second person forms (data repeated from §2.1.1).

- (316) Strong pronouns allowed in all contexts, even ones that ban weak nominative enclitics
 - a. Katke nã eyẽ ẽren? katke nã e-yẽ en-en how PROG 2SG-AUX_{hzntl} 2SG-NUC
 'As for you, how are you doing?' casual discourse: 2016-07-08
 - b. *Here eren ke ewakto pe'ap...* here **en-en** ke e-wak-to pe'ap and **2SG-NUC** like.this 2SG-cry-NMZ_{ro} FUT.2SG 'And **as for you**, you will cry like this...'

text: Miraci Aguissi Tupari, narrator

c. Kat'aro mãkērõ nã wat'oro'e waret. kat'aro mãkērõ nã wat-oro'e wat-et how.many DUNNO PROG 2PL-AUXgo.PAUC 2PL-NUC 'As for you-PL, I don't know how many you-PL are.' casual discourse: 2016-12-14
d. Waret poareman nẽ wat? wat-et poareman nẽ wat

2PL-NUC wellY/N 2PL'As for you-PL, are you-PL well?'

casual discourse: 2018-01-29

Of these four utterances, only (d) – with the nominal predicate *poareman* 'good, well' – can have a weak nominative enclitic in addition to the nuclear-marked strong pronoun. What these utterances show is that the strong pronouns are permitted even in morphosyntactic contexts that disallow the weak nominative enclitics. This generalization supports the analysis proposed here: the strong pronouns are true arguments of the predicate whereas the weak nominative enclitics are functional morphemes attracted to a specific subset of tense morphology. As the strong pronouns are not dependent on the T node the way that the weak nominative enclitics are, they are allowed in the full range of utterance types.

A further piece of evidence that the strong pronouns rather than the weak nominative enclitics are true arguments is morphological: when functioning as subjects, strong pronouns bear the same nuclear case that all non-pronominal subjects do (\$2.4.1). The strong pronouns can take other case markers, as well, in accordance with the argument structural demands of individual predicates. (317) illustrates with the verb *apsitkat~apsikat* 'think, think about', which optionally takes an instrumental-marked argument. These data (repeated from \$2.1.1) demonstrate that a strong pronoun can serve as this instrumental-marked argument just as well as a non-pronominal NP can.

(317) Strong pronouns can bear case suffixes just like non-pronominal NPs

- a. *Kat'aro* nãpe nã wapsikatsã nã w-apsikat-sẽ-a kat'at-o nãpe nã nã what-INS REALLY?! FOCUS 1SG-think-RSLT.SG.HZNTL-TH PROG õka? oyã o-ka o-yẽ-a 1SG-AUX_{hzntl}-TH 1SG-AUX.SG_{habit} 'Just what am I thinking about, sitting here?' casual discourse: 2016-11-30
- b. Osie nã teapsitkarat õrõ. o-si e nã te-**apsitkat**-a-t **on-o** 1SG-mother 3 FOCUS 3C-**think**-TH-NUC **1SG-INS** 'It was my mother who thought of me.' casual discourse: 2016-11-30
- c. Wapsitkara 'on ērõ, ma'a 'en herõwap hem. w-apsitkat-a 'on en-o, Ø-ma'ẽ-a 'en herõwap hem 1SG-think-TH 1SG 2SG-INS [3-speak-TH 2SG yesterday] HÈ.INS 'I thought about you, about the thing that you said yesterday.' casual discourse: 2017-08-14

Example (c) is especially instructive about the similarities between the strong pronouns and nonpronominal NPs, as the instrumental-lative case surfaces twice here: once on the second person singular pronoun $\tilde{e}r\tilde{o}$ and once on the nominalizer *hem*, which subordinates the entire finite embedded clause *ma'ã 'en herõwap hem* 'about the thing that you said yesterday'. That the strong pronouns bear the same case marking as non-pronominal NPs provides a clear cue to the learner that these morphemes are true nominals. The weak nominative enclitics, in contrast, conspicuously lack case morphology. This is further evidence that these enclitics are not true nominals but instead a kind of agreement morphology.

5.5 Using the weak nominative enclitics to reassess the set of tense morphol-

ogy

§5.4 used the dependence of the weak nominative enclitics on a particular subset of tense marking to argue that these enclitics do not qualify as subject pronouns, narrowly defined, but instead constitute functional heads located in the inflectional layer of the clause. This section inverts that logic: it uses the presence of weak nominative enclitics in superficially tenseless environments to establish the existence of two different phonologically null tense morphemes. The phonologically empty T^0 that combines with verbal predicates behaves morphosyntactically like the 2P particles *ko/ke* 'POLITE FUTURE', *õpot* 'DISTANT PAST' and *kut* 'ANCIENT PAST', while the null T^0 that combines with nominal predicates behaves morphosyntactically like the predicate-final suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE'.

5.5.1 Null tense marking with verbal predicates

Verbal predicates that do not combine with any overt tense marking have a strict temporal interpretation: they report an event that took place immediately prior to the utterance time. Consider the near-minimal pair in (318). In (a), the CIC is the verb phrase *weut'eutkia*, and the instrumental-marked NPs *arom* and *'iporo* occur after the weak nominative enclitic *'on*. In (b), it is an instrumental-marked NP which occurs clause-initially; the VP now follows the weak nominative enclitic.

- (318) Weak nominative enclitic shows up in 2P in superficially tenseless clauses
 - a. Weut'eutkia 'on arom, 'iporo. w-eut'eutki-a 'on aro(p)-m 'ipot-o 1SG-fill.up-TH 1SG food-INS fish-INS 'I have filled up on food, on fish [just now].' casual discourse: 2016-11-21

b. Takam'ã suram 'on weut'eutkiap. takam'ã sura(p)-m 'on w-eut'eutki-ap agouti cooked-INS 1SG 1SG-fill.up-ADV.FOC 'I have filled up on cooked agouti [just now].' casual discourse: 2016-11-21

The weak nominative enclitic 'on '1SG' surfaces in 2P in both of these sentences. As with (308), above, the syntactic category of the CIC makes no difference for the placement of the weak nominative enclitic. Given that examples like (318a) and (318b) always have a strict immediatelyprior-to-UT interpretation,⁸ the learner is justified in analyzing them as containing a null tense morpheme. And given that the weak nominative enclitic in such examples occurs in 2P, that null tense morpheme must sit in 2P as well. (319) provides revised glosses for (318):

(319) Phonologically null IMMEDIATE.PAST tense morpheme in 2P

- a. Weut'eutkia 'on arom, 'iporo. w-eut'eutki-a Ø 'on aro(p)-m 'ipot-o 1SG-fill.up-TH IMMEDIATE.PAST 1SG food-INS fish-INS 'I have filled up on food, on fish [just now].' casual discourse: 2016-11-21
- b. Takam'ã suram 'on weut'eutkiap. takam'ã sura(p)-m Ø 'on w-eut'eutki-ap agouti cooked-INS IMMEDIATE.PAST 1SG 1SG-fill.up-ADV.FOC 'I have filled up on cooked agouti [just now].' casual discourse: 2016-11-21

The following near-minimal triple illustrates further. In each of these utterances the CIC is a non-finite adverbial headed by *-ro'are* 'while' (seen also in 290, 314a and 315a); the main verb

(vii)Kõãtekget
kõãtek-etwi'īk
Ø
wi'īkawet
awe-totetka.palm.weevil.larva-NUC?IMMEDIATE.PASTleaf-cutter.anttastiness-NUCexceed-TH'The palm weevil larva exceeds the tastiness of [=is tasier than] the leaf-cutter ant.'
casual discourse: 2016-01-11casualcasualcasual

How otetka 'exceed' receives a present rather than immediate past interpretation here requires further investigation.

⁸There is one exception to this generalization: in the absence of overt tense morphology, verbs which denote atelic states can receive a generic present interpretation. The following utterance illustrates with *otetka* 'exceed, surpass', the lexical verb utilized in comparative constructions ($\S2.5$).

comes at the end of the clause and bears *-ap* 'ADVERBIAL FOCUS'; and the weak nominative enclitic occurs in 2P. Example (c) must contain a null tense particle akin to overt *õpot* 'DISTANT PAST' in (a) and overt *ko* 'POLITE FUTURE' in (b), so as to attract the weak nominative enclitic '*on* '1SG' to 2P and to provide the immediately-prior-to-UT interpretation.

(320) Near-minimal triple with \emptyset 'IMMEDIATE PAST' tense morpheme in 2P

a.	-	<i>otet'ero'are</i> o-tet'e-ro'are	õpore õpot	<i>hare</i> e hare
	[_{AdvP} city-OBL <i>irik'enemnam</i> .	1SG-AUX _{go} .SG-while]	-	PAST 3 here
	irik'e-nẽ-mnẽ-ai	n		
	work-VBZ $_{n\tilde{e}}$ -EV			
		e long ago (NON-WITN	ESSED) wl	nile I was in the city.'
	casual discourse: 20			·
b.	Nĩka	etet'ero'are	ko	'on watoa
	Ø-nĩk-a	e-tet'e-ro'are	ko	'on w-ato-a
	[_{AdvP} 3-write-TI <i>owãram</i> . o-wan-am	H 2SG-AUX _{go} .SG-while] POLITE	.FUT 1SG 1SG-bathe-TH
	1sG-go.nearby-A	ADV.FOC		
	'While you are v	writing it down, let me g	go a short c	listance to bathe.'
	casual discourse: 20	018-01-22		
c.		<i>eyẽrõ'are</i> e-yẽ-ro'are	Ø	'on 'on
		-TH 2SG-AUX _{hzntl} -while	e] IMME	DIATE.PAST 1SG
	w-aoros-ap 1sG-arrive.sG-A	DV.FOC		
	'I arrived [just n	ow] while you were slee	eping, lyin	g down.'
	casual discourse: 20	016-11-15		

Appendix 5.A addresses an alternate placement pattern for weak nominative enclitics in verbal clauses with no overt tense marking.

5.5.2 Null tense marking with nominal predicates

Nominal predicates, too, cooccur with weak nominative enclitics. (321) illustrates. In each of these utterances, a nominal predicate (*soka* 'cold', *kisot'asap* 'our dying', *puop* 'knowledgeable')

combines directly with a weak nominative enclitic despite the lack of any overt tense morphology.

- (321) Position of weak nominative enclitics with nominal predicates
 - a. *Het'aem nẽ sokae?* het'aem nẽ soka e where.you.are Y/N cold 3
 'Is it cold where you are?' casual discourse: 2016-04-02
 - b. Kanã mãkērõ kisot'asapbe. kanã mãkērõ kisot'as-ap e why DUNNO 1PL.INCL-die-NMZap 3
 'I don't know why we have to die.' [lit. 'I don't know why there is our dying.'] casual discourse: 2017-08-16
 - c. Arikapu ema'ere ne puop 'en?
 Arikapu ema'ere ne puop 'en
 Arikapu language-OBL Y/N knowledgable 2SG
 'Do you know the language of the Arikapu?'
 casual discourse: 2016-07-09
 - d. Puop nẽ 'en espanhol ema'em èma'aerẽ?
 puop nẽ 'en espanhol ema'ẽ-m e-e-ma'ẽ-am-ere
 knowledgeable Y/N 2SG Spanish language-INS 2SG-INTRNS-speak-NMZ_{ap}-OBL
 'Do you know how to speak in the Spanish language?'
 casual discourse: 2017-02-09

Given that the weak nominative enclitics are otherwise known to be dependent on a subset of tense marking, it must be the case that clauses like these contain more functional material than meets the eye. In other words, these clauses must contain a null T head.

Yet unlike the \emptyset 'IMMEDIATE PAST' proposed in §5.5.1, the null tense morpheme in (321a) through (321d) cannot sit in 2P. Positing \emptyset 'IMMEDIATE PAST' for examples like (319) and (320c) captures two important facts: first, the strict immediately-before-UT temporal interpretation; second, the obligatory placement of the weak nominative enclitic in 2P. But the weak nominative enclitics in clauses with nominal predicates do *not* necessarily show up in 2P; they are instead attracted to the nominal predicate itself. This fact is clear from (321a), (321b) and (321c): in each of these three utterances a clause typer follows the CIC (an adverbial) but the weak nominative enclitic follows the nominal predicate. Only when the nominal predicate is itself the CIC will

the weak nominative enclitic occur in 2P. This is shown by (321d), where *puop* 'know, knowledgeable' is clause-initial. So even though nominal predicates and superficially tenseless verbal predicates resemble one another in lacking overt tense morphology, they differ markedly in terms of the placement of the weak nominative enclitics.

The key to understanding clauses with nominal predicates comes from verbal predicates that bear the tense suffixes -t 'NEAR PAST' or -*pbi'a* 'DURATIVE'. Consider the pair of examples in (322). In (a), the weak nominative enclitic '*en* occurs immediately after the tense-marked VP, and the clause typer $n\tilde{e}$ 'YES/NO' follows the CIC *haytokia* 'a lot'. In (b), the tense-marked VP occurs as the CIC and the weak nominative enclitic follows the clause typer. This distribution of the weak nominative enclitics in this pair of examples is just like what we saw with the nominal predicate *puop* 'know, knowledgeable' in (321c) and (321d): in that pair, too, '*en* '2SG' cliticizes directly onto the predicate as long as no clause typer intervenes.

(322) Weak nominative enclitics are sensitive to the position of predicate-final tense suffixes

a.		s-ite-s-a- t 3-COM-come.SG-T	H-NI	EAR.PAST	' <i>en?</i> 'en '2SG
	'Did you brin	g a lot of it?'			
	casual discourse	: 2016-11-23			
b.	Sitèsat		nẽ	'en?	
	s-ite-s-a-t		nẽ	'en	
	3-COM-come.	SG-TH-NEAR.PAST	Y/N	2SG	
	'Did you brin	g it?'			
	common in every	yday speech			

Given the parallels between the nominal predicates in (321c) and (321d), on the one hand, and the verbal predicates in (322a) and (322b), on the other, the kind of null T present in clauses with nominal predicates must be akin to the predicate-final suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE' rather than to the 2P particles *ko/ke* 'POLITE FUTURE', *õpot* 'DISTANT PAST', or *kut* 'ANCIENT PAST'. That is, the null tense morpheme in examples in (321) must undergo Lowering from T⁰ to attach to the predicate.

(323) provides revised glosses for (321) with the null tense suffix highlighted. Since clauses

with nominal predicates are interpreted either as generic present or as immediate past, this suffix is labeled PRESENT/IMMEDIATE PAST.

(323) Null PRES/IMMED.PAST morpheme attaches to the nominal predicate

a.	Het'aemnẽsokae?het'aemnẽsoka-Øewhere.you.areY/Ncold-PRES/IMMED.PAST3'Is it cold where you are?'
b.	Kanã mãkêrõ kisot'asapbe. kanã mãkêrõ ki-sot'as-ap-∅ e why DUNNO 1PL.INCL-die-NMZap-PRES/IMMED.PAST 3 'I don't know why we have to die.' [lit. 'I don't know why there is our dying.']
c.	Arikapu ema'ẽrenẽpuop'en?Arikapu ema'ẽ-renẽpuop-∅'enArikapu language-OBL Y/N knowledgable-PRES/IMMED.PAST 2SG'Do you know the language of the Arikapu?'
d.	Puop $n\tilde{e}$ 'enespanhol ema'empuop- \varnothing ne'enespanhol ema'emknowledgeable-PRES/IMMED.PASTY/N2SGSpanishlanguage-INSèma'aerë? </td

5.5.3 Enclitic placement in negated clauses confirms the existence of a null

tense suffix on nominal predicates

The suffix -'*om*, which serves as both a negator and a privative, maps nouns to nouns; negated constituents in Tuparí behave nominally rather than verbally according to a slew of morphosyntactic diagnostics (Singerman 2018). If the generalizations given in §5.5.2 about the placement of the weak nominative enclitics are accurate – and if negated predicates are just a kind of nominal predicate – then we predict that negated predicates should behave identically to all other nominal predicates with regards to the placement of the weak nominative enclitics.

This prediction is correct, both for negated predicates built from nominalized verbs (examples 324a and 324b) and for ones in which -'*om* attaches directly to a noun (324c and 324d). Note that

in (a) and (c) the negated predicate occurs after the 2P clause typer $n\tilde{e}$ 'YES/NO', whereas in (b) and (d) it occurs clause-initially.

(324) Negated predicates behave like nominal predicates with regards to enclitic placement

a.		e-emo'ãk-to- 'om- ∅ I 2SG-pass.by-NMZ _{ro} -NEG-PRES/IMM y my house?'	'en? 'en MED.PAST 2SG
b.	<i>Adãõ iypek</i> Adãõ iy-pek Adam OBJ.NMZ-buy 'Did you not eat what casual discourse: 2015-1	ko-ro- 'om-∅ y eat-NMZ _{ro} -NEG-PRES/IMMED.PAS' at Adam bought?'	<i>nẽ 'en?</i> nẽ 'en T Y/N 2SG
c.		OBL Y/N knowledgeable- NEG-PRES / eable of our-INCL language?'	e /IMMED.PAST 3
d.	<i>Koy'om</i> koy- 'om- Ø sister- NEG-PRES/IM 'Do you not have a s casual discourse: 2016-0		

As far as the placement of the weak nominative enclitics is concerned, these examples with -'*om* are indistinguishable from the non-negated nominal predicates in (323).

5.5.4 Summary

The data examined in this section have shown that a null T head is present with superficially tenseless verbal clauses as well as with nominal predicates. Yet differences in semantic interpretation and in the placement of the weak nominative enclitics show that these two kinds of predicates each combine with a distinct null tense head. We thus arrive at the following lists of tense morphology that cooccurs with the weak nominative enclitics.

- (325) Tense particles that head an underlyingly head-initial TP with no specifier
 - a. *ko/ke* 'POLITE FUTURE'
 - b. *õpot* 'DISTANT PAST'
 - c. *kut* 'ANCIENT PAST'
 - d. Ø 'IMMEDIATE PAST'
- (326) Tense suffixes that undergo Lowering (TP's underlying headedness indeterminate)
 - a. -*t* 'NEAR PAST'
 - b. -pb'ia 'DUR'
 - c. -Ø 'PRESENT/IMMEDIATE PAST' (restricted to nominal predicates only via explicit selection of a [+NOMINAL] rather than [+VERBAL] complement)

The only tense morphology that does not combine with the weak nominative enclitics are postverbal auxiliaries such as the distant future pe...(')ap or the present habitual (')apteka. These auxiliaries do seem to instantiate T (for example, they are restricted to fully finite clauses) but they never appear alongside the weak nominative enclitics.

5.6 Conclusion

This chapter has described the relative positions of functional categories in the Tuparí clause, with a special focus on the distribution of head-initial and head-final phrase structure. We have seen that, as in many other Tupían languages, the lower levels of the Tuparí clause obey rigid complement-head structure. However, the highest layer – instantiated by the 2P clause typers – is head-initial. The Tense Phrase, sandwiched in between the clause typers and the Evidential Phrase, shows a split in headedness: the suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE' are predicate-final (just like evidential *-pnẽ/-psira*), whereas the particles ko/ke 'POLITE FUTURE', $\tilde{o}pot$ 'DISTANT PAST' and kut 'ANCIENT PAST' must always surface in 2P (just like the clause typers).

With these facts in place it became possible to interrogate the distribution of the weak nominative enclitics, morphemes labelled subject pronouns in previous scholarship on the language. We have seen that the distribution of the weak nominative enclitics supports an analysis on which these morphemes are functional heads in the inflectional layer of the clause rather than true arguments of the predicate. Furthermore, the appearance of the weak nominative enclitics in clauses that superficially lack tense – and their rigid positioning therein – has led to the proposal that Tuparí must have at least two kinds of null Tense heads. One of those morphemes, \emptyset 'IMMEDIATE PAST', combines with verbal predicates that do not bear any overt tense marking. Based upon the distribution of the weak nominative enclitics – restricted in the case of such predicates to 2P - I have claimed that IMMEDIATE PAST must sit in 2P, just as the particles *ko/ke*, *õpot* and *kut* do. As for - \emptyset 'PRESENT/IMMEDIATE PAST' – which combines with nominal predicates – this morpheme must undergo the same operation of Lowering as do the predicate-final suffixes -*t* and -*pbi'a*.

I wish to address two remaining analytic questions before concluding. First, the third person weak nominative enclitic e is never present when an NP subject is clause-initial. Consider the two utterances in (327), which have a just-before-UT temporal interpretation. As argued in §5.5.1, above, utterances with that temporal interpretation always contain a weak nominative enclitic in 2P. But when a non-pronominal NP subject is clause-initial, the expected e is absent:

(327) No third person weak nominative enclitic with clause-initial NP subject

- a. *Òwet* teaorosa.
 o-op-et Ø te-aoros-a
 1SG-father-NUC IMMEDIATE.PAST 3C-arrive.SG-TH
 'My father has arrived.'
 common in everyday speech
 b. *Teaorosae òwet.*
- te-aoros-a Ø e o-op-et 3C-arrive.SG-TH IMMEDIATE.PAST 3 1SG-father-NUC 'My father has arrived.' common in everyday speech

Why e is obligatory in (b) but cannot occur in (a) is unclear. There are, however, suggestive parallels between Tuparí and the V2 Romance language Surmiran (Rumantsch). Anderson (2004, 2006) discusses how a subject clitic can occur on the finite verb in Surmiran if and only if the NP subject is not the clause-initial element. (In Anderson's terminology, the subject clitic can occur only if the NP subject has INVERTED with the finite verb.)

(328) Examples of Surmiran subject clitics from Anderson (2006:4–5)

- a. Ursus discorra rumantsch stupent Ursus speaks.3SG Rumantsch excellently 'Ursus speaks Rumantsch very well.'
- b. *Rumantsch discorra* Ursus stupent Rumantsch speaks.3SG Ursus excellently 'Ursus speaks *Rumantsch* very well.'
- c. Rumantsch discorra='l Ursus stupent Rumantsch speaks.3SG-**3**SG.MASC Ursus excellently 'Ursus speaks Rumantsch very well.'
- d. * Ursus discorra='l rumantsch stupent Ursus speaks.3SG-3SG.MASC Rumantsch excellently intended: 'Ursus speaks Rumantsch very well.'

Anderson proposes that the third person singular masculine clitic =l is possible in (c) because the finite verb – located in Infl⁰ – c-commands the base position of the subject. No such c-command takes place in (d), which on Anderson's proposal does not contain an Infl layer at all: for him this utterance simply consists of a VP, with the subject still sitting in Spec,V. I would argue that the inflectional morphology on the verb in that example reflects the presence of T/Infl in the syntax. Theoretical differences aside, there is a striking empirical similarity in that neither language allows a clause-initial NP subject to cooccur with a subject enclitic. What is more, in neither language does a clause-initial NP subject get interpreted as focal. (See §2.4.1 for discussion of how nuclear-marked clause-initial NP subjects are not focused in Tuparí.) It is conceivable, then, that information structural considerations may ultimately help to explain why the third person weak nominative enclitic *e* does not appear in Tuparí utterances of the sort shown in (327a). This possibility will be addressed in Singerman (In preparation a).

A second analytic question concerns the relationship between auxiliaries such as (')apteka 'HABIT' and pe...(')ap 'FUTURE', on the one hand, and the 2P tense particles and predicate-final tense suffixes, on the other. In §5.3 I argued that the Tuparí Tense Phrase is of mixed headedness: the 2P particles head a high head-initial projection that lacks a specifier; the post-VP auxiliaries look to be truly head-final; and the predicate-final suffixes may be generated in a projection that is either head-initial or head-final underlyingly. Jason Merchant (p.c.) points out that the postverbal auxiliaries can be unified with the 2P particles if they are analyzed as occupying a lower position in the clause – perhaps AspP – in combination with a null tense morpheme in 2P. That null tense morpheme would then complement the particle \emptyset 'IMMEDIATE PAST' and the suffix - \emptyset 'PRESENT/IMMEDIATE PAST' that were motivated in §5.5. While this kind of analysis could capture the Tuparí facts, the null tense morpheme that would combine with the auxiliaries (')*apteka* 'HABIT' and *pe...(')ap* 'FUTURE' would need to differ from the particle \emptyset 'IMMEDIATE PAST' and the suffix - \emptyset 'PRESENT/IMMEDIATE PAST' in a non-trivial way: it would be incapable of combining with the weak nominative enclitics. Recall that the major motivation behind the two null tense morphemes proposed in §5.5 is how they attract the enclites in the linear string. But since those enclitics can never occur with (')*apteka* 'HABIT' or *pe...(')ap* 'FUTURE', an analysis that claims that these auxiliaries combine with a null tense morpheme would need to stipulate that this null morpheme is different from all of the other realizations of T in the language. This stipulation, it seems to me, lacks independent language-internal support.

Let me conclude by briefly comparing the behavior of the Tuparí weak nominative enclitics to their cognates in closely-related languages. In Wayoró the subject pronouns may either precede or follow the predicate:

- (329) Placement of õn '1SG' in Wayoró
 - a. koβo pi-g-a-t õn sweet.potato cook-VBZ-TH-PAST 1SG
 'I cooked sweet potato' (Nogueira 2011:99; my translation)
 - b. *õn* mbogop mõ-k-a-t **1SG** child call-VBZ-TH-PAST
 'I called the child' (Nogueira 2011:91; my translation)

As for Sakurabiát, Galucio (2001:41–43) reports that three subjects pronouns – δt '1SG', δt '2SG', and *ose* '1PL.EXCL' – show 'clitic-like behavior': while able to appear clause-initially, they can also encliticize to the whole VP. The other pronouns seem to stay initial. Whereas encliticization of subject pronouns optionally applies in Wayoró and Sakurabiát, it is fully obligatory with the Tuparí

weak nominative enclitics: these enclitics have undergone a process of diachronic reanalysis from independent arguments – base generated within vP – to the high functional head AgrS.

Another important difference between the Tuparí weak nominative enclitics and their cognates in sister languages concerns their omissibility. The Tuparí enclitics are never optional: they are either obligatory or prohibited, depending on the particular kind of Tense head that is present. In Sakurabiát, however, the cognate morphemes are required only with transitive verbs. The following paradigm from Galucio (2014a:378; my highlighting) illustrates.

(330) Optionality of subject pronouns with intransitive verbs in Sakurabiát

- a. *o-so-a-t ẽt* 1SG-see-TH-PAST **you** 'You saw me.'
- b. *e-so-a-t* õt 2SG-see-TH-PAST I 'I saw you.'
- c. *e-et-a-t* (*ẽt*) *eni=ese*2SG-sleep-TH-PAST (you) hammock=LOCATIVE
 'You slept in the hammock.'
- d. *o-et-a-t* (õt) 1SG-sleep-TH-PAST (I) 'I slept.'

That Sakurabiát allows the elision or omission of subject pronouns with intransitives makes sense given the Tuparían languages' pattern of absolutive marking on lexical verbs. As is visible in (330c) and (330d), intransitive verbs like *et* 'sleep' will always bear a pronominal prefix that conveys the person and number features of the subject. Hence the enclitic subject is in such cases informationally redundant. But as transitive verbs such as so(p) 'see' take an object prefix (examples 330a and 330b), *et* '2SG' and *ot* '1SG' are required: otherwise the clause would lack any overt information about the person and number of the subject. In Tuparí, in contrast, the presence of the cognate morphemes is conditioned entirely by the kind of tense marking employed. This is why 'on '1SG' is obligatory after *ko* 'POLITE FUTURE' both in (281a), where the lexical verb is transitive *ökõum* 'put on', and in (300a), where the lexical verb is the intransitive *tet* 'go.SG' (see

also 308, with intransitive *epsik* 'sit'). It is the 2P particle *ko* which forces the weak nominative enclitic '*on* to appear in these utterances, just as the present habitual auxiliary '*apteka* means that that same enclitic cannot appear in (311a). The valency of the lexical verb has no impact whatsoever on whether a weak nominative enclitic will be present.

Appendix 5.A An alternative position for weak nominative enclitics in superficially tenseless verbal clauses

In §5.5.1 we saw that weak nominative enclitics surface in 2P in superficially tenseless verbal clauses. I argued that that pattern points toward the existence of a phonologically null tense particle, IMMEDIATE PAST, which patterns morphosyntactically like the overt 2P particles *ko/ke* 'PO-LITE FUTURE', *õpot* 'DISTANT PAST' and *kut* 'ANCIENT PAST'. However, there exists an alternative possibility: the enclitic can instead follow the predicate-final affix *-ap* 'ADVERBIAL FOCUS'. (331a) shows the placement pattern examined in §5.5.1, while (331b) shows the alternative.

(331) Alternative placement of weak nominative enclitics

a.	apo yope who along.with	'en nã 'en FO	<i>èsap?</i> e-s-ap CUS 2SG-come.SG-ADV.F 1 come here in?'	FOC
	elicitation: 2017-0	8-23		
b.	apo yope who along.with	FOCUS did you	2SG-come.SG-ADV.FOC	' <i>en?</i> 'en 2SG
	(see also casual dis	scourse o	n 2017-08-13)	

(see also elicitation on 2017-08-23)

One way of analyzing this alternation is to say that the null IMMEDIATE PAST morpheme may, for at least some speakers, pattern either like a 2P tense particle or like a predicate-final suffix. If (331b) contains a null tense suffix after *-ap* 'ADVERBIAL FOCUS', then the weak nominative enclitic placement would follow straightforwardly.

My consultants approve this alternative pattern readily, and it is attested in everyday spontaneous discourse as well. Nonetheless, it is my distinct impression that (b) – with the weak nominative enclitic positioned after the predicate – is less common than (a), where it occurs in 2P. The alternative in (b) appears to be more common in the speech of young Tuparí; I do not believe that I have ever heard it used by an elderly member of the community. More research into this alternation is needed, especially in that the pattern in (b) does not seem to occur in the absence of the suffix *-ap* 'ADVERBIAL FOCUS' on the verb. See \$3.6.4 for more information on the adverbial focus suffix, which is subject to considerable variation in the Tuparí speech community.

Appendix 5.B Textual evidence for the internal coherence of the category of Tense

The purpose of this appendix is to provide textual evidence that the various tense morphemes instantiate a single grammatical category, despite the fact that they are not uniformly positioned within the clause. The texts quoted here show that the predicate-final suffixes *-t* 'NEAR PAST' and *-pbi'a* 'DURATIVE' and the 2P particles $\tilde{o}pot$ 'DISTANT PAST', *ko/ke* 'POLITE FUTURE', and *kut* 'ANCIENT PAST' all pattern alike according to multiple diagnostics. In particular, they (*a*) are all repeated in each finite clause within a discourse and (*b*) are mutually incompatible.

(332) illustrates the usage of *kut* 'ANCIENT PAST'. Each clause here also contains the evidential *-pnẽ/-psira*, which agrees in number with the subject: paucal *kiakoet koepa eanã* 'the sun together with the moon' in (a), singular *koepat* 'the moon' in (b) through (d).

(332) Textual example of *kut* 'ANCIENT PAST'

a. *Mõket* kut kire'õerẽ, kiakoet koepa eanã mõket kut kire-'om-ere kiakop-et koepa eanã long.ago ANCIENT.PAST person-NEG-OBL sun-NUC moon together.with kirenã soro'epsira. s-oro'e-psira kire-nẽ-a person-VBZ_{ne}-TH 3-AUX_{go}.PAUC-EV.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 then ANCIENT.PAST sun-NUC te-sister-NUC fool.around.with *tet'epnam*. tet'e-pnẽ-am AUXgo.SG-EV.SG-ADV.FOC 'And the moon started to fool around with his own sister (NON-WITNESSED).'

c. *Here kut* koepat sim'em tekoy wapsim temã here kut koepa-t sim'ẽ-m te-koy wap-sim te-mã-a then ANCIENT.PAST moon-NUC night-INS 3C-sister hammock-inside 3C-lay-TH tewãrã i'ekapnẽ. te-wan-a i-'eka-**pn**ẽ 3C-go.nearby-TH 3-AUX.SG-EV.SG

'And the moon, at night, would go a short distance and lay down in his own sister's hammock (NON-WITNESSED).'

'Nã 'on!' ke te'a d. ko kut tewapsim [nẽ-a ko 'on] ke te-'a kut te-wap-sim [do-TH POLITE.FUT 1SG] say 3C-when.SG ANCIENT.PAST 3C-hammock-inside sukan тã *i'ekapnẽ* te'aepatnã. sukã-n mã-a i-'eka-**pn**ẽ te-'aepatnã pestle-NUC place-TH 3-AUX.SG-EV.SG 3C-place/role 'While saying 'I want to do it [=have intercourse]', he would put a pestle in his place in his hammock (NON-WITNESSED).' text: Isaias Tarimã Tupari, author

(333) illustrates with *opot* 'DISTANT PAST', which – just like *kut* – sits in 2P:

(333) Textual example of *opot* 'DISTANT PAST'

a. *Here õpore* 'apère. 'àpe enkuere takarat here **õpot** e 'àpe-re 'àpe enkup-ere takara-t then **DISTANT.PAST** 3 path-OBL path edge-OBL tapir-NUC tet'epnam. tet'e-pnẽ-am AUXgo.SG-EV.SG-ADV.FOC 'And there on the path, on the edge of the path, was a tapir (NON-WITNESSED).' b. *Here õpore* takarat searap'õam, yõpop'a.

b. *Here opore takarat searap'oam, yopop'a.* here **õpot** e takara-t s-earap'õã-am y-õ-pop'e-a then **DISTANT.PAST** 3 tapir-NUC 3-take.off-ADV.FOC 3-CAUS-fear-TH 'And then the tapir took off, scaring them [the children].' c. *Here õpore* Reginaldot Denisit iwara here **õpot** e Reginaldo-t Denise-t iwat-a then **DISTANT.PAST** 3 Reginaldo-NUC Denise-NUC leave.behind-TH *searap'õam...* s-earap'õã-am 3-take.off-ADV.FOC
'Then Reginaldo took off, leaving Denise behind ...' text: Rita Sisi Tupari, narrator

The following textual excerpt (the first four lines of which appear in §5.3.1) shows the systematic combination of -t 'NEAR PAST' and the AUX_{go} auxiliaries. Both -t and the AUX_{go} are required in each clause in this text to ensure the right temporal interpretation: between three months and two years prior to UT.

(334) Textual example of -t 'NEAR PAST' combining with auxiliaries

a.	Here otewãrã	oteoro'at	'ote.
	here ote-wan-a	ote-oro'e-a-t	'ote
	then 1PL.EXCL-go.nearby-TH	1PL.EXCL-AUXgo.PAUC-TH-NEAR.PAST	1pl.excl
	'Then we-EXCL went a short of	distance.'	

b.	Here okoa	otero'at	'on,	
	here o-kop-a	o-tero'e-a-t	'on	
	then 1SG-descend-TH	1SG-AUXgo.SG-TH-NEAR.PAST	1SG	
	'Then I got down [from the tree],'			

- c. here owãrã otero'at 'on ìyam. here o-wan-a o-tero'e-a-t 'on ìyam then 1SG-go.nearby-TH 1SG-AUXgo.SG-TH-NEAR.PAST 1SG to.him 'and I went a short distance to him.'
- d. Here sesua otero'at 'on, here s-esu-a o-tero'e-a-t 'on then 3-call-TH 1SG-AUXgo.SG-TH-NEAR.PAST 1SG 'Then I called out to him,'
- e. *here òyaora tero'are*. here o-õyaot-a **tero'e-a-t** e and 1SG-answer-TH AUXgo.SG-TH-NEAR.PAST 3 'and he answered me.' text: Nilson Tupari, narrator

The text in (335) utilizes near past *-t* without any auxiliaries. This gives an interpretation of two days before UT to, at most, a few months before UT.

(335) Textual example of -t 'NEAR PAST'

a. *Here akurap epotet* 'on eraratonã, toat here akurap epote-t top-a-t 'on erarato-ne-a, then monkey different-NUC see-TH-NEAR.PAST 1SG very.big-VBZ_{$n\tilde{e}$}-TH hap'iri'omnã, hap hìthìt'enã. hap-'iri-'om-nē-a, hap hìthìt'e-nẽ-a hair-small-NEG-VBZ_{$n\tilde{e}$}-TH hair [white]²-VBZ_{$n\tilde{e}$}-TH 'Then I saw a different monkey - very big, without short hair, with white hair.' b. *Here kòmkòmkia* tepsiksãrẽ. here kòmkòm-ki-a te-epsik-sẽ-a-n e and $[silence]^2$ -VBZ_{ki}-TH 3C-sit-RSLT.SG.HZNTL-TH-NEAR.PAST 3 'And it sat, in silence.' c. Hè babuíno. heret hè het-et babuíno that.one name-NUC baboon

'The name of that one [=the different monkey] is 'baboon."

d. $M\tilde{a}kinamsironaer\tilde{e}$ irowakot'oat 'on mãkinã-msiro-nẽ-am-ere irowa-kot'oy-a-**t** 'on camera-POSS-VBZ_{nẽ}-NMZ_{ap}-OBL take.picture-COND-TH-**NEAR.PAST** 1SG *kipotoapnã*. ki-potop-ap-nẽ-a 1PL.INCL-view-NMZ_{ap}-VBZ_{nẽ}-TH 'If I had had a camera, I would have taken a picture for us to view.' text: Isaias Tarimã Tupari, author

The third line of this excerpt lacks any overt tense marking because the predicate is just the nominal *babuíno*, a loan from Portuguese.

Durative *-pbi'a* differs from the other past tense morphemes in that it marks habitual actions and cannot combine with evidential *-pnẽ/-psira*. However, it behaves just like *-t*, *õpot* and *kut* in discourse. In a text that narrates habitual events, *-pbi'a* will be used in every single clause. (336) illustrates. Here *-pbi'a* provides a present habitual or generic interpretation.

(336) Textual example of -pbi'a 'DURATIVE': present habitual/generic interpretation

a. *Hurahurat kerãkgapbi'a u'àre*.
hurahura-t kerãkga-a-**pbi'a** u'à-re
tucunaré-NUC be.many-TH-**DUR** ?river.bottom-OBL
'There are many tucunaré [peacock bass] at the bottom of the river.'

- b. Dezembrope teopsi'at sinambi'ae, dezembro-pe te-opsi'a-t sinẽ-a-mbi'a e December-LOC 3C-egg-NUC give.birth.to-TH-DUR 3 'In December they give birth to their eggs,'
- c. *kup tere teopsi'at õambi'ae iupsipe.* kup tere te-opsi'a-t om-a-**mbi'a** e iu-psipe wood on.top.of 3C-egg-NUC give-TH-**DUR** 3 river-within 'they give/lay their eggs on top of wood within the river.'
- d. *Here teuapeka y'a, isit sitetet'etetekapbi'ae.*here te-uapek-a y-'a i-si-t s-itetet'etetet-ka-a-pbi'a e
 then [3C-hatch-TH 3-when.SG] 3-mother-NUC 3-[COM+go.SG]²-VBZ_{ka}-TH-DUR 3
 'Then when they [the turtle eggs] hatch, the mother takes them along with her.'
- e. Here kitoa te'a, tekuret poaroapbi'ae here ki-top-a te-'a te-kut-et poaroa-a-pbi'a e then [1PL.INCL-see-TH 3C-when.SG] 3C-child-NUC safeguard-TH-DUR 3 teõyemsim. te-õyẽ-psim 3C-mouth-within 'Then if she [the mother tucunaré] sees us, she safeguards her offspring within her mouth.' text: Raul Pat'awre Tupari, author

Durative *-pbi'a* can also give a past habitual interpretation, comparable to the Portuguese imperfective *-ava/-ia* or to English *used to*. The following excerpt illustrates this usage:

(337) Textual example of -pbi'a 'DURATIVE': past habitual interpretation

- a. *Mõket*, okurerem, òwet irik'enaerẽ irik'e-nẽ-am-ere mõket o-kut-ere-m o-op-et long.ago 1SG-childhood-OBL-INS 1SG-father-NUC work-VBZne-NMZap-OBL õpuopma'ambi'ae, kutnã otero'a o'a. o-'a o-õpuopma'ē-a-mbi'a e, kut-nē-a o-tero'e-a 3 [child-VBZ_{ne}-TH 1SG-AUX_{go}.SG-TH 1SG-when.SG] 1SG-teach-TH-**DUR** 'Long ago, in my childhood, my father taught me how to work [=to cut rubber], when I was a child.'
- b. $N\tilde{a}pe$ irik'enaer \tilde{e} puopket'e 'on. n $\tilde{a}pe$ irik'e-n \tilde{e} -am-ere puop-ket'e 'on that's.why work-VBZ_{n \tilde{e}}-NMZ_{ap}-OBL know-somewhat 1SG 'That's why I more or less know how to work [=cut rubber].'

- c. *Here, herop pora nã terapbi'ae òwet, tarupa'eat* here herop pore-a nã tet-a-**pbi'a** e o-op-et, tarupa-'eat so rubber cut-TH FOCUS go.SG-TH-**DUR** 3 1SG-father-NUC non.indigene-MANY *aropnã,* aropnã for 'So my father would go off to tap rubber for the white people,'
 d. *here ồpuopma'ambi'ae,*
- here o-õpuopma'ẽ-a-**mbi'a** e so 1SG-teach-TH-**DUR** 3 'and he would teach me.'
- e. *here õpot* 'on opuop'ora nã otet'e, herop poraere. here **õpot** 'on o-puop'ot-a nã o-tet'e herop pore-ap-ere so **DISTANT.PAST** 1SG 1SG-learn-TH ? 1SG-AUX_{go}.SG rubber cut-NMZ_{ap}-OBL 'so I learned how to tap rubber.' text: Pedro Kup'eoyt Tupari, narrator

The second line has no overt tense marking since it contains a non-verbalized nominal predicate, *puopket'e* 'sort of know'. The placement of the weak nominative enclitic 'on '1SG' in this line obeys the generalizations about nominal predicates given in §5.5.2, above. Note also the change from durative *-pbi'a* to distant past *õpot* in the final line, probably due to the fact that the telicity of the verb *puop'ot* 'learn' is incompatible with the habitual aspect of *-pbi'a*. This change in tense marking shows the mutual incompatibility of *õpot* and *-pbi'a*: no clause can contain both.

(338) provides a textual example of *ko/ke* 'POLITE FUTURE' occurring in back-to-back clauses. In (a) the CIC is the VP ' \dot{u} tokoa 'chew genipapo'; in (b) it is the adverbial ' $\dot{u}t$ tokoppe 'after chewing the genipapo'.

- (338) Textual example of *ko/ke* 'POLITE FUTURE'
 - a. 'Ù tokoa ke 'en.
 ù tokop-a ke 'en genipapo chew-TH POLITE.FUT 2SG
 'You should chew genipapo.'
 - b. 'Ùt tokoppe ke 'en eosire yõrõkap.
 'ù-t tokop-pe ke 'en e-osire y-õrõk-ap genipapo-NUC chew-after POLITE.FUT 2SG 2SG-beneath 3-place.flat-ADV.FOC 'After you have chewed the genipapo, you should place it underneath yourself.' text: Marilza Kabatoá Tupari, narrator

Chapter 6

Evidentiality, clause typing, and physical position

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 highly developed 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. Elaborate evidentiality 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). Yet just as scholarly knowledge of South American languages is geographically and genealogically uneven (Crevels 2007, 2012), our understanding of the continent's evidentiality systems suffers from several large gaps. Evidentiality in many Tupían languages remains little described, even though this is one of South America's largest families both in terms of geographic dispersion and sheer number of languages (Rodrigues and Cabral 2012; Eriksen and Galucio 2014).

Those Tupían languages described as possessing grammaticalized evidentiality typically mark source of knowledge via freestanding particles rather than bound morphemes. Seki (2000b:\$2.7) provides detailed information on the Kamaiurá witnessed/non-witnessed contrast, which is realized by particles located in 2P: *rak*~*ak* 'witnessed' versus *je* 'reported'. Gabas Jr. (1999:chapter 7) describes eleven particles that Karo (Arara of Rondônia) uses to indicate source of evidence and reliability of a proposition; perhaps six or seven of these would qualify as evidentials on the restrictive definitions discussed in \$6.1. The most detailed study of evidentiality in a Tupían language that I know of is Chaves Alexandre (2017), an MA thesis on Karitiana which builds on the descriptive foundation of Storto (1999, 2001).

The goal of this chapter is to contribute to our understanding of evidentiality in the Tupían family by examining, in detail, how Tuparí marks source of evidence. Evidentiality in this language is marked via the bound verbal suffix *-pnẽ/-psira*, which occupies a fixed position in the clausal spine 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 particles to mark evidentiality. I make the following claims about Tuparí evidentiality in this chapter.

- The evidential suffix -pnē/-psira sits at the right edge of the predicate complex: the lexical verb plus any and all auxiliaries. Translating into the phrase structure, the syntactic projection headed by -pnē/-psira the Evidential Phrase occupies a position immediately above the positional and aspectual auxiliaries and immediately below the Tense Phrase.
- 2. The distinction between witnessed and non-witnessed utterances in Tuparí is restricted to past tense contexts only; that is, evidentiality is in a sense parasitic on tense. Yet evidential morphology and tense morphology are largely separable from one another. Aside from the durative tense suffix *-pbi'a* and the same-day past construction built with the auxiliaries 'e and a, there are no other portmanteaux that fuse tense/aspect with evidentiality.
- 3. The witnessed/non-witnessed distinction must be made in all past tense declarative contexts. In non-declarative contexts, the ability to use *-pnẽ/-psira* depends on the kind of 2P clause-typing particle that is present: one cannot make the witnessed/non-witnessed distinction in utterances that contain clause typers expressing doubt, uncertainty, or surprise. The incompatibility between the evidential distinction and this specific subset of clause typers arises because *-pnẽ/-psira* can be used only when the speaker's commitment to p is presupposed.
- 4. That -pnē/-psira requires a presupposition of commitment to p helps to explain three further facts: the lack of -pnē/-psira in quotative contexts; the availability of evidential marking in embedded existentials; and the incompatibility of evidential marking with the counterfactual conditional suffix -kot'oy.
- 5. Evidential *-pnẽ/-psira* is homophonous with two of the three allomorphs of the resultative suffix *-psẽ/-pnẽ/-psira*, but multiple diagnostics show that these two suffixes are distinct from one another synchronically. The resultative is a non-obligatory morpheme which shows sensitivity to lexical aspect, encodes a positional contrast with singular subjects, and occupies a

low syntactic position. It likely served as the historical source for *-pnẽ/-psira*, which resides in the inflectional layer of the clause.

This chapter is organized as follows. §6.1 provides background on the study of evidentiality, and §6.2 discusses what has been said about evidentiality in previous descriptive work on Tuparí. §6.3 then lays out the basic morphophonological properties of *-pnẽ/-psira*, with §6.4 addressing the position of this suffix within the language's clause structure. §6.5 turns to the question of the semantic contribution of *-pnẽ/-psira*, examining how it is used in contexts with first person subjects. §6.6 then analyzes the interaction between *-pnẽ/-psira* and the various 2P clause-typing particles. §6.7 describes the behavior of the witnessed/non-witnessed distinction in finite embedded clauses and argues that *-pnẽ/-psira* is licit only in contexts where the speaker's commitment to *p* is presupposed. The historical origins of Tuparí evidentiality are addressed in §6.8, which argues that *-pnẽ/-psira* developed out of the resultative suffix *-psẽ/-pnẽ/-psira*. §6.9 concludes. The appendix address the behavior and meaning of the adverbial prefix *tom'en-*, which indicates ignorance on the part of a contextually-determined discourse participant.

6.1 Background on evidentiality

This chapter follows much typological and formal work (Jakobson 1957/1971; Chafe and Nichols 1986; Aikhenvald 2004, 2018; Brugman and Macaulay 2015; Murray 2017, among others) by defining evidentiality as the GRAMMATICALIZED MARKING OF THE SOURCE OF INFORMATION that the speaker has for making a statement. 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 information source or evidence source. 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 morphemes that *at least* or *primarily* indicate source of evidence can be considered evidentials. Second, evidentiality proper is taken to be functional rather than lexical; that is, it is canonically expressed via some kind of grammatical morphology rather than through a freestanding adverbial. As argued by Aikhenvald

(2004), this kind of criterion is a must if we are to successfully separate bound morphemes that express source of evidence from optional adverbials ('allegedly', 'reportedly') that make comparable semantic contributions but do not belong to the grammatical system *sensu stricto*.¹

This chapter shows that the Tuparí suffix *-pnē/-psira* meets the core criteria expected of evidentials on the approaches of Aikhenvald (2018) or Brugman and Macaulay (2015). This suffix is a bound morph whose position 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, *-pnē/-psira* possesses several characteristics which intuitively correspond to the functional rather than lexical end of the grammar-vocabulary spectrum. It is obligatory on a clausal level: if a narrative about the origin of the sun and the moon – which no one living today could have personally witnessed – contains fifty declarative finite clauses, then *-pnē/-psira* will appear fifty times. Furthermore, this suffix never manipulates grammatical relations, valency, or *aktionsart* but does partake in interesting relationships with tense and mood/clause type. On an understanding of the organization of clauses into distinct domains or layers (McCloskey 1997; Carnie 2010; Wiltschko 2014, among others), *-pnē/-psira* occupies a position within the inflectional layer of the spine.

A major descriptive and analytic challenge is to disentangle epistemic modals and evidentials from one another (see Matthewson 2012 and references therein). In Tuparí such disentangling is not difficult to accomplish. This is because 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 2P clause-typing particles. These particles, which are morphologically and syntactically separate from *-pnẽ/-psira*, separate certain speech acts from one another (polar

¹There are certain generativist approaches where this distinction may become harder to judge. In particular, the theory of Cinque (1999) takes adverbs to be generated in the specifier positions of dedicated functional heads, which are themselves arranged in a universally available hierarchy. On such an approach it becomes harder to express the intuitive contrast between a bound morphological evidential and a freestanding adverb with evidential or evidential-like semantics, since both are interpreted as instantiating specific functional projections.

Tuparí has at least one evidential-like adverbial, *tom'en*-, used when some contextually-determined party is oblivious to an action. But as the discussion in §6.A explains, this morpheme's behavior is very much unlike that of the evidential suffix *-pnẽ/-psira*: it is not obligatory, is not restricted by tense or by clause type, and so on. So in this language the distinction between obligatory, bound evidential marking and optional adverbial elements is clear.

interrogatives are marked by the clause typer $n\tilde{e}$ 'YES/NO', tag questions with $m\tilde{a}k\tilde{e}r\tilde{o}$ 'RIGHT?') and can also indicate the degree of commitment that the speaker has to p ($n\tilde{a}kop$ 'MAYBE' reduces commitment to p, 'aet 'NEGATIVE LAMENT' expresses a speaker's disappointment that phas failed to take place, pa'a/ta'a 'ASSERTIVE' highlights the speaker's confidence in p, and so on). These particles form a single closed class and are located in a high syntactic position – a position much higher than the one occupied by - $pn\tilde{e}/-psira$. In short, the clausal organization of Tuparí cleanly separates epistemic and evidential markers from one another; - $pn\tilde{e}/-psira$ is the only grammaticalized morpheme in the language whose function is to mark source of evidence.

6.2 **Prior descriptions of evidentiality in Tuparí**

This section summarizes what earlier descriptions of Tuparí have said about *-pnẽ/-psira*, including its phonological form and semantic contribution.

Caspar and Rodrigues (1957) 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, whose more exact meaning is perhaps rather *permansiv*, that is, it means that the subject or object still always finds itself in a completed state... [Mit dem Suffix =na bildet das Null-Thema eine Form, die im allgemeinen die Vergangenheit ausdrückt, deren genauere Bedeutung aber vielleicht permansiv ist, d.h. sie bedeutet, dass das Subject bzw. Objekt sich immer noch in einem erreichten Zustand befindet...]

(Caspar and Rodrigues 1957:§3.3.4.3.4)

Caspar and Rodrigues offer several examples of this suffix, including *Wari=at okop=na* 'die Fledermaus hat mich (jetzt) gebissen' ('the bat bit me'). The full meaning of this utterance would necessarily include a non-witnessed semantic component: 'The bat bit me *though I did not witness this act of biting take place.*' As §6.3 will show, the underlying shape of the morpheme in question

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.

is not /nã/ but rather /p.nẽ/. The initial labial stop is subject to regular processes of nasalization and post-consonant deletion, and the final /ẽ/ is automatically deleted prior to the theme vowel -a.

Alves (2004:§4.3.2.2) correctly identifies the basic meaning of the evidential morpheme: 'O sufixo evidencial é empregado nas situações em que o falante não testemunhou o fato' ('The evidential suffix is used in those situations where the speaker did not witness the fact/event'). She also recognizes that the evidential morpheme contains an initial labial, contrasting *Paroro-t te-watna* 'The armadillo fled', *Syrysyry-t kop?i-t ko-pna* 'The anteater ate the termite' and *Aramirã-n* tfa?y-t *ne-mna* 'The woman made the manioc flour'. However, her analysis does not disentangle the evidential suffix from the theme vowel -*a*, and it omits the plural allomorph.

Seki (2001) includes several examples where the singular evidential suffix is present: *Kur*et aramirã-n top **nãã** 'The child saw the woman', *Aramirã-n kur-et top nãã* 'The woman saw the child'. In these examples the evidential is glossed as AUX and is written as a separate word; furthermore, the translations do not include the obligatory non-witnessed interpretation. There is also at least one example where the evidential is treated as part of the verbal root itself: *Amẽkot kur-et õpopna* 'The jaguar killed the boy'. Complete segmentation of the verbal word in this example would involve three distinct morphemes: the transitive root $\tilde{o}po$ 'hit, strike, kill', the singular evidential -*pnẽ*, and the theme vowel -*a*.

This concludes the presentation of data on the evidential given in previous descriptions of Tuparí. To my knowledge, the authors of those descriptions did not base their analyses of the evidential on its distribution in spontaneous discourse and texts. This may explain why certain fundamental characteristics of *-pnẽ/-psira* (it agrees with the subject in number) and of the witnessed/nonwitnessed distinction more broadly (it is operative only in a subset of clause types and only in past tense contexts) have not been described before.

6.3 Morphophonological properties of evidential -pnē/-psira

The evidential suffix in Tuparí has six allomorphs and agrees in number with the subject. The allomorphy shown in this table follows straightforwardly from two general processes at work in

Table 6.1: Allomorphy of the evidential

	After oral vowel	After nasal vowel	After consonant
SINGULAR	-pnẽ	-mnẽ	-nẽ
PLURAL	-psira	-msira	-sira

Tuparí phonology. First, oral consonants nasalize in coda position following nasal vowels (see Singerman 2016). Second, $C_1C_2C_3$ sequences are simplified to C_1C_3 , with the two surviving consonants syllabified into different syllables (§A.3.2).

- (339) Two phonological processes affecting the realization of the evidential
 - a. Nasalization of oral coda consonants: $C_{[-nasal]} \rightarrow C_{[+nasal]} / V_{[+nasal]} ----$
 - b. Consonant cluster simplification: $C_1C_2C_3 \rightarrow C_1C_3$

Applied together, these two processes correctly predict that the singular evidential will be realized as *-pnẽ* after oral vowels, as *-mnẽ* after nasal vowels, and as *-nẽ* after consonants. Various other suffixes follow the exact same pattern, including possessive *-psiro/-msiro/-siro* (§A.6.3). In §6.8 we will see that the allomorphy of the resultative morpheme *-psẽ/-pnẽ/-psira*, the likely ancestor of evidential *-pnẽ/-psira*, is also determined by the two processes in (339).

Previous researchers (who found only the singular allomorph of the evidential) did not recognize that the final / \tilde{a} / in their examples is in fact a separate morpheme, the theme vowel -*a*. As discussed in §A.4, the theme vowel can wreak havoc on preceding segments. It triggers the deletion of an immediately prior /e/ without exception: *apsi'e* 'hear' + -*a* 'TH' \rightarrow *apsi'a*; *morẽ* 'throw, chug, play' + -*a* 'TH' \rightarrow *morã*; *oro'e* 'AUXgo.PAUC' + -*a* 'TH' \rightarrow *oro'a*; *yẽ* 'AUX_{hzntl}' + -*a* 'TH' \rightarrow *yã*. The theme vowel also frequently causes /o/ and /i/ to delete, though there is lexeme-by-lexeme idiosyncrasy: *si* 'spear, kill, sting' + -*a* 'TH' \rightarrow *sa*; *n*ĩ 'feel embarrassment' + -*a* 'TH' \rightarrow *niã*; *ko* 'eat, drink' + -*a* 'TH' \rightarrow *kà*; *ato* 'bathe' + -*a* 'TH' \rightarrow *atoa*. If the base to which the theme vowel attaches already ends in /a/ or /ã/, then no audible change takes place: *tetka* 'do quickly' + -*a* 'TH' \rightarrow *tetka*; *mã* 'place within/inside of something' + -*a* 'TH' \rightarrow *mã*. The morphosyntactic factors that determine the distribution of the theme vowel are too intricate to detail here; see Singerman (In preparation b). Simplifying for present purposes, when there is a clause-initial NP subject, then the theme vowel must be present on the highest verb/auxiliary. When an NP subject occurs in some other position (or is absent), the highest verb/auxiliary will lack the theme vowel.

(340) Presence of the theme vowel is conditioned by position of the NP subject

- a. Paulinan nãkop kurem teaorosap'a te'a.
 Paulina-n nãkop kurem te-aoros-a-p'a te-'e-a
 Paulina-NUC MAYBE today 3C-arrive.SG-TH-NEAR.FUT 3C-AUX.SG-TH
 'Maybe Paulina will arrive today.'
 casual discourse: 2016-02-10
- b. Kurem nãkop Elizabetxit tèsap'a y'e. kurem nãkop Elizabetxi-t te-s-a-p'a y-'e today MAYBE Elizabete-NUC 3C-come.SG-TH-NEAR.FUT 3-AUX.SG 'Maybe Elizabete will come here today.'
 casual discourse: 2016-01-13

In (a), the NP subject *Paulinan* 'Paulina' occurs clause-initially, immediately before the 2P clause typer $n\tilde{a}kop$ 'MAYBE'; this causes the theme vowel to appear on the auxiliary root 'e. In (b), the NP subject *Elizabetxit* 'Elizabete' occurs non-initially, to the right of $n\tilde{a}kop$. As a result, the theme vowel does not appear on 'e 'AUX.SG' and the underlying /e/ of the auxiliary escapes deletion.³

When the singular evidential suffix is present, we see the exact same alternation: the theme vowel appears on top of the evidential when the NP subject is clause-initial, but not otherwise. Compare *te'ekapnã* (with final $|\tilde{a}|$) against *i'ekapnẽ* (with final $|\tilde{e}|$):

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

malokare a. *Pamẽkgen* õpot mõket ototonã Pamek-en mõket maloka-re õpot o-toto-nẽ-a Pamek-NUC DISTANT.PAST long.ago maloca-OBL 1SG-grandfather-VBZne-TH tero'a te'ekapnã. tero'e-a te-'eka-pnẽ-a AUXgo.SG-TH 3C-AUX.SGhabit-EV.SG-TH 'Pamek was my grandfather in the maloca [communal long house] (NON-WITNESSED).' casual discourse: 2017-08-04

³The change in person marking on the auxiliary – from locally bound *te*- in (340a) to locally free *y*- in (340b) – is also connected to the position of the NP subject. See §4.1 for a description, and Singerman (In preparation b) for analysis.

b. $Tan'omn\tilde{a}$ kut osit tero'a tàn-'om-nẽ-a kut o-si-t tero'e-a tall-NEG-VBZ_{nẽ}-TH ANCIENT.PAST **1SG-mother-NUC** AUX_{go}.SG-TH *i'ekapnẽ*. **i-'eka-pnẽ 3-AUX.SG**habit-EV.SG 'She wasn't tall, my mother (NON-WITNESSED).' elicitation: 2014-07-19 (based on casual discourse: 2014-07-10)

In (a) the NP subject *Pamẽkgen* is clause-initial; it immediately precedes the 2P tense particle $\tilde{o}pot$ 'DISTANT PAST'. 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*'*ekapnã*, with final /ã/. In (b), however, the NP subject *osìt* 'my mother' occurs to the right of the 2P tense particle *kut* 'ANCIENT PAST', and the final auxiliary is *i'ekapnẽ* – with the underlying /ẽ/ of the evidential spared from deletion. Comparing (340) against (341) provides clear evidence that the singular evidential ends in /ẽ/, not /ã/.

We saw above that the theme vowel has no audible effect when added to a verbal base that already ends in /a/ or $/\tilde{a}$ /. Because the plural allomorph of the evidential suffix also ends in /a/, the position of a plural NP subject is irrelevant for the pronunciation of this morpheme:

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

a.	Mãkorapi'eare	et õp	pot	yõpuopma'ã	teakapsira.
	Mãkorapi-'ea	t-et õp	oot	y-õpuopma'ẽ-	-a te-aka-psira-a
	Makurap-MA	NY-NUC DI	STANT.PAST	3-teach-тн	3C-AUX.PL _{habit} -EV.PL-TH
	'The Makurapa	s used to tea	ach her (NON	-WITNESSED)	,
	elicitation: 2018-	04-08			
	(based on casual of	discourse: 201	16-02-04)		
b.	Wappe	kut	Tupari	'earet 1	te'era
	wap-pe	kut	Tupar	i-'eat-et t	e-'et-a
	hammock-LOC	ANCIENT.	PAST Tupar i	í-MANY-NUC	3C-sleep-тн
	sakapsira.				
	s-aka-psira				
	3-AUX.PL _{habit}	-EV.PL			
	'The Tuparí us	ed to sleep	in hammock	s (NON-WITNE	ESSED).'
	casual discourse:	2017-08-03			

This pair shows the exact same contrast illustrated above in (341): the position of the NP subject determines the presence of the theme vowel on top of the highest auxiliary. But because the theme vowel has no audible effect on preceding /a/, the final vowel of the evidential suffix's plural allomorph is pronounced as [a] in both of these examples.

6.4 Morphosyntactic properties of *-pnẽ/-psira*

Evidential *-pnẽ/-psira* occupies a fixed position in the Tuparí clause: it attaches to the highest verbal head. Per the syntactic generalizations explored in Chapter 5, this verbal head may be the lexical verb itself (when there is no auxiliary present) or an auxiliary.

- (343) Evidential *-pnẽ/-psira* attaches to the highest verbal head
 - a. *Teaoroynaẽ*.
 te-aoros-**nẽ**-a e
 3C-arrive.SG-EV.SG-TH 3
 'He/she arrived (NON-WITNESSED).'
 common in everyday speech
 - b. Teremoem nã tewara teoro'epsirare.
 teremoem nã te-wat-a te-oro'e-psira-a-t e
 by.themselves FOCUS 3C-go.away-TH 3C-AUXgo.PAUC-EV.PL-TH-NEAR.PAST 3
 'They went away (NON-WITNESSED) of their own accord.'
 casual discourse: 2017-08-17
 - mõket malokare c. Pamẽkgen õpot ototonã Pamẽk-en mõket maloka-re o-toto-nẽ-a õpot **Pamek-NUC** DISTANT.PAST long.ago maloca-OBL 1SG-grandfather-VBZ_{ne}-TH tero'a te'ekapnã. tero'e-a te-'eka-pne-a AUXgo.SG-TH 3C-AUX.SGhabit-EV.SG-TH 'Pameek was my grandfather in the maloca [communal long house] (NON-WITNESSED).' casual discourse: 2017-08-04

In (343a) there is no auxiliary present, so singular *-pne* attaches directly to the lexical verb *aoros* 'arrive.SG'. In (343b) the lexical verb *wat* 'go away, leave, flee' is followed by the paucal auxiliary *oro'e*, which bears plural evidential *-psira*. And in (343c) there are two auxiliary roots present: *tero'e* 'AUX_{go}.SG' and '*eka* 'AUX.SG_{habit}'. The evidential suffix necessarily attaches to the rightmost – which is to say, the structurally highest – of the two. This generalization is the motivation

for my proposal that evidential *-pnẽ/-psira* heads a head-final projection located immediately beneath the Tense Phrase (see Figure 5.13, which illustrates 343c in more detail).

Tense morphology in Tuparí is a heterogenous category; it includes 2P particles and predicatefinal suffixes. Evidential *-pnẽ/-psira* combines without issue with past tense marking regardless of where this marking sits in the clause. The examples in (344) show *-pnẽ/-psira* combining with *-t* 'NEAR PAST' (a predicate-final suffix) and with *õpot* 'DISTANT PAST' and *kut* 'ANCIENT PAST' (2P particles).

(344) Evidential -pnē/-psira combines with predicate-final tense suffixes and 2P tense particles

- a. *Pot'at tearopkà teakapsirat*. pot'a-t te-arop-ko-a te-aka-**psira**-a-**t** peccary-NUC 3C-food-eat-TH 3C-AUX.PL_{habit}-EV.PL-TH-NEAR.PAST 'The peccaries were eating their food (NON-WITNESSED).' text: Nilson Tupari, narrator
- b. *Here õpore* tepoaroapnam, kup aek'asim. here **õpot** e te-poaroa-**pnẽ**-am kup aek'a-sim but **DISTANT.PAST** 3 3C-hide-EV.SG-ADV.FOC tree branch-in
 'But it [the violent monkey] had hidden itself in the tree's branches (NON-WITNESSED).' text: Iracema Taydyup Tupari, narrator

c. Aramirã'earet kut takarat meop aramirã-'eat-et kut takara-t meop woman-MANY-NUC ANCIENT.PAST tapir-NUC fool.around.with 'eanemsira. 'eanẽ-msira-a $AUX_{go}.PL-EV.PL-TH$ 'The women were fooling around with the tapir (NON-WITNESSED).' text: Rita Sisi Tupari, narrator

A crucial property of the Tuparí evidential suffix is its agreement in number with the sentential subject: *-pnẽ* only ever combines with singular subjects and *-psira*, with plural ones. The absolute systematicity of this agreement pattern becomes clear when we look at verbal roots which show sensitivity to the number of the subject. As discussed in Chapter 3 and Chapter 4, a handful of intransitive verbal roots (all indicating motion) and all auxiliary roots have different singular and non-singular forms. A subset of these roots further divide the non-singular domain into paucals –

small groups with no more than five or six individuals – and larger plurals (see §4.2). (345) and (346) illustrate for the lexical verb 'come' and for the habitual auxiliary series, respectively.

- (345) Evidential marking on the lexical verb 'come'
 a. te- '3C' + s 'come.SG' + EV → tèynẽ
 b. te- '3C' + ã'ẽ 'come.PAUC' + EV → teã'emsira
 c. te- '3C' + ip'anẽ 'come.PL' + EV → teip'anemsira
- (346) Evidential marking on the habitual auxiliary
 a. *i* '3' + 'eka 'AUX.SG_{habit}' + EV → *i*'ekapnẽ
 b. s- '3' + aka 'AUX.PL_{habit}' + EV → sakapsira

The lexical verb 'come' distinguishes between singulars, paucals, and plurals whereas the habitual auxiliaries '*eka* and *aka* make only a singular versus plural contrast. Since evidential *-pnẽ/-psira* also makes a two-way number distinction, on 'come' and other movement verbs the paucal and plural forms both take *-psira* (examples 345b and 345c).

The contrast between witnessed and non-witnessed past tense occurrences or actions is a CLAUSAL-LEVEL category. It is not sufficient to signal the contrast once, at the beginning of a discourse; rather the distinction between witnessed (formally unmarked) and non-witnessed (with *-pnẽ/-psira*) must be stated in every clause. The following textual excerpt illustrates:

(347) Evidential *-pnẽ/-psira* repeated within each finite clause in a text (repeated from §5.B)

a.	Mõket	kut	kire	'õerẽ,	kiakoet	koepa eanã
	mõket	kut	kire	e-'om-ere	kiakop-et	koepa eanã
	long.ago	ANCIEN	T.PAST pers	son-NEG-OBL	sun-NUC	moon together.with
	kirenã		soro'epsira			
	kire-nẽ-a	l	s-oro'e-psi	ra		
	person-V	BZ _{nẽ} -TH	3-AUXgo.PA	AUC-EV.PL		
	'Long ag	go, when	there were n	o other people	e, the sun a	and the moon were people (NON-
	WITNESS	sed).'				

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-pnẽ-am AUXgo.SG-EV.SG-ADV.FOC 'And the moon started to fool around with his own sister (NON-WITNESSED).'

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 tewãrã i'ekapnẽ. i-'eka-pnẽ te-mã-a te-wan-a 3C-lay-TH 3C-go.nearby-TH 3-AUX.SG-EV.SG

'And the moon, at night, would go a short distance and lay down in his own sister's hammock (NON-WITNESSED).'

'Nã d. ko 'on!' ke te'a kut tewapsim 'on] ke te-'a [nẽ-a ko kut te-wap-sim [do-TH POLITE.FUT 1SG] say 3C-when.SG ANCIENT.PAST 3C-hammock-inside sukan тã *i'ekapnẽ* te'aepatnã. sukã-n i-'eka-**pn**ẽ te-'aepatnã mã-a pestle-NUC place-TH 3-AUX.SG-EV.SG 3C-place/role 'While saying 'I want to do it [=have intercourse]', he would put a pestle in his place in his hammock (NON-WITNESSED).' text: Isaias Tarimã Tupari, author

Every finite clause in this text contains both a tense morpheme – the 2P particle *kut* 'ANCIENT PAST' – and the evidential suffix *-pnẽ/-psira*. This pattern is consistent across texts and in everyday conversation: tense and evidentiality must both be marked in past declarative contexts.

The above excerpt comes from a myth that is said to have taken place long before the narrator (or any other living person) was born – hence the obligatory use of ancient past *kut* in each clause. But *-pnẽ/-psira* is not restricted to such temporally distant contexts. Except for the durative and same-day past (discussed at greater length in §6.9), *-pnẽ/-psira* can be used with any utterance whose reference time is prior to the moment of speaking. (348) illustrates with examples drawn from everyday conversation.

- (348) Evidential *-pnē/-psira* used in a variety of past tense contexts
 - a. *Omemsiret* etèynã. epiet o-memsit-et epip-et ete-s-ne-a 1SG-child.of.woman-NUC banana-NUC COM-come.SG-EV.SG-TH 'My child has brought the bananas (NON-WITNESSED) [same day as UT].' casual discourse: 2015-12-26 (see also elicitation on 2016-01-12) b. *Herõwap tesitot* mimnẽ. herõwap te-sito-t mĩ-mnẽ yesterday 3C-foot-NUC puncture-EV.SG 'She punctured her foot yesterday [one day before UT].' casual discourse: 2016-12-15 c. Teremoem nã teoro'epsirare. tewara teremoem nã te-wat-a te-oro'e-psira-a-t e by.themselves FOCUS 3C-go.away-TH 3C-AUXgo.PAUC-EV.PL-TH-NEAR.PAST 3 'They went away (NON-WITNESSED) of their own accord [months before UT].' casual discourse: 2017-08-17
 - d. *Kemsok'anã õpore i'ekapnẽ tekemsok'are.* kemsok'a-nẽ-a õpot e i-'eka-**pnẽ** te-kemsok'a-re beautiful-VBZ_{nẽ}-TH DISTANT.PAST 3 3-AUX.SG_{habit}-EV.SG 3C-youth-OBL
 'She was beautiful in her youth (NON-WITNESSED) [decades before UT].' elicitation: 2017-08-06 (based on casual discourse: 2016-12-12)

6.5 The meaning of *-pnẽ/-psira* with first person subjects

The core meaning contributed by $-pn\tilde{e}/-psira$ in past tense declaratives is that the speaker did not personally witness the event that they are relating. If $-pn\tilde{e}/-psira$ is absent in a past tense declarative, this can only mean that the speaker did witness what is being related. (How evidentiality behaves in non-declarative contexts is addressed in §6.6.) This section discusses the semantic contribution made by $-pn\tilde{e}/-psira$ in contexts where the subject is first person.

Crosslinguistically, the combination of evidential morphology with first person subjects is often used to mark accidental or non-volitional behavior (see Curnow 2002, 2003). Such interpretations are common in Tuparí as well, though they are highly dependent on context. In (349) a speaker laments having put too much sugar into the coffee. The verb here is $n\tilde{e}$ 'do, make'; the null direct object here refers to the pot of coffee that the speaker had just brewed.

(349) CONTEXT: A woman brews a pot of coffee for a group of friends and family to enjoy. After serving the coffee, she tastes it and discovers that it has come out too sweet.

Hoy'ãēnã 'on nemnẽ. hoy'ãẽnã 'on Ø-nẽ-mnẽ too.sweet 1SG 3-make-EV.SG

'I made it [=the coffee] too sweet (NON-WITNESSED).' casual discourse: 2017-08-?05

Though my friend intentionally brewed the coffee, making the coffee excessively sweet was accidental; this is why *-pne* must appear here. A more extensive example of accidental or non-volitional behavior comes from (350), in which a mother explains why her son did not go to school that morning. The evidential suffix appears in each of these finite clauses, since the speaker did not witness any of the three events being related: her son's failure to go to school; her own oversleeping; her failure to wake up her son.

(350) Non-elicited three-clause utterance marked with -pnē/-psira

- a. Omemsiret tero'omkapnã.
 o-memsit-et tet-ro-'om-ka-pnẽ-a
 1SG-child.of.woman-NUC go.SG-NMZ_{ro}-NEG-VBZ_{ka}-EV.SG-TH
 'My child didn't go [to school] (NON-WITNESSED).'
- b. O'etnã 'on, o-'et-nẽ-a 'on 1SG-sleep-EV.SG-TH 1SG
 'I overslept/slept in (NON-WITNESSED),'
- c. *here* 'on imēpakto'omkapnam. here 'on i-m-epak-to-'om-ka-pnē-am and/then 1SG 3-CAUS-awake-NMZ_{ro}-NEG-VBZ_{ka}-EV.SG-ADV.FOC 'so I didn't wake him up (NON-WITNESSED).' casual discourse: 2017-08-17 (see also elicitation on 2017-08-19)

In lines (b) and (c) – where the subject is first person singular 'on – the interpretation is one of unintentional behavior: 'I overslept (BY ACCIDENT)', 'I didn't wake him up (BY ACCIDENT)'.

Note also that the evidential morpheme scopes over negative -'*om* in (a) and (c), in keeping with the very low position of negation in the Tuparí clause (Singerman 2018).

In other cases the combination of a first person subject with *-pnē/-psira* does not necessarily mean that the speaker's behavior was accidental. Consider (351), in which an elderly speaker explains how she was nursed by her grandmother, her mother having died when she was very young. This example requires *-pnē* because infants are simply too young to witness their own nursing take place. The meaning that *-pnē* contributes here is the same one that it contributes in clauses with second and third person subjects – namely, that the speaker did not witness what she is relating.

(351) Opapa kērē õpot 'on okemkà otet'epnē.
o-papa ke(m)-re õpot 'on o-kemko-a o-tet'e-pnē
1SG-grandmother breast-OBL DISTANT.PAST 1SG 1SG-nurse-TH 1SG-AUXgo.SG-EV.SG
'I nursed at my grandmother's breast (NON-WITNESSED).'
text: Marilza Kabatoá Tupari, narrator

(352) is comparable: in this example a middle-aged woman explains that she was born far downriver but moved upriver as a child. Since she does not remember that move, the evidential cooccurs with the first person singular '*on* in (b).

- (352) A speaker explains how she was born far downriver
 - a. Osit õpot Laranjoare osinemnã.
 o-si-t õpot Laranjao-re o-sinẽ-mnẽ-a
 1SG-mother-NUC DISTANT.PAST Laranjal-OBL 1SG-give.birth.to-EV.SG-TH
 'My mother gave birth to me, long ago, in Laranjal (NON-WITNESSED).'
 - b. *Here \tilde{o}pot 'on \hat{o}ynam kutnã.* here $\tilde{o}pot$ 'on o-s-nẽ-am kut-nẽ-a then DISTANT.PAST **1SG** 1SG-come.SG-EV.SG-ADV.FOC child-VBZ_{nẽ}-TH 'Then I came here, as a child (NON-WITNESSED).' casual discourse: 2016-02-05

Evidential *-pne* is present in (b) for the same reason that it is present in (a): the speaker did not volitionally witness moving upstream, just as she did not witness her own birth.

We see, then, that *-pnē/-psira* often encodes accidental or non-volitional behavior when used with first person subjects. But the reason why the speaker failed to witness an action or occurrence

that they were involved in is determined pragmatically. In (349), the speaker intentionally brewed coffee but was not aware that she was making it too sweet. In (350), the speaker erred by not waking up on time, and this is why she did not witness her son's failure to go to school. In (351) the evidential combines with 'on '1SG' simply because an infant cannot serve as a volitional witness to her own breastfeeding. In the same way, a young child may be too young to remember moving between villages (example 352). Overall, the principal semantic contribution of $-pn\tilde{e}/-psira$ – even when the subject is first person – is that of non-witnessed evidentiality. Although the combination of $-pn\tilde{e}/-psira$ with a first person subject can give rise to an interpretation of accidental behavior, that interpretation is best analyzed as a context-dependent pragmatic inference rather than as part of the evidential suffix's core meaning.

6.6 The relationship between *-pnẽ/-psira* and clause typing

The examples examined so far have shown *-pnē/-psira* at work in declarative contexts. But Tuparí – like all other languages – has the means to express a variety of different speech acts (Sadock and Zwicky 1985). This section examines the interaction between *-pnē/-psira* and the language's set of 2P clause-typing particles, which serve to distinguish various sorts of utterances from one another. The data examined here will demonstrate that the distinction between witnessed and non-witnessed evidentiality in Tuparí is restricted to a clear subset of clause types. In particular, the evidential contrast is neutralized in utterances that contain a 2P clause typer expressing any degree of doubt, surprise, or uncertainty on the part of the speaker. It is not possible to employ *-pnē/-psira* when one of these clause typers is present.

(353) repeats the list of overt clause typers from Chapter 5. These morphemes occupy the first slot in the 2P particle cluster; they head a head-initial projection located in the highest layer of the Tuparí clause.

- (353) List of overt 2P clause-typing particles
 - a. nẽ 'YES/NO'
 - b. nãkop 'MAYBE'
 - c. *pa'a/ta'a* 'ASSERTIVE'

- d. nãpe 'REALLY ?!'
- e. '*aet* 'NEGATIVE LAMENT' (i.e., 'it is a shame that $\neg p$ ')
- f. mãkẽrõ 'DUNNO'
- g. mãkērõ 'RIGHT?'

We must distinguish between two homophonous clause typers: the *mãkẽrõ* utilized in *wh*-questions and the tag-like *mãkẽrõ* utilized in biased polar questions. The two display very 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 biased questions marked with *mãkẽrõ* 'RIGHT?', but no such rise takes place with *mãkẽrõ* 'DUNNO'. There is never any ambiguity about which of the two forms of *mãkẽrõ* is present in a given utterance: biased polar questions may not contain a *wh*-word, whereas the 'DUNNO' use of *mãkẽrõ* must always follow a *wh*-word. The sensitivity of the various 2P clause typers to the presence or absence of a *wh*-word provides support for analyzing them as complementizers, as in Chapter 5.

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

Clauses that contain the assertive particles *pa'a* and *ta'a* behave like unmarked declaratives with respect to the witnessed/non-witnessed evidential contrast: that contrast is maintained in clauses marked with *pa'a/ta'a*, and the deictic origo of *-pnẽ/-psira* in such cases is still the speaker. The particles *pa'a* and *ta'a* are commonly 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. For these reasons another possible label for these morphemes would be VERUM FOCUS, following Höhle (1992), Lohnstein (2012, 2016), and Matthewson and Glougie (in press). I have chosen to use the label ASSERTIVE here in part because of the suggestive parallels between *pa'a/ta'a* and the Karitiana mood prefix *py-/pyr-/pyry*, which Storto (2001) and Ferreira (2017) label *assertativo*.

The following exchange between two women illustrates a typical usage of *pa'a/ta'a*. The yes/no clause typer in the question is replaced by the gender-indexing assertive marker in the

answer.4

(354) Typical exchange with *pa'a/ta'a* 'ASSERTIVE' utilized in response

a.	Èsa	nẽ	'en?	
	e-s-a	nẽ	'en	
	2sg-come.sg-th	Y/N	2sg	
	'Have you come?	,		
b.	Hề, òsa		ta'a	'on.
	hề, o-s-a		ta'a	'on
	yes 1SG-come.SG	6-TH	ASSERTIVE.Q	1SG
	'Yes, I have indee	ed co	me.'	
	casual discourse: 201	6-01	-22	

As the two examples in (355) show, pa'a/ta'a serves to emphasize the speaker's commitment to the accuracy or reliability of p.

(355) Examples of *pa'a/ta'a*

a. CONTEXT: I wish my friend a merry Christmas, which prompts his remark that today really is Christmas.

Kurem pa'aNãtaoe.kurem pa'aNãtaotodayASSERTIVE.< Christmas 3</td>

'Today really is Christmas.' / 'Today is Christmas, indeed.'

casual discourse: 2015-12-15

b. CONTEXT: I ask my adopted grandmother if it is true that she speaks Makurap. She confirms that she does.

Mãkorapi ema'erẽ	ta'a	puopket'e	'on.
Mãkorapi ema'ẽ-re	ta'a	puop-ket'e	'on
Makurap language-OBL	ASSERTIVE.Q	knowledgeable-somewha	t 1SG
'I am indeed somewhat l	knowledgeable	of the the Makurap langua	age.'
casual discourse: 2016-02-04			

⁴Storto (2001:155–156), following Landin (1984), states that the assertive prefix in Karitiana is obligatory in answers to yes/no questions. However, Storto informs me (p.c.) that this is no longer a categorical requirement; the language now permits answers to yes/no questions with the declarative prefix na(ka)-/ta(ka)-. The Tuparí clause-typing particles pa'a and ta'a are not obligatory when answering questions, either. Although the response in (354b) does contain ta'a, this is not a necessity for well-formedness; speakers commonly answer *Èsa nẽ 'en?'* 'Have you come?' and similar questions without using any overt clause typer.

Past tense clauses marked as assertive continue to draw a witnessed versus non-witnessed distinction, just as unmarked declaratives do. The discourse contexts in (356) highlight the kinds of situations in which speakers may wish or need to emphasize that a particular action, event, or occurrence took place even though they were not present to witness it.

(356) Examples of *pa'a/ta'a* cooccuring with evidential *-pnẽ/-psira*

a. CONTEXT: I have heard that my friend's father is in town for medical treatment. I ask my friend if this is true. Although she did not see her father arrive, she confirms that he did indeed arrive.

Herowap ta ipnẽ. herõwap ta'a ip-nẽ yesterday ASSERTIVE.Q come.SG-EV.SG 'He did indeed come here yesterday (NON-WITNESSED).' casual discourse: 2017-08-04

 b. CONTEXT: I see that there are many freshly-caught fish in my friend's home and remark that his sons, who'd gone out on the river earlier that day, must have done well. My friend confirms that they did.

Tãramkapsira pa'ae. Ø-tãramka-**psira**-a **pa'a** e 3-kill.PL-EV.PL-TH ASSERTIVE.♂ 3

'They did indeed kill a lot [of 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 isìt itopnam 'ero'are ta'a kut i-si-t i-top-**nẽ**-am meanwhile ASSERTIVE.Q ANCIENT.PAST 3-mother-NUC 3-see-EV.SG-ADV.FOC sepa 'ùtpe. 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

Whereas (a) and (b) are taken from conversations that I participated in, (c) comes from a traditional narrative. Note that *kut* 'ANCIENT PAST' is present in this last example. As will be discussed with regards to (365), below, *kut* always cooccurs with *-pnẽ/-psira* in declarative contexts; in certain

non-declarative contexts, however, *kut* can occur without *-pnẽ/-psira*. That *-pnẽ/-psira* is present with *kut* in (356c) shows that assertive-marked utterances are like unmarked declaratives in that they maintain the witnessed/non-witnessed evidential contrast.

In the next subsection we will see that this contrast is also maintained in biased polar questions marked with $m\tilde{a}k\tilde{e}r\tilde{o}$ 'RIGHT?' though it undergoes deictic inversion in non-biased polar questions marked with $n\tilde{e}$ 'YES/NO'.

6.6.2 Evidential contrast undergoes deictic inversion in non-biased interrogative contexts

In declarative contexts the deictic origo of evidential *-pnẽ/-psira* is the speaker. The speaker continues to function as the origo in in assertive contexts such as those discussed in §6.6.1. In polar questions with *nẽ* 'YES/NO', however, the origo of *-pnẽ/-psira* changes from speaker to addressee. In such questions *-pnẽ/-psira* is employed if the speaker anticipates that the addressee will have to employ an evidential in her response (see Murray 2017; San Roque et al. 2017; Bhadra 2018). (357) illustrates. Note the lack of *-pnẽ/-psira* in this example:

(357) CONTEXT: I ask my friend about his recent wedding, which I had not attended.

Porite hak	eanã	nẽ	wat'eueparat	wat?
Porite hak	eanã	nẽ	wat-eue-pat-a-t	wat
Porite daugh	ter together.	with Y/N	2PL-RCP-marry-TH-NE	AR.PAST 2PL
'Did you and	l Porite's da	ughter ge	t married to one another	:?'
elicitation: 201	7-08-02			
(based on casua	l discourse: 20	016-12-14))	

I was not present when my friend married Porite's daughter, so in a declarative context I would have to use the non-witnessed evidential when speaking about their wedding. But *-pnẽ/-psira* is absent in the polar question in (357). This is because I know that the addressee witnessed his own wedding and will therefore not need to use *-pnẽ/-psira* when responding to my question.

This kind of deictic inversion does not take place in biased questions marked with *mãkērõ* 'RIGHT?' rather than *nẽ* 'YES/NO'. Questions that bear *mãkērõ* 'RIGHT?' are biased: speakers use

this particle not when simply inquiring about the truth/falsehood of a proposition but rather when seeking confirmation of a fact they already suspect to be true. (358), which a middle-aged speaker asked me approximately one month after my brother got married, contains $m\tilde{a}k\tilde{e}r\tilde{o}$ 'RIGHT?' rather than $n\tilde{e}$ 'YES/NO'. This change from $n\tilde{e}$ to $m\tilde{a}k\tilde{e}r\tilde{o}$ was due to the fact that the speaker had already heard about my brother's wedding and was therefore relatively confident that it had taken place.

(358) CONTEXT: A speaker asks me about my brother's wedding, which she has heard about secondhand.

Easatmãkẽrõ tea'usi patnan?e-asa-tmãkẽrõ te-a'usi pat-nẽ-a-n2SG-older.brother-NUC RIGHT?3C-wife marry-EV.SG-TH-NEAR.PAST'Your older brother got married, right (NON-WITNESSED)?'casual discourse: 2017-08-04

Unlike what we saw with (357), above, here the speaker is still the origo of *-pnẽ/-psira*. This is why the question is explicitly marked as non-witnessed, even though I – the addressee – would not use *-pnẽ/-psira* to describe a wedding ceremony that I attended. If *mãkẽrõ* 'RIGHT?' in (358) were replaced with *nẽ* 'YES/NO', the singular evidential *-pnẽ* would disappear: *Easat nẽ tea'usi parat*? 'Did your older brother get married (WITNESSED)?'.

In *wh*-questions the deictic origo switches from speaker to addressee just like in polar questions marked by $n\tilde{e}$ 'YES/NO'. When a speaker asks someone where they were born, *-pn* \tilde{e} *is psira* is required; after all, no one can witness their own birth. Hence *-pn* \tilde{e} is obligatory in (359a). If, however, I ask my friend where her son was born, the evidential will be absent – since mothers do witness giving birth. This is why there is no *-pn* \tilde{e} in (359b).⁵

(359) Deictic inversion takes place in *wh*-questions

a.	Pare	õpot	esìt	esinã	tet'epnẽ?
	pare	õpot	e-si-t	e-sinẽ-a	tet'e- pnẽ
	where	DISTANT.PAST	2SG-mother-NUC	2SG-give.birth.to-TH	AUXgo.SG-EV.SG
	'Whe	re did your motl	ner give birth to yo	ou (NON-WITNESSEI) ?'

⁵I thank my friends Ivan Tupari and Valmira Tupari for discussing (359a) and (359b) with me over WhatsApp in April 2018. Note that these questions contain $\tilde{o}pot$ 'DISTANT PAST' rather than *kut* 'ANCIENT PAST' because *kut* is archaic in the speech of younger Tuparí. In §6.6.3, below, we will see an example where an elderly woman uses *kut* to discuss her birth.

b. Pare õpot 'en nã ememsiret sinã pare õpot 'en nã e-memsit-et sinẽ-a where DISTANT.PAST 2SG FOCUS 2SG-child.of.woman-NUC give.birth.to-TH etet'e?
e-tet'e 2SG-AUXgo.SG 'Where did you give birth to your child (WITNESSED)?'

This pair of utterances shows that in normal *wh*-questions the deictic origo of the witnessed/nonwitnessed contrast inverts from speaker to addressee. In this sense *wh*-questions behave identically to non-biased polar interrogatives.

6.6.3 Evidential contrast is neutralized with clause typers that express un-

certainty, doubt, or surprise

We have now seen that $n\tilde{e}$ 'YES/NO' inverts the deictic orientation of $-pn\tilde{e}/-psira$; this inversion also occurs in normal *wh*-questions. Biased questions marked with *mãkērõ* 'RIGHT?', however, do not exhibit any deictic inversion. In this respect questions that bear *mãkērõ* 'RIGHT?' behave just like utterances that contain assertive *pa'a/ta'a*. In this subsection we will examine the interaction between $-pn\tilde{e}/-psira$ and three other clause typers: *nãkop* 'MAYBE', *mãkērõ* 'DUNNO', *nãpe* 'REALLY?!'. These three morphemes form a natural class in that they all lessen the commitment of the speaker to the proposition *p*. Importantly, they all neutralize the witnessed/non-witnessed distinction.

The dubitative particle $n\tilde{a}kop$ does the opposite work of assertive pa'a/ta'a. Whereas pa'a/ta'a serve to emphasize the speaker's commitment to a given proposition, $n\tilde{a}kop$ is how speakers minimize their commitment to or confidence in the reliability of p. That $n\tilde{a}kop$ lessens the speaker's commitment to p is clear from disjunctions built with $pare \sim nam \ pare$. Such disjunctions bring together whole independent utterances, each containing a 2P clause typer.

- (360) Dubitative *nãkop* in disjunctions
 - a. CONTEXT: A speaker says that he does not know the sex of his family's pet parrot.

Okio nãkopparearamirã nãkop.okio nãkopØparearamirã nãkop[male MAYBE 3]DISJUNCTION [femaleMAYBE 3]'It might be a male or it might be a female.'casual discourse:2016-01-10

b. CONTEXT: A speaker speculates about when he and his family will return to their village from the town of Alta Floresta D'Oeste.

Pu'um nãkop ko 'ote nã nãkop ko pu'u-m 'ote nã [afternoon-INS MAYBE POLITE.FUT 1PL.EXCL FOCUS oteorap nam pare erero nãkop ko erero nãkop ko ote-ot-ap nam pare 1PL.EXCL-go.PAUC-ADV.FOC] DISJUNCTION [early MAYBE POLITE.FUT 'ote пã oteorap. 'ote nã ote-ot-ap 1PL.EXCL FOCUS 1PL.EXCL-go.PAUC-ADV.FOC] 'We-EXCL may go in the afternoon, or we-EXCL may go early in the morning.' casual discourse: 2017-07-19

It is not possible for a pet parrot to be both male and female, nor is it possible for a group of Tuparí to depart town both early in the morning and in the afternoon. Disjunctions such as these⁶ show that when speakers use *nãkop*, they make no commitment to the veracity or reliability of p.

Crucially, *nãkop* cannot combine with evidential morphology; past tense declaratives that would require overt non-witnessed marking fail to take *-pnẽ/-psira* when *nãkop* is present. The

(viii) Esi nẽ пã ey'at pare nẽ nã eop nẽ e nã e-si e-y-at pare e-op nẽ e nã [2SG-mother Y/N 3 FOCUS 2SG-OBJ.FOC-take.after] DISJUNCTION [2SG-father Y/N 3 FOCUS ev'at? e-y-at 2SG-OBJ.FOC-take.after] 'Is it your mother that you take after, or is it your father that you take after?' casual discourse: 2017-08-15

Just as *nãkop* appears in each of the disjoined clauses in (360), in (viii) *nẽ* 'YES/NO' occurs in both clauses. See also (362), below, for an example of disjoined clauses containing *nãpe* 'REALLY?!'.

⁶Tuparí also allows disjunctions of polar questions:

textual excerpt in (361) 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. (361) is how the mother replies when her daughter says that it may have been a *we'u'u* (Portuguese: *macaco da noite* 'monkey of the night') that bit her.

(361) Textual ex	ccerpt illustra	ting incon	npatibility	between <i>nãko</i>	• 'MAYBE'	and -p	nẽ/-ps	sira

- a. $Te'ana\tilde{e}$ we'u'u non, te-'an \tilde{e} -a e we'u'u n \tilde{o} -n 3C-AUX_{go}.PL-TH 3 night.monkey other-NUC 'There are other night monkeys,'
- b. tenõ õporo pesap hèt. kiret amsi wek pesap hèt. tenõ hèt. kire-t amsi wek pesap hèt õpo-ro pesap [people kill-NMZ_{ro} FUT.3PL] HÈ.NUC [person-NUC nose bite FUT.3PL] HÈ.NUC 'ones that will kill people, ones that will bite a person's nose.'
- c. Hè nãkop nerõ 'at.
 hè nãkop Ø nẽ-ro 'e-a-t
 that.one MAYBE 3 do.so-NMZ_{ro} AUX.SG-TH-NUC
 'Maybe that's the kind that did it [i.e., bit you].'
- d. Nãpe nã ewekawekakapnam.
 nãpe Ø nã e-wekaweka-ka-**pnẽ**-am that's.why 3 FOCUS 2SG-[bite]²-VBZ_{ka}-EV.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'anaẽ 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 consists of two internally headed relative clauses of the sort discussed at greater length in §6.7, below.) The crucial data come in the next two lines. In (c) the mother speculates that it is this other, violent variety of *we'u'u* that attacked her daughter. But no evidential appears here, since the clause contains *nãkop*. Then in (d) – which does not contain *nãkop* – evidential *-pnẽ* suddenly reappears. Lines (c) and (d) both refer to the same biting event, which the mother was not present to witness; but as (c) contains *nãkop*, the evidential affix is absent. This kind of complementary distribution is systematic in my corpus and is consistent across all speakers. It is simply not possible to mark the witnessed/non-witnessed distinction in clauses that are hedged with *nãkop*.

A second clause typer which renders it impossible to employ *-pnẽ/-psira* is *nãpe* 'REALLY?!', whose uses perhaps qualify as a MIRATIVE in the sense of DeLancey (1997).⁷ In *wh*-questions, *nãpe* expresses a kind of impatience or frustration; see examples (279a) and (288d) in Chapter 5. In polar questions, *nãpe* expresses a great degree of uncertainty or surprise on the speaker's part. The following disjunction – spoken by a woman who was preparing to shoot a rifle at a dangerous crocodile – illustrates. (This example is structurally akin to the disjunctions shown in 360 and in Footnote 6; the only difference is the use of *nãpe* rather than *nãkop* 'MAYBE' or *nẽ* 'YES/NO'.)

(362) Disjunction containing *nãpe* 'REALLY?!'

a.	Ø-si-a-p'a	<i>nãpe</i> nãpe EAR.FUT REALLY? !	o'e? o-'e? 1SG-AUX.SG	
	'Am I really g	oing to shoot it?'		
b.	<i>Pare</i> pare DISJUNCTION	<i>pet'awap'a</i> pet'awa-a-p'a mess.up-TH-NEAR.	nãpe nãpe FUT REALLY?!	o'e? o-'e 1SG-AUX.SG
		going to mess up [=n		
	text: Tereza Mira	ká Tupari, narrator		

Just like *nãkop* 'MAYBE', *nãpe* refuses to combine with evidential morphology even in past tense contexts. The incompatibility between *nãpe* and *-pnẽ/-psira* is shown by the following paradigm:

(363) Neutralization of evidential distinction with *nãpe* 'REALLY?!'

a. Wararo nãpe nã èsat 'en! wararo nãpe nã e-s-a-t 'en quickly REALLY?! FOCUS 2SG-come.SG-TH-NEAR.PAST 2SG 'Why, you came for just a short while!' elicitation: 2017-08-06 (based on casual discourse: 2016-11-09)

⁷The usefulness and coherence of the term 'mirative' is controversial. For debate see Lazard (1999), de Haan (1999, 2001, 2012), and the articles in *Linguistic Typology* 16: Aikhenvald (2012); DeLancey (2012); Friedman (2012); Hengeveld and Olbertz (2012); Hill (2012), among others.

- b. Wararo nã èynan 'en. wararo nã e-s-nẽ-a-n 'en quickly FOCUS 2SG-come.SG-EV.SG-TH-NEAR.PAST 2SG 'You came for just a short while (NON-WITNESSED).' elicitation: 2017-09-02 (based on casual discourse: 2017-08-07)
- c. *Wararo nãpe nã èynan 'en! elicitation: 2017-09-02

Examples (a) and (b) were spoken to me on separate occasions but in essentially identical contexts: in each case I informed my interlocutor that I would be visiting the Rio Branco Reserve for only a few weeks' time, and in each case my interlocutor expressed surprise at the brevity of my stay. Since neither speaker had seen me arrive, one would expect both (a) and (b) to bear non-witnessed morphology. But when *nãpe* is present to mark the speaker's surprise, evidential *-pnẽ* must be absent. As shown by (c), combining *nãpe* and *-pnẽ/-psira* inside of a single utterance is rejected.

Comparable neutralization of the evidential distinction also takes place with *mãkērõ* 'DUNNO'. This clause typer converts content interrogatives into statements of ignorance; it must always cooccur with a clause-initial *wh*-word. The following near-minimal pair demonstrates.

(364) Effect of *mãkērõ* 'DUNNO' on interpretation of *wh*-questions

a.	<i>Katkaere</i> katkaere			<i>eteronar</i> e-tet-ror		<i>ekuydyo?</i> e-kuy-o
	when	POLITE.FUT	2sg	2sG-go.	SG-again-ADV.Fo	OC 2SG-land-INS
	'When ar	e you going b	back	to your l	and?'	
	casual disc	ourse: 2016-01-	07			
	(see also ca	usual discourse of	on 201	16-07-29)		
b.	Katkaere	mãkẽrõ ke		'en	warop	õam.
	katkaere	mãkẽrõ ke		'en	w-arop	om-am
	when	DUNNO POL	ITE.	fut 2sg	1SG-possession	give-ADV.FOC
	'I don't l	know when y	ou'l	l give me	my gift.'	

casual discourse: 2016-11-10

Wh-questions converted into statements of ignorance by *mãkẽrõ* lose the ability to combine with *-pnẽ/-psira*, just like non-questions hedged with *nãkop* or statements of surprise marked by *nãpe*. This is clear from the two examples in (365), which were spoken by the same elderly woman:

(365) Neutralization of evidential distinction with *mãkērõ* 'DUNNO'

a. Tan'omnã kut osìt tet'epnẽ. tàn-'om-nẽ-a tet'e-pnẽ kut o-si-t tall-NEG-VBZ_{ne}-TH ANCIENT.PAST 1SG-mother-NUC AUX_{go}.SG-EV.SG 'She wasn't tall, my mother (NON-WITNESSED).' casual discourse: 2014-07-10 (see also elicitation on 2014-07-19) tet'e. b. Pare mãkẽrõ kut osinã yan pare mãkêrõ kut o-sinẽ-a tet'e yã-n 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.'

text: Marilza Kabatoá Tupari, narrator

In (a) the speaker has to include evidential $-pn\tilde{e}$ because she never met her mother. That is, while she is confident that her mother was a short woman, this piece of information is not something that she ever learned as a firsthand witness. As this is a declarative utterance, the witnessed/nonwitnessed contrast must be marked. In (b) that 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. And yet the evidential $-pn\tilde{e}$, obligatory in (a), is absent in (b). The crucial difference is that the first utterance is a declarative with no overt 2P clause typer, whereas the second one contains $m\tilde{a}k\tilde{e}r\tilde{o}$.

Note that the disappearance of *-pnē/-psira* in (365b) cannot be a case of deictic inversion in interrogative contexts of the sort discussed in §6.6.2. If the speaker of this utterance chose whether or not to use the evidential here based upon whether the interlocutor had witnessed her birth, then she would necessarily have included *-pnē*: this utterance was spoken to me, and as I am half a century younger than the speaker, I could not have witnessed her birth, either. As was shown by (359a) in §6.6.2, when I ask someone about their place of birth, the evidential is necessary; no one can witness their own coming into the world. Yet *-pnē* is absent in (365b). The absence of *-pnē* in that utterance is due to *mākērõ* 'DUNNO'.

The contrast illustrated in (365) shows how the clause typers help to disentangle the categories

of tense and evidentiality from one another in Tuparí. The 2P tense particle *kut* 'ANCIENT PAST', though largely 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* is used with events that took place no later than the speaker's birth – events which, by definition, the speaker could not have been present to witness – it is invariably accompanied by *-pnē/-psira* in declarative clauses. The textual excerpt in (347) illustrates the absolutely systematic cooccurrence of *kut* with *-pnē/-psira* in declaratives. Yet (365b) proves that this restriction may be overridden: when we switch from declarative contexts to ones marked with *nākop* 'MAYBE', *nāpe* 'REALLY?!' or *mākērõ* 'DUNNO', it suddenly becomes possible – necessary, in fact – to utilize *kut* without *-pnē/-psira*. This fact highlights an important difference between evidentiality and tense in the grammar of Tuparí: the former category is susceptible to changes in clause type, whereas the latter is immune.

6.6.4 Interaction between *-pnẽ/-psira* and *'aet* 'NEGATIVE LAMENT'

It is not yet clear whether the negative lamentative particle '*aet*, whose properties are discussed in Singerman (2018:§5), also triggers wholesale neutralization of the witnessed/non-witnessed distinction. It is possible for '*aet* to occur in past tense contexts without non-witnessed marking, as demonstrated by (366).

(366) CONTEXT: I am about to head upriver with a Tuparí family. When we have already sat down in the boat, my friend realizes that we didn't make a thermos of coffee for the trip.

Kafenã'aet'okitwatkafeeteoraptenã.kafenē-a'aet'okitwatkafeete-ot-ap-tenãcoffeemake-THNEGATIVE.LAMENT1PL.INCLcoffeeCOM-go.PAUC-NMZ_{ap}-PURP'Wedidn'tevenmakecoffeeso as to takecoffeealongwith us.'/ 'It's a shame that wedidn'tevenmakecoffeeso as to takecoffeealongwith us.'/

casual discourse: 2015-11-04

Since the speaker of (366) was expressing regret that she and her family had forgotten to make coffee prior to an upriver trip, we might expect *-pnẽ/-psira* to appear here – just as it does in so many other cases of accidental behavior with first person subjects (§6.5). That *-pnẽ/-psira* is

nonetheless absent indicates that this clause typer, too, may trigger neutralization. However, my corpus contains one example where '*aet* does combine with *-pnẽ/-psira*''

(367) Kiwētõã 'aet nã i'anemsira.
ki-wētom-a 'aet nã i-'anē-msira
1PL-let.know-TH NEGATIVE.LAMENT FOCUS 3-AUXgo.PL-EV.PL
'They didn't even let us know (NON-WITNESSED).' / 'It's a shame that they didn't even let us know (NON-WITNESSED).'
text: Paulina Tomīka Tupari, narrator

It is plausible that this is a case of intergenerational variation: the speaker of (367) is an elderly woman, thirty to forty years older than the speaker of (366). If this suspicion is right, then '*aet* may neutralize evidentiality in the speech of younger Tuparí as categorically as *nãkop* 'MAYBE', *nãpe* 'REALLY?!' and *mãkẽrõ* 'DUNNO' do. More research is required on this front.

6.6.5 Summary: how evidentiality interacts with clause type

The Tuparí clause typers and the non-witnessed evidential suffix *-pnẽ/-psira* engage in a nuanced set of interactions; these are summarized in Table 6.2.

Biased tag questions (with $m\tilde{a}k\tilde{e}r\tilde{o}$ 'RIGHT?') and extra-assertive declaratives (with pa'a and ta'a) behave identically to plain (which is to say, superficially unmarked) declaratives: evidential *-pnẽ/-psira* must be used whenever the speaker relates an action or occurrence that he or she did not personally witness. No inversion of the deictic origo of *-pnẽ/-psira* from speaker to addressee applies in these clause types. What unites these clause types is that they all involve a high degree of commitment on the speaker's part to p.

In non-tag polar questions – marked with $n\tilde{e}$ 'YES/NO' – and in content interrogatives without an overt clause typer, the deictic orientation of *-pnẽ/-psira* changes from the speaker to the addressee. This kind of INTERROGATIVE FLIP is cross-linguistically quite common (see Garrett 2001; Faller 2002; Friedman 2003; Murray 2017; San Roque et al. 2017, among others). The different behavior seen in polar questions marked by $n\tilde{e}$ than in biased tag questions containing $m\tilde{a}k\tilde{e}r\tilde{o}$ conforms to the typological predictions of Bhadra (2018), who observes that Interrogative Flip often fails to apply with biased questions even in languages that require Flip to take place with

	- I		LADIE U.Z. HIREPACTUAL DELACEL ZF CIAUSE LYPEIS AND THE MULESSEM HOLF MULESSED COULTASE		lui ásu
Clause typer	Gloss	Type of clause- initial constituent	How confident is the speaker in p ?	Is this clause typer com- patible with <i>-pnẽ/-psira</i> ?	Who serves as the deic- tic origo of <i>-pnē/-psira</i> ?
pa'a/ta'a	ASSERTIVE	[<i>qw</i> -]	maximally confident	yes	the speaker
Ø	DECLARATIVE	$[\eta_{\mathcal{W}}-]$	confident	yes	the speaker
mãkẽrõ	RIGHT?	$[\eta m]$	relatively confident	yes	the speaker
nē	V/Y	[<i>hwh</i>]	low/zero confidence (speaker is requesting infor- mation)	yes	the addressee
Q	<i>wh</i> -QUESTION	$[\eta m+]$	low/zero confidence (speaker is requesting infor- mation)	yes	the addressee
nãpe	REALLY?!	[±wh]	minimal confidence (speaker has just learned p or is surprised by p)	оп	N/A
nãkop	МАҮВЕ	[<i>ųm</i> -]	zero confidence (speaker cannot say whether p is true or not)	Ю	N/A
mākērõ	DUNNO	[<i>hwh</i>]	zero confidence (speaker is ignorant of a piece of information)	Ю	N/A

Table 6.2: Interaction between 2P clause typers and the witnessed/non-witnessed contrast

non-biased ones.

In clauses marked for uncertainty or doubt (with $m\tilde{a}k\tilde{e}r\tilde{o}$ 'DUNNO' or $n\tilde{a}kop$ 'MAYBE') or for surprise (with $n\tilde{a}pe$ 'REALLY?!'), - $pn\tilde{e}/-psira$ cannot appear; that is, the witnessed/non-witnessed evidential distinction is neutralized altogether in clauses that bear one of these three clause typers. Speakers use $n\tilde{a}kop$ to indicate a lack of commitment to or confidence in p, and comparable uncertainty characterizes wh-questions transformed by $m\tilde{a}k\tilde{e}r\tilde{o}$ 'DUNNO' into professions of ignorance. And $n\tilde{a}pe$ is used when the speaker has just learned – and is surprised by – some new piece of information, which means that utterances containing $n\tilde{a}pe$ are also characterized by a lack of deeply-held commitment to p.

Per the argumentation for the existence of null complementizers given in §5.3.3, Table 6.2 includes the [+INTERROGATIVE] C head present in superficially unmarked content interrogatives and the [-INTERROGATIVE] C head present in neutral declaratives. (It does not however include '*aet* 'NEGATIVE LAMENT', since the interaction of this particle with *-pnē/-psira* remains poorly understood.) Whether or not a given clause typer can cooccur with a clause-initial [+*wh*] word does not predict that clause typer's relationship to the witnessed/non-witnessed contrast. While *wh*-words never occur with *pa'a/ta'a* 'ASSERTIVE', \emptyset 'DECLARATIVE' or *mākērõ* 'RIGHT?' – all characterized by high commitment to *p* – the set of clause typers that trigger Interrogative Flip and the set of clause typers that neutralize the witnessed/non-witnessed distinction include [+*wh*], [-*wh*], and [±*wh*] members.

The neutralization of the evidential distinction in clauses containing *mãkērõ* 'DUNNO', *nãkop* 'MAYBE' or *nãpe* 'REALLY?!' must be conditioned by semantic factors. There is, after all, no morphosyntactic incompatibility between *-pnẽ/-psira*, on the one hand, and these three clause typers, on the other. All of the clause typers occupy the same position within the 2P particle cluster and behave indentically according to all known constituency diagnostics (see §5.2). Given that evidential *-pnẽ/-psira* can occur in unmarked declaratives, assertive declaratives, in normal yes/no questions, in tag questions, and in *wh*-questions that lack an overt clause typer, it cannot be the case the morphosyntax is responsible for the neutralization of the evidential distinction in clauses that bear

mãkērõ 'DUNNO', *nãkop* 'MAYBE' or *nãpe* 'REALLY?!'. The explanation for this neutralization instead rests with the semantics, as I will argue further in §6.7.

It is important to stress that while evidential marking is compatible with only a subset of clause types – that is, evidentiality is DEPENDENT on clause type in the sense of Aikhenvald and Dixon (1998) – the same is not true for tense: the full range of tense morphology is compatible with all varieties of 2P clause typers. (368) shows some of the many possible combinations.

(368) Tense, unlike evidentiality, is not sensitivity to clause type

- a. Katkaere mãkērõ ke omằkap. katkaere mãkērõ ke e o-mằk-ap when DUNNO POLITE.FUT 3 1SG-send-ADV.FOC
 'I don't know when they will send me off.' casual discourse: 2016-03-26
- b. *Kanã nãpe* ko 'ote eõpo? kanã **nãpe** ko 'ote e-õpo? why **REALLY?! POLITE.FUT** 1PL.EXCL 2SG-kill 'But why ought we-EXCL to 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.Q DISTANT.PAST 3 3-kill-NMZ_{ro}-NEG-VBZ_{ka}-ADV.FOC 'They really didn't kill it [the night monkey]...' text: Iracema Taydyup Tupari, narrator

What is more, there are no asymmetrical dependencies between polarity and clause type. Although '*aet* 'NEGATIVE LAMENT' does not easily occur with the negative/privative suffix -'*om* (presumably for semantic reasons; Singerman 2018), all of the other clause typers are insensitive to negation. The utterances in (369) show the compatibility between -'*om* 'NEG' and various clause typers.

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

a. *Iwaywaykipsit'omnã nãpe ke 'en etet'e!* i-waywayki-psit-'**om**-nẽ-a **nãpe** ke 'en e-tet'e 3-laugh.at-PASS-NEG-VBZ_{nẽ}-TH **REALLY**?! POLITE.FUT 2SG 2SG-AUX_{g0}.SG 'Why, you really ought not to be so laughable!' casual discourse: 2017-09-01 b. Ham ne tèyto'omkap'a y'e?ham **ne** te-s-to-'**om**-ka-a-p'a y-'e hither Y/N 3C-come.SG-NMZ_{ro}-NEG-VBZ_{ka}-TH-NEAR.FUT 3-AUX.SG 'Is he not going to come here?' casual discourse: 2015-10-08 c. Suko hi'a'om mãkẽrõ 'en? suko hi'a-'om mãkẽrõ 'en juice love-NEG RIGHT? 2SG 'You don't like juice, right?' casual discourse: 2017-08-03 d. *Otero'omkap'a* nãkop o'e. o-tet-ro-'om-ka-a-p'a nãkop o-'e 1SG-go.SG-NMZ_{ro}-NEG-VBZ_{ka}-TH-NEAR.FUT MAYBE 1SG-AUX.SG 'I may not go.' / 'Maybe I am not going to go.' casual discourse: 2015-12-12 e. *Here ta* õpore yõporo'omkap... here ta'a õpot e y-õpo-ro-'om-ka-ap then ASSERTIVE.Q DISTANT.PAST 3 3-kill-NMZ_{ro}-NEG-VBZ_{ka}-ADV.FOC 'They really didn't kill it [the night monkey]...'

text: Iracema Taydyup Tupari, narrator

In sum, evidential marking is unique within the set of clausal-level categories in Tuparí. In past declaratives the witnessed/non-witnessed distinction is just as obligatory a category as tense is, yet this distinction is susceptible to neutralization in a way that tense is not.

6.7 Evidential *-pnẽ/-psira* requires a presupposition of commitment to *p*: evidence from finite embedded clauses

This section argues that evidential *-pnē/-psira* can be used only in contexts that pressuppose commitment on the part of the deictic origo to the veracity, accuracy, or reliability of *p*. Evidence for this presupposition comes from the behavior of the witnessed/non-witnessed contrast inside of finite embedded clauses. In addition to explaining why the three clause typers *nākop* 'MAYBE', *nāpe* 'REALLY?!' and *mākērõ* 'DUNNO' cannot cooccur with *-pnē/-psira*, the presuppositional analysis advanced here accounts for several other facts: the rarity of *-pnē/-psira* in quotative contexts, the ability to mark evidentiality in embedded existentials, and the mutual incompatibility of evidential and counterfactual conditional marking.

Although the closest relatives of Tuparí use non-finite nominalizations in lieu of finite embedded clauses (see Galucio 2011a,b for Sakurabiát), Tuparí has innovated an embedded clause construction in which the full range of 2P tense particles, predicate-final tense suffixes, and post-verbal tense auxiliaries may occur (Singerman 2018 [to appear]). These embedded clauses – frequently used as internally headed relatives (IHRCs) – bear the nominalizer he at their right edge. This nominalizer is in turn capable of bearing the full range of case morphology. In (370b) the internal head of the relative is the third person pronominal *y*-, attached as a proclitic to the verb *om* 'give'.⁸

(370) Example of finite embedded clause functioning as an internally headed relative

a.	Mõket	õpot	'en	yõã	etet'e.
	mõket	õpot	'en	y-om-a	e-tet'e
	long.ago	DISTANT.PAST	280	з-give-тн	2SG-AUX _{go} .SG
	'You gave it [to me] long ago.'				

b.	mõket	õpot	'en	yõã	etet'e	hè
	mõket	õpot	'en	y-om-a	e-tet'e	hè
	[long.agc) DISTANT.PAST	r 2sg	3-give-TH	2SG-AUX _{go} .SG] HÈ
	'the thing	that you gave [to me	e] long ago	,	
	casual disco	ourse: 2015-12-25				
	(see also eli	citation on 2016-0	1-01)			

The tree given in Figure 5.14 positions the Evidential Phrase immediately underneath the Tense Phrase. This ordering reflects how *-pnē/-psira* sits inside of the near past suffix *-t* (see examples 343b, 344a, and 363b, among others) and how *-pnē/-psira* remains attached to the highest verbal head even when tense is realized as a structurally high 2P particle (*õpot* 'DISTANT PAST' in 341a, *kut* 'ANCIENT.PAST' in 341b). Based on the relative heights of EvidP and TP, we predict that the witnessed versus non-witnessed distinction ought to be maintained in any embedded environments where tense is realized. Put slightly differently: any portion of the Tuparí clause that contains

⁸The tense particle *õpot* 'DISTANT PAST' occurs in 2P inside of the IHRC in 370b. Tuparí does not manifest any 2P/non-2P or V2/non-V2 asymmetries of the sort known from Germanic (den Besten 1983), Kashmiri (Bhatt 1999; Manetta 2011), or Karitiana (Storto Forthcoming). That is, the tense particles which surface in 2P in root clauses in Tuparí do so inside of finite embedded clauses, as well.

a TP must contain an EvidP as well. This prediction is correct. Just as finite embedded clauses may contain the full range of tense marking known from matrix clauses, they also maintain matrix clauses' witnessed/non-witnessed evidential distinction. The minimal pair in (371) illustrates.

(371) Minimal pair showing evidential contrast in embedded clauses

a.	Otegahafa	õã	õpot	'en	hèt.		
	ote-gahafa	om-a	õpot	'en	hèt		
	[1PL.EXCL-bot	tle give-TI	H DISTANT.	PAST 2SG] HÈ.NU	JC	
	'[It's] the bottle	that you g	gave us (WI	TNESSED).	,		
	casual discourse: 2	016-11-14					
h	Oteoahafa	omnã	õr	nat	'en	hèt	

b. Otegahafa omnã õpot 'en hèt. ote-gahafa om-nẽ-a õpot 'en hèt
[1PL.EXCL-bottle give-EV.SG-TH DISTANT.PAST 2SG] HÈ.NUC '[It's] the bottle that you gave us (NON-WITNESSED).' casual discourse: 2016-11-14

These two examples were offered back to back by a middle-aged speaker in conversation. In (a) – where there is no evidential inside of the IHRC – the interpretation is that the speaker was present to witness the giving of the water bottle. But *-pne* 'EV.SG' is present in (b), so the interpretation is that the speaker did not witness the giving of the water bottle.

Of crucial importance is the fact that witnessed/non-witnessed contrast projects out of an internally headed relative in the fashion of a presupposition.⁹ This is clear from (372), which to the best of my knowledge cannot be interpreted as asking about the source of evidence for the eating event. Rather, both (*a*) that the addressee ate and (*b*) that the speaker did not witness the addressee eat project out of the IHRC to take scope over the matrix clause typer $n\tilde{e}$ 'YES/NO'.

(372) CONTEXT: During a WhatsApp conversation my friend tells me that she has eaten dinner. I ask if her meal was tasty, and she says yes. She then asks if my meal was tasty, too.

Earetnẽawe heporetkopnã'enhèt?e-aretnẽawe heporetØ-ko-pnẽ-a'enhèt2SG-food.NUCY/N tasty also[3-eat-EV.SG-TH 2SG] HÈ.NUC

'Is your food tasty also, **that which you ate** (**NON-WITNESSED**)?' casual discourse: 2017-06-22

⁹I am grateful to Anastasia Giannakidou for helpful discussion of this point.

The IHRC in (372) is marked as non-witnessed, which shows that the deictic orientation of the embedded evidential continues to be anchored to the speaker: she did not witness me eat my food, which is why she had to employ *-pnē*. But the matrix question is marked with *nē* 'YES/NO', independently known to trigger inversion of the deictic origo of *-pnē/-psira* (§6.6.2). This example thus demonstrates that the embedded *-pnē/-psira* projects over the Interrogative Flip triggered by the matrix clause typer *nē* 'YES/NO'. The kind of projection seen here is precisely what we would expect 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).

Finite embedded clauses are used not just as IHRCs but also serve to indicate temporal relations; for instance, when marked with oblique *-ere* these clauses acquire a meaning of 'upon X, when X happened'. In this usage, too, the witnessed/non-witnessed distinction is maintained, and the evidential presupposition continues to project. This is clear from (373), where the embedded verb *s* 'come.SG' – deictically oriented to the site of speaking – bears *-pne*.

(373) CONTEXT: I arrive in Bom Jesus, a majority-Tuparí village where several friends reside, having left the village of Serrinha early in the morning. The speaker of this example does not see me when I arrive in his village; he and I run into each other only later in the day.

PapaKabatoatnẽetoate'aPapaKabatoá-tnẽe-top-ate-'e-aGrandma Kabatoá-NUC Y/N 2SG-see-TH 3C-AUX.SG-THèynã'en hère?e-s-nẽ-a'en hère[2SG-come.SG-EV.SG-TH 2SG] HÈ.OBL

'Did Grandma Kabatoá see you **when you came here** (**NON-WITNESSED**)?' casual discourse: 2016-02-10

The speaker of (373) had not been present in Serrinha and therefore did not witness whether Grandma Kabatoá, a resident of that village, had seen me. So if he were to relate her having seen me in a declarative clause, he would need to use *-pnẽ/-psira*. But the matrix clause of (373) is a yes/no question marked with $n\tilde{e}$, not a declarative. Because $n\tilde{e}$ is present the origo of the evidential switches from my friend (the speaker) to me (the addressee). As the speaker expects that I will not need to use a non-witnessed evidential when answering, the matrix question does

not contain any non-witnessed morphology. However, the embedded clause $\partial yn\tilde{a}$ 'en hore 'when you came here (NON-WITNESSED)' does contain the evidential suffix: the speaker did not see me arrive in Bom Jesus, and so he must use $-pn\tilde{e}/-psira$ here. In other words, the witnessed/nonwitnessed distinction inside of the embedded clause remains anchored to the speaker even as the matrix clause undergoes Interrogative Flip. Just as we saw with (372), above, in this example the deictic inversion that affects the evidential in the matrix clause does not impact the form or deictic interpretation of $-pn\tilde{e}/-psira$ in the embedded clause. This constellation of facts makes sense if using $-pn\tilde{e}/-psira$ necessarily presupposes that the occurrence in question – though not personally witnessed by the speaker – did indeed take place.

The presuppositional analysis advanced here provides an explanation for the interaction between *-pnē/-psira* and the various clause-typing particles surveyed in §6.6. The incompatibility of the evidential contrast with *nãkop* 'MAYBE', *mãkẽrõ* 'DUNNO' and *nãpe* 'REALLY?!' makes sense given that these three clause typers indicate doubt, uncertainty, or surprise on the speaker's part – and a speaker cannot presuppose p when p leaves them doubtful, uncertain, or surprised. 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 marked with *mãkẽrõ* 'RIGHT?'. These are all contexts in which the speaker's commitment to or confidence in p is already high. Indeed, speakers employ assertive pa'a/ta'a to emphasize just how committed or confident they are. The availability of *-pnẽ/-psira* therefore correlates with the speaker's level of commitment to p.

Let me conclude this section by mentioning three further advantages of the presuppositional analysis for *-pnẽ/-psira*. First, this analysis accounts for why *-pnẽ/-psira* is rare in quotative contexts. Many languages of the world have specialized quotative evidentials, that is, functional morphology that attributes the source of evidence to someone else's speech. Indeed, Jakobson (1957/1971:135) defined evidentiality as a verbal category that encodes information about the time of a 'narrated speech event.' Yet speakers of Tuparí only rarely deploy *-pnẽ/-psira* when quoting others. This is because one uses *-pnẽ/-psira* when strongly committed to p, but quoting some-

one else is by its very nature an act that keeps the burden of commitment anchored to its original source (see Michael 2014, Nuckolls 2014 and the other chapters in Nuckolls and Michael 2014). If a speaker of Tuparí wants to indicate a lack of commitment to a proposition that someone else has advocated, she will employ periphrastic quotation with the verb *ke* 'say, be like'. Only when she commits herself to the accuracy of a piece of information reported by someone else will she employ *-pnẽ/-psira*.

A second benefit of the presuppositional analysis is that it can help to explain those cases where evidential *-pnẽ/-psira* occurs in a present existential. My corpus contains only two such utterances; both are from spontaneous discourse and have had their well-formedness confirmed during subsequent interviews. I reproduce one of those two utterances in (374).

(374) 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.

Puop'omnã'on otet'epnẽ,
o kõsultatpuop-'om-nẽ-a'on o-tet'e-**pnẽ**
o-kõsulta-tknow-NEG-VBZ_{nẽ}-TH 1SG 1SG-AUXgo.SG-**EV.SG** [1SG-appointment-NUCte'epnã
here.te'e-**pnẽ**-a
3C-AUX.SG-**EV.SG**-TH] HÈ.OBL

'I didn't know (NON-WITNESSED) that I have an appointment / that there is my appointment (NON-WITNESSED).' casual discourse: 2017-08-04

The singular evidential *-pnẽ* appears twice in this utterance: on the embedded auxiliary '*e*, used for present existentials, and on the matrix auxiliary *tet'e*. That *-pnẽ/-psira* occurs with the matrix verb *puop'omnã* 'not know, be ignorant' is unsurprising: the speaker was unaware of her own ignorance of the appointment, and *-pnẽ/-psira* is always present when speakers express ignorance about the gaps in their knowledge (see §6.9). But what of the evidential inside of the finite embedded clause? The embedded clause here bears the oblique case *-ere* since the matrix verb *puop'omnã* 'not know' (like its positive-polarity counterpart *puop* 'know, be knowledgeable about') can optionally take an

oblique complement. If *puop'omnã* 'not know' presupposes or entails the veracity of its obliquemarked argument, then it makes sense for evidential marking to be licit in this context. Put slightly differently: because the embedded existential in (374) is presupposed – and because evidential marking in Tuparí requires a presupposition of commitment to p – in this circumstance one can mark a present existential as non-witnessed, in violation of the language's otherwise rigid restriction of the evidentiality contrast to past tense environments.

The third benefit of the presuppositional analysis concerns the relationship between evidential $-pn\tilde{e}/-psira$ and the conditional suffix -kot'oy (§3.6.2). This suffix appears in the apodosis of counterfactual conditionals, where it occupies a position suspiciously like that of evidential $-pn\tilde{e}/-psira$: it sits on top of the predicate complex and occurs immediately inside of near past -t and other tense marking.

(375) Examples of conditional -kot'oy occurring with past tense morphology

- a. Mākinamsironaerē irowakot'oat 'on mākinā-msiro-nē-am-ere irowa-kot'oy-a-t 'on camera-POSS-VBZ_{nē}-NMZ_{ap}-OBL take.picture-COND-TH-NEAR.PAST 1SG *kipotoapnā*.
 ki-potop-ap-nē-a 1PL.INCL-view-NMZ_{ap}-do-TH 'If I had had a camera, I would have taken a picture for us to view.' text: Isaias Tarimā Tupari, author
- b. *Pensironaerẽ* $\tilde{o}pot$ 'on isikot'oy. pen-siro-nẽ-am-ere $\tilde{o}pot$ 'on i-si-kot'oy gun-POSS-VBZ_{nẽ}-NMZ_{ap}-OBL **DISTANT.PAST** 1SG 3-shoot-**COND** 'If I had had a gun, I would have shot it.' casual discourse: 2016-12-15

As it is used only in counterfactual conditionals, -kot'oy cannot be employed if the speaker is in any way committed to the reliability or accuracy of p. In this sense it is the inverse of $-pn\tilde{e}/-psira$, which is restricted to environments where the speaker's commitment to p is presupposed. The presuppositional analysis advanced here thus explains why $-pn\tilde{e}/-psira$ and -kot'oy do not cooccur: they presuppose opposite commitments on the part of the speaker. As these two suffixes surface in the same morphosyntactic position, they may instantiate one and the same functional head in the Tuparí spine – perhaps a kind of CommitmentP. I leave the specifics of this analysis to future work.

6.8 Resultative morphology as the diachronic source of Tuparí evidentiality

This section examines the resultative suffix -*psē*/-*pnē*/-*psira*, a verbal morpheme which agrees with the subject in both number and physical position. I argue that the resultative served as the diachronic source of evidential -*pnē*/-*psira*, in keeping with our broader understanding of the development of evidential morphology (Friedman 2018). Semantically, the resultative changes verbs that denote discrete actions into descriptions of ongoing states, i.e. *epsik* 'sit down' and *tomẽka* 'stand up' become *epsiksẽ* 'be/remain in a seated position' and *tomẽkapnẽ* 'be/remain in a standing position'. The suffix's two singular allomorphs, -*psẽ* and -*pnẽ*, 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 (§6.3; see also Appendix A).

Table 6.3: Allomorphy of the resultative

	After oral vowel	After nasal vowel	After consonant
SINGULAR, horizontal	-psẽ	-msẽ	-sẽ
SINGULAR, vertical	-pnẽ	-mnẽ	-nẽ
PLURAL	-psira	-msira	-sira

As far as terminology is concerned, I follow Nedjalkov and Jaxontov (1988:6) in treating RE-SULTATIVE verb forms as ones 'that express a state implying a previous event' (see also Haspelmath 1992 as well as Nedjalkov 2001). They 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. All or nearly all of the examples of *-psē/-pnē/-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' rather than 'stative' is justified.¹⁰

¹⁰The Tuparí suffix -psē/-pnē/-psira does not correspond to the kind of resultative constructions discussed by

Since two of the resultative's three allomorphs are homophonous with evidential *-pnẽ/-psira*, we must ask how the two morphemes relate to one another. Several diagnostics demonstrate that the two morphemes occupy distinct positions in the Tuparí clause; synchronically there are relatively few instances where ambiguity arises.

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

As discussed in §6.2, previous work on Tuparí did not disentangle the singular evidential from the theme vowel; in addition, the plural allomorph of the evidential went undiscovered. In much the same way, Caspar and Rodrigues (1957:§3.3.4.3) gave $-s\tilde{a}$ and $-ms\tilde{a}$ as the allomorphs of the resultative, but the final / \tilde{a} / of these forms is actually the theme vowel. The underlying / \tilde{e} / of the singular resultative is deleted by the theme vowel, just as the / \tilde{e} / of the singular evidential is (§6.3).

Unlike the evidential, the resultative agrees with singular subjects in terms of physical position: horizontal *-psē* contrasts with vertical *-pnē*. (376a) is what one speaker said to me shortly after I shaved my beard. As I was sitting down when this utterance was spoken, she used horizontal *-psē*. During a subsequent interview, the same speaker confirmed that the resultative suffix would change to vertical *-pnē* if I had been standing up; this is shown in (b). She further confirmed that if she were speaking to an in-law – who must be treated in respectful speech as paucal/plural rather than singular (2.6.3) – then she would instead employ the plural form of the resultative, as in (c).

(376) The resultative makes a positional contrast with singular (but not plural) subjects

a. *Èpotekapsã* 'en eovẽ haet atpe. 'en e-oyẽ hap-et e-epoteka-pse-a at-pe 2SG-change-RSLT.SG.HZNTL-TH 2SG 2SG-mouth hair-NUC cut-after 'You are changed (SITTING), having shaved off your beard.' casual discourse: 2017-08-09 b. *Epotekapnã* 'en eovẽ haet atpe. e-epoteka-**pn**e-a 'en e-oyẽ hap-et at-pe 2SG-change-RSLT.SG.VRTCL-TH 2SG 2SG-mouth hair-NUC cut-after 'You are changed (STANDING), having shaved off your beard.' elicitation: 2017-08-14

Beavers (2012), which involve a secondary predicate in addition to a principal one.

c. Wat'epotekapsira wat wat'õyẽ haet atpe. wat-epoteka-psira-a wat wat-oyẽ hap-et at-pe
2PL-change-RSLT.PL-TH 2PL 2PL-mouth hair-NUC cut-after
'You-PAUC are changed (POSITION UNSPECIFIED), having shaved off your-PAUC beard.'
elicitation: 2017-08-14

The variant in (c) is positionally unspecified: plural *-psira* does not encode any information about whether the subject is horizontal or vertical. (The neutralization of positional contrasts with plural subjects occurs elsewhere in Tuparí. In the present progressive, for instance, singular subjects make a horizontal/vertical distinction but plural subjects do not. See §4.3.3.) It is highly probable that (376b) and (376c) are ambiguous between resultative and evidential interpretations, thanks to the two morphemes' partial homophony. That is, (b) can probably mean both 'You are changed (STANDING), having shaved off your beard' as well as 'You have changed, having shaved off your beard (NON-WITNESSED).' On the evidential interpretation no positional information would be conveyed.

The sensitivity of the resultative to the physical position of the subject means that certain lexical verbs will preferentially combine with either horizontal *-pse* or vertical *-pne*:

(377) Resultative matches position encoded by the lexical verb

a. Ekanetat tekatsã.
e-kaneta-t te-kat-sẽ-a
2SG-pen-NUC 3C-fall-RSLT.SG.HZNTL-TH
'Your pen has fallen / is in a horizontal position.'
casual discourse: 2016-02-15

b. Ekanetat teo'epnã.
e-kaneta-t te-o'e-pnẽ-a
2SG-pen-NUC 3C-place.upright-RSLT.SG.VRTCL-TH
'Your pen has been placed upright / is in a vertical position.'
elicitation: 2017-08-02
(based on casual discourse: 2016-02-15)

Example (a) was how one speaker described the position of a pen lying on the ground; speakers later confirmed that a pen propped upright against a wall would be described as in (b). The re-

sultative's positional distinction is reflected in the verbal roots themselves: *kat* 'fall' occurs with horizontal *-psē* whereas *o'e* 'place upright, place vertically' occurs with vertical *-pnē*.

6.8.2 Telling the evidential and the resultative apart: four diagnostics

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

In this section I discuss four structural diagnostics that tell these two morphemes 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 all varieties of clause typers, whereas the evidential is incompatible with *nãkop* 'MAYBE', *mãkẽrõ* 'DUNNO' and *nãpe* 'REALLY?!'. Third: the resultative occupies a position closer to the verbal root than the evidential does. Fourth: the resultative can occur inside of non-finite nominalizations.

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

The evidential can only be used in past tense contexts; it never combines with present or future tense morphology. But resultative *-psē/-pnē/-psira* is not restricted in this fashion. While it can occur in past tense contexts (378a, repeated from §5.B), it is also attested with future morphology (378b and 378c).

(378) Resultative can combine with non-past morphology

a. *Here kòmkòmkia tepsiksãrẽ*. here kòmkòm-ki-a te-epsik-**sẽ**-a-**n** e then $[silence]^2$ -VBZ_{ki}-TH 3C-sit-**RSLT.SG.HZNTL**-TH-**NEAR.PAST** 3 'And it [the baboon] sat, in silence.' text: Isaias Tarimã Tupari, author b. CONTEXT: When a young boy goes to pick up a baby girl who is lying on the floor, his grandmother orders him to let her be.

Teanemsã	ke!		
te-anẽ- msẽ -a	ke	e	
3C-lie.down-RSLT.SG.HZ	NTL-TH POLITE.	fut 3	
'Let her remain lying dow	n!' / 'She ought to	o remain lyir	ng down!'
casual discourse: 2016-01-23			
	1.0.1 1.1.1.1	1 • 1 4	1 1 1.

c. CONTEXT: I ask my friend if she would like a chair, but she declines.

Otomẽkapnã	ko	'on.
o-tomẽka- pnẽ -a	ko	'on
1SG-stand.up-RSLT.SG.VRTCL-TH POLITE.FUT 1SG		
'Let me remain standing.' / 'I am going to remain standing.'		
casual discourse: 2017-08-09		

The evidential never occurs in imperatives, but the resultative can do so without issue. The command in (379a) was how one Tuparí speaker instructed a noisy child to keep quiet. That child was to be quiet while sitting, which is why horizontal *-psẽ* rather than vertical *-pnẽ* was employed. The variants in (b) and (c) complete the paradigm.

- (379) Resultative can occur in imperatives
 - a. Kòmkòmkipsẽ!
 kòmkòm-ki-**psẽ**[silence]²-VBZ_{ki}-RSLT.SG.HZNTL
 'Stay quiet!' (singular addressee, SITTING)
 casual discourse: 2016-11-16
 - b. Kòmkòmkipnẽ!
 kòmkòm-ki-pnẽ
 [silence]²-VBZ_{ki}-RSLT.SG.VRTCL
 'Stay quiet!' (singular addressee, STANDING)
 elicitation: 2016-12-09
 (based on casual discourse: 2016-11-16)
 - c. *Kòmkòmkipsira* wat! kòmkòm-ki-**psira** wat [silence]²-VBZ_{ki}-**RSLT.PL** 2PL 'Stay quiet!' (multiple addressees, POSITION UNSPECIFIED) elicitation: 2016-12-09 (based on casual discourse: 2016-11-16)

Diagnostic #2: The resultative can occur with all varieties of 2P clause typers.

In §6.6 we saw that evidential *-pnē/-psira* can occur only with a subset of clause typers. In particular, *-pnē/-psira* cannot combine with *nãkop* 'MAYBE', *mãkērõ* 'DUNNO' or *nãpe* 'REALLY?!', which mark uncertainty, ignorance, and/or surprise on the speaker's part. The same is not true for resultative *-psē/-pnē/-psira*, however: this morpheme can and does occur with those clause typers that neutralize the witnessed/non-witnessed evidential contrast. (380a) and (380b) are non-elicited examples of horizontal *-psē* cooccuring with *nãkop* and *nãpe*, respectively, and (380c) is a variant of (b) with *nãpe* replaced by *mãkẽrõ*.

(380) Resultative occurring with clause typers that neutralize evidential contrast

a.	Teanemsãnãkop.te-anẽ-msẽ-anãkop3C-recline-RSLT.SG.HZNTL-THMAYBE 3	
	'She may be lying down.'	
	casual discourse: 2017-08-?20	
b.	Kat'aronãpenãwapsikatsãkat'at-onãpenãw-apsikat-sẽ-awhat-INSREALLY?!FOCUS1SG-think.about-RSLT.SG.HZNTL-	<i>nã</i> nã ГН PROG
	oyãõka?o-yẽ-ao-ka1SG-AUXhzntl-TH1SG-?AUX.SGhabit'Just what am I thinking about, sitting here?'casual discourse: 2016-11-30	
c.		<i>nã</i> nã PROG

(based on casual discourse: 2016-11-30)

Unsurprisingly, -psē/-pnē/-psira can also combine with those clause typers that do not trigger any

evidential neutralization. (381) illustrates with $n\tilde{e}$ 'YES/NO'.¹¹

(381) Èkgo e'a nẽ ke 'en eaora etera e-ek-o e-'a e-tet-a nẽ ke 'en e-aot-a [2SG-house-INS 2SG-leave.SG-TH 2SG-go.SG-TH 2SG-when.SG] Y/N POLITE.FUT 2SG ham eapsikatsam? ham e-apsikat-**se**-ap hither 2SG-think-RSLT.SG.HZNTL-ADV.FOC 'When you arrive at your home, are you going to think of this place, sitting?' casual discourse: 2016-02-17

Diagnostic #3: the resultative sits closer to the root than the evidential does.

Resultative *-psē/-pnē/-psira* and evidential *-pnē/-psira* can cooccur in a single clause. This is attested in spontaneous discourse, as shown by (382a).

(382) Evidential occurs outside of resultative

a.	Waptsitwatsemnã	'on.
	w-apsitwat- sẽ-mnẽ -a	'on
	1sg-forget-RSLT.SG.HZNTL-EV.SG-TH	1SG
	'I have forgotten, sitting (NON-WITNESS	ED).'
	casual discourse: 2017-08-02	
b.	Waptsitwatnemnã	'on.
	w-apsitwat- nẽ-mnẽ -a	'on
	1SG-forget-RSLT.SG.VRTCL-EV.SG-TH	1SG
	'I have forgotten, standing (NON-WITNE	SSED).'
	elicitation: 2017-08-03	
	(based on casual discourse: 2017-08-02)	
	(see also elicitation on 2017-08-14)	

This minimal pair demonstrates that when the resultative and evidential cooccur on a single verb, the former sits closer to the root than the latter does. In a framework where morphology and syntax work in tandem (Baker 1985), this generalization means that the resultative must head a syntactic projection lower than that of evidential in the clausal spine. The difference in height is also illustrated by the position of the two auxiliaries in (380b), above. In that example horizontal *-psē* sits

¹¹My corpus does not contain any examples of the resultative occuring together with *mãkērõ* 'RIGHT?' or '*aet* 'NEGATIVE LAMENT'. This is in all likelihood an accidental gap and will be verified through targeted elicitation during my next fieldwork trip.

on the lexical verb *apsikat* 'think about', so it occurs to the *left* of the two auxiliaries. But as we already saw in §6.4, the evidential must always occur to the *right* of auxiliaries. This difference in behavior reinforces the conclusion that the resultative and the positional occupy distinct positions in the clause. (See §6.8.3, below, for a phrase structural formalization.)

Observe that the resultative varies in form in (382) – in keeping with the change from a sitting to standing subject – but the singular evidential stays the same: it is always *-pne*. This proves that the evidential, unlike the resultative, does not make a positional contrast.

Diagnostic #4: the resultative can occur inside of non-finite nominalizations.

Resultative *-psē/-pnē/-psira* can occur inside of non-finite nominalizations that are incapable of containing evidential morphology. (383) illustrates with the deverbal nominalizer *-ap* (§3.7.2). In (a), the nominalized VP *teanemsam* is the possessor of *hi'a* 'like, love, affection'; in (b), the nominalized VP *kimamsam* serves as the sentential subject and thus bears the nuclear case.¹²

(383) Resultative occurring within non-finite nominalizations with -ap

a.	wild.deer-NUC	te-anẽ- msẽ-am	<i>hi'a.</i> hi'a G.HZNTL-NMZ <i>ap</i> like	
b.	casual discourse: Poare kiman	2016-11-29 nsãen.		
	-	NCL-place- RSLT.SG us / for one to be pla	HZNTL-NMZ <i>ap</i> -NUC ced horizontally [within a hammock].	,

¹²In example (383b) the resultative's singular horizontal allomorph, *-pse*, cooccurs with the plural pronominal proclitic ki. This may look at first like an agreement mismatch in terms of number, but it is not. The proclitic ki-can be used as a generic impersonal possessor, in which case it no longer triggers plural agreement. A comparable example is (ix), which was spoken by a bored teenager. Here ki- cooccurs with the explicitly singular auxiliary ye.

(ix) Erop'ae kietatyãen.

erop'a e **ki**-etat-**yẽ**-am-en bad 3 **one-**just-**AUX**_{hzntl}-NMZ_{ap}-NUC 'It's bad when we / when one just lies around.' casual discourse: 2017-08-?29 (384) provides two examples of resultative *-psẽ/-pnẽ/-psira* inside of a non-finite adverbial clause. In (a) singular horizontal *-psẽ* occurs in a non-finite 'while' clause marked with *-ro'are*. (See §5.4.2 and §5.5.1 for more examples of *-ro'are*.) The speaker of this utterance was referring to a house then under construction. Homes on the Rio Branco Reserve are one-story, so they are conceptualized as sitting rather than standing; this is why the speaker used the horizontal allomorph of the resultative. In (b) *-psẽ* occurs inside of a purposive clause headed by *-tenã*, a suffix which requires its complement to have been nominalized with *-ap* (§3.7.2).

(384) Resultative occurring within non-finite adverbial clauses

- a. *Èy pe'eronam ekget tepoatkatsẽrõ'are.*e-s pe'eronam ek-et te-poatkat-sẽ-ro'are
 2SG-come.SG FUT.2SG+again [house-NUC 3C-be.ready-RSLT.SG.HZNTL-while]
 'You will come back here again when the house is already ready/finished (SITTING).'
 casual discourse: 2016-12-09
- b. Waet o'era ãpea ko 'on o-'et-a wap-et ãpe-a ko 'on hammock-NUC hang-TH POLITE.FUT 1SG [1SG-sleep-TH omamsamtenã. o-mã-msẽ-am-tenã 1SG-place-RSLT.SG.HZNTL-NMZ_{ap}-PURP] 'Let me hang up my hammock in order for me to sleep, placed horizontally.' casual discourse: 2015-10-11

Evidential *-pnẽ/-psira* occurs in fully finite clauses only; it never appears in the kind of non-finite constructions given in (383) and (384).

6.8.3 Discussion

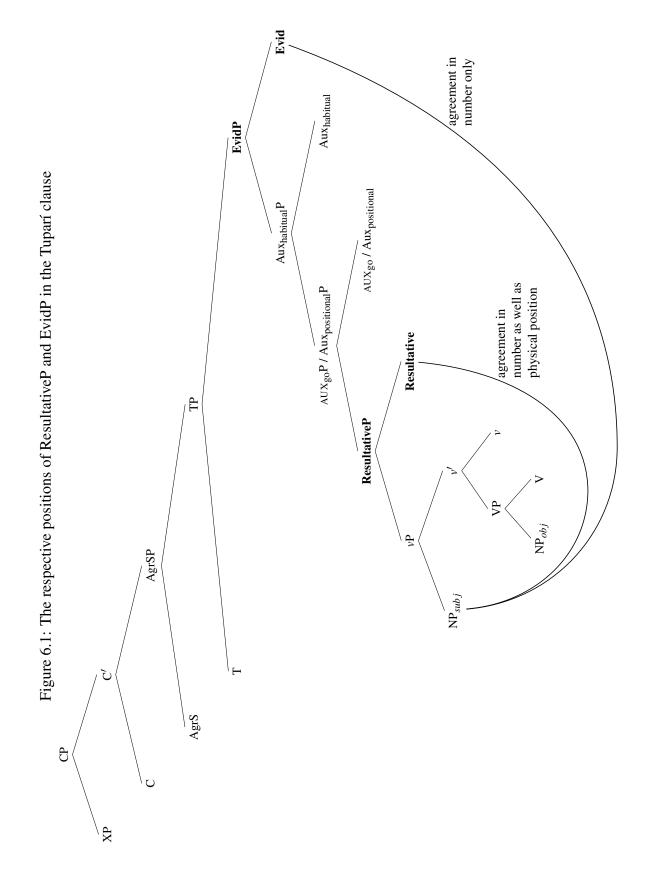
Let us summarize the diagnostics that differentiate between evidential *-pnẽ/-psira* and resultative *-psẽ/-pnẽ/-psira*. First, while the evidential is restricted to past tense contexts, the resultative can occur with non-past tense morphology as well as in imperatives. Second, while the evidential cannot occur with *nãkop* 'MAYBE', *nãpe* 'REALLY?!' or *mãkẽrõ* 'DUNNO', the resultative can occur with the full range of 2P clause typers. Third, the resultative sits closer to the root than the evidential does. Fourth, the resultative can appear inside of non-finite nominalizations which are

never capable of containing evidentiality or tense. These four diagnostics prove that resultative *-psē/-pnē/-psira* (which distinguishes position with singular subjects) and evidential *-pnē/-psira* (which makes no positional distinction) are independent suffixes synchronically.

Translating the findings of these diagnostics into phrase structure gives the tree in Figure 6.1. Here the Evidential Phrase occurs immediately underneath the Tense Phrase, in the inflectional layer of the clause, while the projection headed by *-psē/-pnē/-psira* occurs immediately above the VP/vP, in the region where thematic roles are assigned and argument structure is manipulated.¹³ ResultativeP and EvidP are positioned on opposite ends of the auxiliary projections that were motivated in the conclusion to Chapter 4 (see also §5.1). The fact that a single utterance is unlikely to have all of this functional material overtly exponed is not problematic; the important point is instead that the resultative surfaces on the lexical verb even when one or more auxiliaries are 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 6.1 captures the distinct linear positions of resultative *-psē/-pnē/-psira*, on the one hand, and evidential *-pnē/-psira*, on the other. What Evid⁰ and Resultative⁰ share despite their different heights is agreement with the subject, assumed (as in Chapter 5) to be base-generated in Spec,v.

The fact that resultative $-ps\tilde{e}/-pn\tilde{e}/-psira$ can occur inside of non-finite nominalizations – which are never able to include evidential or tense morphology – is also predicted by the tree in Figure 6.1. This is because non-finite nominalizations may only include as much material as an Aux_{habitual} Phrase. Since ResultativeP sits underneath the auxiliary projections, it follows that non-finite nominalizations that contain auxiliaries should be able to include resultative morphology as well. Figure 6.2 shows the maximum height in the spine where nominalizers such as -apcan attach, namely, above the auxiliary projections but underneath the Evidential Phrase. (385) provides examples of purposive clauses that contain auxiliaries independently known to occupy positions higher than ResultativeP but lower than EvidP: horizontal $y\tilde{e}$, habitual '*eka*. We have

¹³The TP exhibits mixed or indeterminate headedness in Figures 5.12 and 5.14. This split in headedness is not important for making sense of the respective positions of the evidential and resultative suffixes, since EvidP and ResultativeP both sit beneath the TP. I give only a head-initial TP in Figure 6.1 to keep the tree readable.



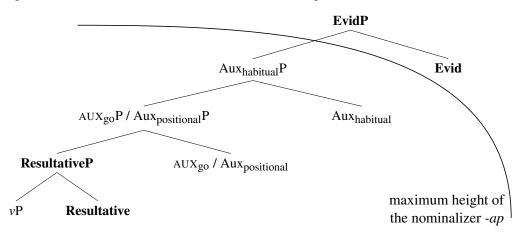


Figure 6.2: ResultativeP and EvidP differ with regards to non-finite subordination

already seen a purposive clause that contains the resultative: *o'era omamsamtenã* 'in order for me to sleep, placed horizontally' (example 384b).

$(0,0,\tau)$	T 1	C C	•	1	containing auxilia	•
(385)	Hyamplac	of non finita	nurnociva	01011000	containing auvilia	1100
(.)(.))			DUIDOSIVE	Clauses	Containing auxina	
()			P P			

- a. *èut'eutkippe* e'era eyamtenã
 e-eut'eutki-ppe e-'et-a e-yẽ-am-tenã
 2SG-[fill.up]²-VBZ_{ki}-after 2SG-sleep-TH 2SG-AUX_{hzntl}-NMZ_{ap}-PURP
 'in order for you to sleep, lying down, after having filled up eating'
 casual discourse: 2016-12-12
 b. *kire irowa 'ekaptenã*
- kire irowa **'eka-ap-tenã** person photograph-TH AUX.SG_{habit}-NMZ_{ap}-PURP 'in order for you to regularly take photos of people' casual discourse: 2017-11-27

Since ResultativeP sits lower than the auxiliary phrases – and since these are in turn positioned lower than EvidP – the ability of resultative but not evidential morphology to appear inside of these non-finite clauses follows from Figures 6.1 and 6.2.

Note that it is not possible to conflate the projection headed by $-ps\tilde{e}/-pn\tilde{e}/-psira$ with the one headed by the singular positional auxiliary $y\tilde{e}$. This is because a single clause can contain both $-ps\tilde{e}/-pn\tilde{e}/-psira$ and $y\tilde{e}$ – see (380b). That example shows that ResultativeP is distinct from (and lower than) Aux_{positional}P, even though the heads of the two projections can contribute overlapping positional information.

To my knowledge no affixes comparable to evidential -pnē/-psira or resultative -psē/-pnē/-psira have been described for the other members of the Tuparían branch of Tupían. It could be that such affixes do exist elsewhere in the Tuparían branch 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 -pnē/-psira and resultative -psē/-pnē/-psira developed, the tool of internal reconstruction (Lehmann 1992:chapter 8, Givón 2000, Campbell 2013:chapter 8) does permit us to hypothesize a general process of change that led to the present state. It is likely that the evidential and the resultative share a common origin, given their overlap in all allomorphs other than *-pse*. 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 spine, ultimately coming to occupy a position in the inflectional rather than thematic layer of the clause. Such a reanalysis would have required information about the physical state of an object ('the pen is in a fallen position') to be reinterpreted as information about the process that led to that physical state ('the pen fell [NON-WITNESSED]'). This is a very plausible 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 evidential is obligatory in the following utterance:¹⁴

(386) CONTEXT: My friends and I are walking on a road in the town of Alta Floresta D'Oeste. We see a dead owl by the side of the road, and my friend says this to her daughter.

Poppop'aenãtey'õpopsira.poppop'ae nãte-y-õpo-**psira**owl3 FOCUS 3C-OBJ.FOC-kill-EV.PL

'It's an owl that they killed (NON-WITNESSED).' / 'What they killed was an owl (NON-WITNESSED).'

casual discourse: 2017-08-03

The dead owl constituted clear visual evidence that a killing event had transpired. Yet this evidence

¹⁴Consultants have confirmed that the plural evidential *-psira* is preferable to the singular *-pne* in (386) because one does not know how many actors were involved in the killing of the owl. The singular equivalent to (386), *Poppop'ae* $n\tilde{a}$ tey' $\tilde{o}popne$ 'It's an owl that he/she killed (NON-WITNESSED)', is grammatically well-formed but infelicitous if the number of actors is unknown.

was not sufficient for the speaker of (386) to omit *-psira*; having not seen the killing of the owl take place, she was obligated 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 reanalysis proposed here: an observation about the current physical state of an object, marked with resultative *-psẽ/-pnẽ/-psira*, came to be reinterpreted as a non-firsthand statement about the action that led to that state.

This reanalysis is consistent with what is known from the development of evidentiality in Eurasia (Victor Friedman, p.c.; see also Friedman 2018). Perfect or resultative morphology has developed into non-witnessed or non-firsthand marking in multiple families of Eurasia; see for instance Jalava (2014, 2017) on this grammaticalization process in the Uralic language Tundra Nenets. So the hypothesis that resultative marking gave rise to evidential morphology in Tuparí enjoys crosslinguistic precedent.

But a major question remains unanswered: if evidential *-pnē/-psira* developed out of resultative *-psē/-pnē/-psira*, why doesn't it express physical position as well? Given that evidential *-pnē/-psira* is used only to describe occurrences that one did not see – and given that it is inherently difficult to specify the physical position of participants in a non-witnessed event – the resultative's positional contrast may have been neutralized when the evidential developed into an autonomous affix. An alternative possibility: at the point in time when the evidential grammaticalized, the resultative may not have yet distinguished between horizontal and vertical subjects. It is plausible that at that point the ancestor of modern *-psē/-pnē/-psira* expressed only the core resultative meaning; the contrast between horizontal *-psē* and vertical *-pnē* may have developed only after evidential *-pnē/-psira* became a distinct morpheme.

There exists some support for this hypothesis. Of the two singular allomorphs of the resultative, horizontal *-pse* is rampant in everyday speech. But while speakers readily produce and recognize vertical *-pne* in interviews, tokens of this allomorph are rare in everyday discourse; the only nonelicited example of this allomorph in my entire corpus is the one given in (378c), above. This skewed distribution suggests that vertical *-pne* has been losing ground to horizontal *-pse*, such that the latter constitutes a recent diachronic innovation. If this right then we have support for the hypothesis the ancestor of the resultative – like the modern-day evidential – agreed with the subject in number but not in physical position. The lack of a horizontal/vertical distinction in the evidential would then be an artifact of when it grammaticalized.

6.9 Conclusion

This chapter has shown that Tuparí makes a systematic witnessed versus non-witnessed distinction, subject to certain requirements of tense (the distinction is made only in the past) and clause type (the distinction is neutralized by *mãkẽrõ* 'DUNNO', *nãpe* 'REALLY?!', or *nãkop* 'MAYBE'). Despite these restrictions, evidentiality is a pervasive aspect of Tuparí grammar and discourse. In stretches of speech that relate actions not witnessed by the speaker, *-pnẽ/-psira* appears in each and every finite clause – see (347), above, for a representative textual excerpt.

Semantically, *-pnē/-psira* can be used only in contexts that presuppose commitment on the part of the deictic origo to the veracity or reliability of *p*. This analysis accounts for why *-pnẽ/-psira* cannot be used in contexts of surprise, uncertainty, or ignorance, as well as for its ability to project out of finite embedded clauses. The presuppositional analysis further explains the rarity of *-pnẽ/-psira* in quotative contexts; accounts for the ability of *-pnẽ/-psira* to appear in the embedded complements of factives like *puop'om* 'not know, be unaware of'; and captures the incompatibility between *-pnẽ/-psira* and the counterfactual conditional suffix *-kot'oy*.

Although the resultative and that of the evidential differ according to a battery of synchronic tests, it is clear that the two suffixes share a common historical origin. The diachronic development proposed here is that information originally expressed with the resultative ('the pen is in a fallen position') was reinterpreted as a non-witnessed statement about a past occurrence ('the pen has fallen [NON-WITNESSED]').

On the proposal of Brugman and Macaulay (2015), a crosslinguistically robust characterization of evidential morphology has only two absolute criteria: (*a*) such morphology must primarily mark source of evidence (rather than, say, mood or aspect) and (*b*) such morphology must belong to the

grammatical system rather than to the lexicon. The Tuparí suffix *-pnē/-psira* meets both of these criteria. The semantic contribution of *-pnē/-psira* is that the speaker did not witness what is being related; hence it marks that the source of evidence is not firsthand visual. The suffix also qualifies as functional rather than lexical: it occupies a fixed position in the inflectional layer of the spine and does not resemble an optional adverbial. It is worth emphasizing that if one were to adopt a definition of evidential morphology more restrictive than Brugman and Macaulay's – that is, if one were to consider obligatoriness and deictic orientation to be criterial for evidentiality – then *-pnē/-psira* would still qualify. The witnessed/non-witnessed distinction marked by *-pnē/-psira* is as obligatory as tense is in all past declaratives. And the deictic origo of that distinction is always determined by the kind of clause at hand: the origo remains anchored to the speaker in declaratives and tag questions, but switches to the addressee in polar questions containing $n\bar{e}$ 'YES/NO' and in *wh*-questions that lack an overt clause-typing particle (Table 6.2).

One might wonder whether past tense declarative clauses which do not contain $-pn\ddot{e}/-psira$ get their obligatory [+WITNESSED] interpretation by pragmatic mechanisms. The behavior of evidentiality in embedded contexts provides clear evidence that $-pn\ddot{e}/-psira$ involves a presupposition of commitment to p on the part of the deictic origo (§6.7). Simplifying considerably, the principle of MAXIMIZE PRESUPPOSITION (Heim 1991; Chemla 2008; Singh 2011; Schlenker 2012; Bochnak 2016) requires speakers to use an utterance with the strongest possible set of presuppositions when indicating source of evidence. Hence whenever a non-witnessed interpretation is intended, this principle would obligate the speaker to employ $-pn\ddot{e}/-psira$. If the speaker does not do so, then the non-witnessed interpretation is excluded and the witnessed interpretation is arrived at. But there are problems with this kind of approach. First, Gricean principles such as Maximize Presupposition cover at-issue meaning, but evidentials are often argued to contribute non-at-issue meaning (Jessica Rett, p.c.; see Murray 2016, 2017 on Cheyenne as well as Speas 2008, 2018). So while it is appealing to use Maximize Presupposition to explain how utterances without $-pn\ddot{e}/-psira$ get interpreted as [+WITNESSED], this analysis runs into non-trivial problems concerning the kind of meaning that evidentials contribute. Second, if pragmatic mechanisms were responsible for the [+WITNESSED] interpretation that arises in the absence of *-pnē/-psira*, we would not expect it to be necessary for a speaker to mark the evidential distinction in every finite clause. It ought to be sufficient to state one's evidential position at the beginning of a stretch of discourse and leave it at that. But this is not how Tuparí works: speakers of this language must draw the witnessed/non-witnessed distinction anew in each and every past tense declarative clause. Since pragmatic reasoning does not lessen this grammatical requirement, it does not seem viable to pursue a pragmatic explanation for why past tense declaratives that lack *-pnē/-psira* are always interpreted as [+WITNESSED].

Several areas of research merit further investigation. There are two past tense configurations in Tuparí that never combine with *-pnẽ/-psira*. The durative suffix *-pbi'a* is like *-t* 'NEAR PAST' in that it occurs at the far right edge of the predicate complex. When used for past habitual actions, *-pbi'a* is felicitous only if the speaker witnessed (at least some iterations of) those actions. Hence we have contrasts like the following:

(387) Durative -pbi'a means [+WITNESSED] in declarative clauses

a. CONTEXT: A woman asserts that a deceased non-indigenous man had learned the Tuparí language.

Puopnambi'aeTupari ema'erẽ.puop-nẽ-a-**mbi'a**e Tupari ema'ẽ-reknow-VBZ $_{n\tilde{e}}$ -TH-**DUR**3 Tuparí language-OBL'He knew the Tuparí language (WITNESSED).'casual discourse: 2015-10-08(see also elicitation on 2017-08-06)

b. $Puopn\tilde{a}$ $\tilde{o}pot$ $i'ekapn\tilde{e}$ Tupari ema'er \tilde{e} . puop-n \tilde{e} -a $\tilde{o}pot$ i-'eka-pn \tilde{e} Tupari ema' \tilde{e} -re know-VBZ_{n \tilde{e}}-TH **DISTANT.PAST** 3-AUX.SG_{habit}-EV.SG Tuparí language-OBL 'He knew the Tuparí language (NON-WITNESSED).' elicitation: 2015-10-10

Example (a) was spoken by a woman who knew the man in question and who had therefore witnessed his knowledge of Tuparí firsthand. But if she wished to comment on the linguistic competence of someone she had never met, *-pbi'a* would be unacceptable. In this case she would need to use the periphrastic alternative in (b): *-pbi'a* disappears, the distant past particle *õpot* occurs in 2P, and the temporally unspecified habitual auxiliary *'eka* (§4.5.2) hosts the evidential suffix. A tidy example of how *-pbi'a* necessarily includes a [+WITNESSED] semantics comes from speakers' expression of their own ignorance. If I say (388) – where *-pbi'a* combines with *puop'om* 'not know' – this can only mean that I was aware of my ongoing failure to know something. (One possible context: if in my childhood I frequently heard people speaking Makurap but could not understand them, then I was a witness to my ignorance of their language.)

(388) Puop'omnambi'a 'on. puop-'om-nē-a-mbi'a 'on know-NEG-VBZ_{nē}-TH-DUR 1SG
'I was ignorant / I did not know (WITNESSED).'

But durative *-pbi'a* is unacceptable if I have just learned a piece of information, for prior to learning that piece of information I cannot be a volitional witness to my own ignorance. In this context the kind of periphrasis first shown in (387b) returns. (389) is how one speaker corrected me when I spoke (388), with durative *-pbi'a*, after learning a new piece of information:

(389) Puop'omnã 'on nã otet'epnẽ õren. puop-'om-nẽ-a 'on nã o-tet'e-**pnẽ** on-en know-NEG-VBZ_{nẽ}-TH 1SG FOCUS 1SG-AUX_{go}.SG-**EV.SG** 1SG-NUC 'Me, I was ignorant / I did not know (**NON-WITNESSED**).' casual discourse: 2016-12-14 (see also casual discourse on 2017-08-04)

The contrast between (388) and (389) shows that Tuparí grammar distinguishes between 'known knowns', 'known unknowns', and 'unknown unknowns' (to borrow Donald Rumsfeld's infamous distinction). Though known knowns and known unknowns may be marked with durative *-pbi'a*, unknown unknowns must take evidential *-pnẽ/-psira* – and this requirement rules out using *-pbi'a*.

What is not yet understood is how *-pbi'a* behaves in the full range of non-declarative contexts. Can this suffix combine with those clause typers known to neutralize the witnessed/non-witnessed distinction? Though absence of evidence does not equal evidence of absence, it is telling that my corpus of texts and of everyday Tuparí speech does not contain any examples of *-pbi'a* cooccuring with *mãkẽrõ* 'DUNNO' or *nãpe* 'REALLY?!', and just one example of it cooccuring with *nãkop* 'MAYBE'. That one example is given in (390): (390) CONTEXT: A speaker sees a photograph from the 1980s of my father running a race.

Tetaray'eromkapbi'a $n\tilde{a}kop$.te-taray'e-ro-'om-ka-a-**pbi'a** $n\tilde{a}kop \varnothing$ 3C-grow.tired-NMZ_{ro}-NEG-VBZ_{ka}-TH-**DUR MAYBE** 3'Perhaps he didn't grow tired.'

casual discourse: 2016-11-26

More research is needed to determine how durative *-pbi'a* behaves in non-declarative contexts, but the vanishingly small number of such examples in my corpus already suggests that this suffix may be restricted to a subset of clause types. That restriction makes sense given that *-pbi'a* has to be interpreted as [+WITNESSED] in declaratives.

Of related interest is the same-day past construction accomplished with the auxiliaries 'e and a (§4.3.2). Just like durative -pbi'a, the same-day past receives an explicitly [+WITNESSED] interpretation in declaratives; it cannot cooccur with evidential -pnẽ/-psira. But the same-day past is nonetheless attested in clauses bearing the clause typer nãkop 'MAYBE', which is known to neutralize the witnessed/non-witnessed contrast.

(391) Same-day past is [+WITNESSED] in declaratives, but it can still combine with *nãkop*

- a. *Teã'ã sa.*te-ã'ẽ-a s-a
 3C-come.PAUC-TH 3-AUX.PL
 'They-PAUC have arrived (WITNESSED).' [same day as, but several hours prior to, UT] common in everyday speech
- b. *Teã'ã nãkop sa.* te-ã'ẽ-a **nãkop s-a** 3C-come.PAUC-TH MAYBE 3-AUX.PL 'Maybe they-PAUC have arrived.' casual discourse: 2015-12-23

More data collection is a must if we are to determine how durative *-pbi'a* and the same-day past – which are incapable of ever combining with evidential *-pnẽ/-psira* – behave in the full range of non-declarative clause types. The data available at present indicate that the evidential neutralization that applies with *nãkop* (as well as *mãkẽrõ* 'DUNNO' and *nãpe* 'REALLY?!') is asymmetric.

Tense-aspectual constructions which in declarative contexts are obligatorily interpreted as witnessed are capable of combining with evidentiality-neutralizing clause typers, in which case the [+WITNESSED] component of their semantics is lost. The explicitly non-witnessed *-pnē/-psira*, however, is incompatible with the evidentiality-neutralizing clause typers. What this system intuitively suggests is that Tuparí makes a distinction between 'nothing' and 'zero' (see Dixon 2011 for discussion with regards to evidentiality in Jarawara, an Arawá language of Brazil). In contexts where explicitly non-witnessed morphology is permitted, the absence of *-pnē/-psira* is interpreted as [+WITNESSED]; for Dixon this counts as evidence for a semantically contentful zero morph. But that interpretation does not arise in clauses where the witnessed/non-witnessed contrast is neutralized, which is to say that the semantically contentful [+WITNESSED] zero used in declaratives is replaced in evidentiality-neutralizing contexts by a semantically empty nothing.

Appendix 6.A Concerning the differences between the adverbial prefix *tom'en-*'without someone being aware' and evidential *-pnẽ/-psira*

This appendix examines the adverbial prefix *tom'en-*, first presented and discussed in §3.5.3. This prefix contributes a meaning similar to that of evidential *-pnẽ/-psira*: it is used when some participant in the event being related is oblivious to that event as it transpires. The exact identity of that participant, however, is subject to contextual variability and is therefore determined on pragmatic grounds.

The following pair of examples shows the flexibility of interpretation concerning the origo of *tom'en*-. In (a) a speaker in a different room suspects that her sister and I are passive agressively arguing with her. Here the deictic center of *tom'en*- is the speaker herself. Observe that in this context all the participants are animate and human: the speaker, her sister, and me. A comparable example is given in (b), which is what one speaker said to me after I left town for a few days without providing any advance notice to her or her family members.

(392) Two examples of *tom'en*-

a. Wetom'en'ẽã nãkop wat. w-etom'en-'em-a nãkop wat 1SG-TOM'EN-fight.with-TH MAYBE 2PL 'Perhaps you-PL are fighting with me, without my being aware.' elicitation: 2017-08-03 (based on casual discourse: 2016-12-11) b. *Ètom'enwaro'omka* 'en! ke e-etom'en-wat-ro-'om-ka-a ke 'en 2SG-TOM'EN-go.away-NMZ_{ro}-NEG-VBZ-TH POLITE.FUT 2SG 'Don't go away without our-EXCL being aware!'

casual discourse: 2016-12-17

An important difference between (392a) and (392b) is that the verb in the former example is transitive – 'em 'fight with' – so all the relevant discourse participants are morphosyntactically represented: the object is first person singular (the speaker), the subject is second person plural (the two addressees). The ignorant party to which tom'en- refers is therefore encoded in the utterance itself. This is not true for (392b), where the verb is intransitive wat 'go away, flee, leave': the only speech act participant overtly represented in the sentence is the second person singular subject, which is to say, the addressee. Nonetheless, the interpretation of tom'en- concerns the speaker and her friends. What this shows is that tom'en- can pick out as its deictic origo a person or persons who are situationally relevant even if they are not morphosyntactically represented in the utterance.

Although both utterances in (392) have agentive human subjects, *tom'en-* does not require the sentential subject to be human or even animate. In (393a) the subject is the bee that stung the addressee. And in (393b) the subject is a pen that has gone missing.

(393) tom'en- can occur with [-HUMAN] or [-ANIMATE] subjects

a. CONTEXT: I feel an itch on my arm and look down to see a small red bump. A local mother looks at my arm to figure out what has happened.

Kapbenãètom'ensipnan.kapenãe-etom'en-si-pnẽ-a-nbee3 FOCUS 2SG-TOM'EN-sting-EV.SG-TH-NUC'It was a bee that stung you without your being aware (NON-WITNESSED).'casual discourse: 2017-08-29

b. CONTEXT: As I unsuccessfully search for a pen inside of my backpack, a speaker suggests that it might be lying by my feet.

Het'aere nãkop tetom'enyam. het'aere nãkop Ø te-**tom'en**-yẽ-am where.you.are MAYBE 3 3C-**TOM'EN**-AUX_{hzntl}-ADV.FOC 'Perhaps it's lying where you are, without your being aware.' casual discourse: 2017-09-02

Just as a bee does not verbally communicate its intention to sting, it is impossible for a missing pen to inform anyone about its whereabouts. What these examples show is that the semantic core of *tom'en-* is not about the actor's failure to communicate but rather the patient or experiencer's failure to perceive.

The affixes -*pnẽ/-psira* and *tom'en-* contribute an intuitively related kind of meaning: someone was not present to witness, or was not aware of, the event that is related. Yet there are crucial differences. The deictic orientation of *-pnẽ/-psira* is rigid: it is anchored to the speaker in declaratives and biased questions but flips to the addressee in yes/no questions and unmarked *wh*-questions. Adverbial *tom'en-* has a much wider deictic range: it may refer to the speaker or to the addressee, depending on context. That *tom'en-* is not as deictically rigid as *-pnẽ/-psira* is clear from (393a), where *-pnẽ* is present because the SPEAKER did not see the stinging event but where *tom'en-* indicates that the ADDRESSEE also failed to do so. What is more, *tom'en-* may appear in a wider range of clause types than *-pnẽ/-psira*: in (392a) and (393b) *tom'en-* combines with *nãkop* 'MAYBE', which always neutralizes the witnessed/non-witnessed distinction. Furthermore, *tom'en-* is licit in non-past contexts, as shown by its cooccurrence with *ke* 'POLITE FUTURE' in (392b).

Overall, *tom'en-* differs from evidential *-pnẽ/-psira* in much the same fashion as resultative *-psẽ/-pnẽ/-psira* does. Like *-psẽ/-pnẽ/-psira*, *tom'en-* is not subject to the rigid clause typing and tense restrictions that circumscribe the marking of the witnessed/non-witnessed evidential contrast. Furthermore, there are no known circumstances which require *tom'en-* in order for an utterance to be grammatical. Evidential *-pnẽ/-psira*, in contrast, instantiates an obligatory inflectional category: all past tense declaratives must be marked as witnessed or non-witnessed.

Appendix A

Phonological description

The objective of this appendix is to provide a description of Tuparí phonetics and phonology, including discussion of various morphophonological processes. The data and analysis presented here build upon earlier work (Singerman 2016). Readers interested in how nasality operates in Tuparí are referred to that article, which examines the ramifications of the language for the typologies of Walker (2000, 2003) and Piggott (1992, 2003).

The phonology of Tuparí bears a strong resemblance to what has been described for other Tupían languages of Rondônia – especially the closely-related Makurap (Braga 2005), Sakurabiát (Galucio 2001), Wayoró (Nogueira 2011), and Akuntsú (Aragon 2014) – and readers familiar with those languages will find much that is familiar here. This appendix is structured as follows. §A.1 presents the inventory of vocalic and consonantal phonemes, lays out the set of basic phonotactic restrictions, and discusses several phonemes of restricted occurrence. §A.2 offers some brief comments on how the language's stress system operates, a topic in need of further research. §A.3 then discusses multiple phonological processes that affect the realization of consonants, principally at morpheme boundaries. The phonological effects of the theme vowel -*a* and several other /*a*/-initial affixes (-*ap* 'NMZ_{*ap*}', -*ap* 'ADV.FOC', -*at* 'ACTOR') are discussed in §A.4. In §A.5 I address the phonology of Portuguese loanwords.

§A.6 reassesses four claims about Tuparí phonology put forward in past literature.¹ In the hopes of excising errors from the documentary record, I devote attention to the following claims here. First, some authors have stated that Tuparí permits the tautosyllabic consonant cluster /jt/ in coda position. This cluster is in fact just a single segment, the palatal glide /j/, which is realized as an unreleased palatal stop ([c[¬]]) in coda position. So the language does not allow any tautosyllabic clusters outside of Portuguese loanwords. Second, certain reconstructions of Proto-Tupían have

¹I have not been able to locate a copy of Alves (1991), an MA thesis focused on the language's phonetics and phonology. Here I assume that the description and analysis in Alves (1991) was superseded by that author's more extensive doctoral dissertation (Alves 2004).

assumed that the Tuparí phonemic inventory contains glottalized /p[?]/. This is in fact a heterosyllabic sequence of coda /p/ and onset /?/. Multiple diagnostics show that the sequence of /p/ and /?/ behaves like all of the language's other CC sequences; it does not have phonemic status. Third, Seki (2001) analyzes [ps] as the allomorph of /p/ prior to /i/, but evidence from suffixal allomorphy demonstrates that this [ps] is synchronically just a heterosyllabic sequence of /p/ and /s/. Finally, I show that the description in Singerman (2016) did not fully capture the behavior of nasal spreading from verbal prefixes. Prefixes farther away from the verbal root than causative *m*-/ \tilde{o} - (see the two templates in §3.1) fail to trigger rightward nasal spreading, even under phonotactic conditions that would otherwise be amenable to nasalization.

A.1 Phonemic inventory and phonotactics

A.1.1 Vowels

Tuparí possesses five oral vowels. Phonemic /u/ is written as plain *u* in the language's standard orthography, utilized in *Wan Tupari Ema'en Nĩka!* (Tupari et al. 2016) and adopted here as well. Table A.1 provides the inventory, and (394) gives examples of each vowel occuring in between /k/ and /j/ (realized as $[c^{-}]$ in coda position).

	front	central	round
high	i	ŧ	
mid	e		0
low		а	

Table A.1: Oral vowels

(394) Oral vowel contrasts

a. okoy

```
[o.koc<sup>¬</sup>]
'my elder sister (of woman)'
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b. akay

[a.kac[¬]] 'sister' (vocative form of address, used by women) c. eykey

[ec'.kec']
'your-SG elder sister (of woman)'

d. kuy

[kuc']
'ground'

e. kiynẽ

[kic['].nẽ] 'done by us'

Nasality is a contrastive feature on all five of these vowels.

1.0000000	<i>.</i>	
(395)	Nas	sal vowel contrasts
	a.	ãpe
		[ã.pe]
		'comb'
	b.	õpà
		[õ.pa:]
		'hit'
	c.	hĩto
		[hĩ.to]
		'necklace'
	d.	<i>ẽ</i> ?ẽkap
		[ẽ.?ẽ.kap]]
		'your-SG dancing'
	e.	ũrorẽ
		[<i>š</i> ĩ.õĩ. <i>̃</i> ı]
		'far over there'

The nasal vowel / \tilde{u} / has not been recognized in all of the previous literature on the language; for instance, Seki (2001) does not include it in her phoneme inventory. Though rare, it seems that this vowel does exist – see (395e), above, where it serves as the first segment of the demonstrative root $\tilde{u}r\tilde{o}$ 'far off place'.

A.1.2 Vowel length

Length is also contrastive on all five oral vowels, although Alves (2004) did not include /e:/ in her phonemic inventory. Per the standard orthography adopted by the Tuparí community, I write all long vowels with a grave accent.

- (396) Length contrast on oral vowels
 - a. 'àpoy [?a:.'\oc] 'paternal aunt' (c.f. *apo* [a.\opluso] 'who') b. wì [βi:] 'axe' (c.f. *wit'i* [βit⁷.?i] 'açai') c. ?ù [?ʉ:] 'Genipa americana fruit' (c.f. *pu?u* [фн.?н] 'late') d. *pè* [pe:] 'clothing, skin' (c.f. *pep'o* [pep'.?o] 'wing') e. *pòt*

[φo:t[°]] 'old, former' (c.f. *pot'a* [φot[°].?a] 'wild pig')

Long nasal vowels are rare. They occur principally when other nasal material is also present. Both of the nominals in (397), for instance, end in /n/ (and the second one starts with /m/, as well).

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(397) Long nasal vowels
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a. *tàn* [tã:n] 'long, tall' b. min
[mī:n]
'hummingbird'

Derived long vowels also occur with pronominal proclitics:

- (398) Derived long vowels that occur with pronominal proclitics
 - a. o- '1SG' + op [op'] 'father' $\rightarrow \partial p$ [o:p'] 'my father'
 - b. e- '2sG' + ek [ek] 'house' $\rightarrow ek$ [e:k] 'your house'
 - c. $e^{-2SG'} + et\tilde{a}reman^{-1}$ (not again) $\rightarrow et\tilde{a}reman^{-1}$ (as in $et\tilde{a}reman^{-1}ipto^{-1}omkap^{-1}a^{-1}e^{-1}$ (you are not going to return again); see 163a in Chapter 3)

A.1.3 Consonants

The Tuparí consonant inventory has five places of articulation: labial, alveolar, palatal, velar, and glottal (Table A.2). Voicing is distinctive in the series of oral stops and, to a limited degree, among the affricates. While phonemic /d/ is absent, the flap /r/ in certain respects steps in to fill in the gap in the voiced stop series.

	labial	alveolar	palatal	velar	glottal
voiceless oral stops	р	t		k	?
voiced oral stops	b			g	
nasal stops	m	n			
fricatives		s, ∫			h
affricates		s, ∫ t∫, dʒ			
liquid		ſ			
glides	W		j		

Table A.2: Inventory of Tuparí consonants

Allophony affects several members of the consonant inventory. Before the round vowels /u/ and /o/, the stop /p/ becomes a fricative: $[\phi]$. Compare (399a) and (399b), where /p/ is realized as $[\phi]$, against (399c) through (399e), where it is realized as [p]:

- (399) Allophonic alternation between [p] and $[\phi]$
 - a. *poat*[φoat[¬]]~[φwat[¬]]
 'good, ready, easy'

- b. *pu'u*[φʉ.?ʉ]
 'afternoon'
 c. *opap*
 - [o.pap[¬]] (not *[o.\phiap[¬]]) 'corn'
- d. *epip*[e.pip[¬]] (not *[e.\$\phip[¬]])
 'banana'
- e. *pep'o* [pep⁷.?o] (not *[φep⁷.?o]) 'wing'

See §A.6.3 for discussion of /p/ before the front high vowel /i/.

The glide /j/ is realized as an unreleased palatal stop, [c[¬]], in coda position; when next to nasal material, it is nasalized to [n]. (See §A.6.2, below, for discussion of the relationship between this glide's allophony and the language's set of phonotactic restrictions.)

(400) Allophonic alternation between [j], [c], and [n]

a. kuy [kuc¹] 'land, earth'
b. hoy [hoc¹] 'sweet'
c. uyãy [u.pãp¹] 'piranha'
d. pẽõy [pẽ.õp¹] 'cold, chilled'
e. yema'ẽ [pẽ.mã.?ẽ] 'his/her/their language' In coda position the fricative /s/ is realized as an unreleased palatal stop; that is, the fricative /s/ and the glide /j/ are indistinguishable in coda position. The allophonic alternation between [s] and [c[¬]] is particularly visible in verbs that end in /s/, such as *etès* 'bring' (singular subject). The final segment of this verb comes out as [s] when it is followed by a vowel but as [c[¬]] otherwise.

(401) a. Sitèsae.
[si.te:.sa.e]
'He/she brought it (WITNESSED).'
b. Sitèynaẽ.
[si.te:c'.nã.ẽ]

'He/she brought it (NON-WITNESSED).'

c. *Sitèy!* [si.te:c[¬]]

'Bring it!'

Seki (2001) reports that the voiced stops may be realized as implosives, but this does not conform to my experience. However, heterosyllabic sequences of /p?/, /t?/ and /k?/ can – in fast speech – be realized phonetically as voiced stops. The elision of the distinct glottal stop in such cases is compensated for by creaky voice on the adjacent vowel.

(402) <u>Phonetic realization of fast /?/-final clusters</u>

- a. orop'o 'vulture'
 careful speech: [o.rop'.?o]
 fast speech: [o.ro.bo]
- b. *aut'a* 'maternal aunt / paternal uncle' careful speech: [aut'.?a] fast speech: [au.da]
- c. *pok'a* 'turtle, tortoise'
 careful speech: [φok'.?a]
 fast speech: [φo.ga]

This alternation is entirely allophonic and is common mostly in the speech of younger Tuparí. That younger speakers can produce /?/-final CC sequences as voiced stops probably explains why the innovative variant of the near future affix contains /b/ rather than /p?/ (see §4.4.1).

The inventory in Figure A.2 does not include the velar nasal. Although many Tuparí words are pronounced with an engma, I analyze [ŋ] as a predictable allophone of /k/ rather than an independent phoneme. This claim is justified in that the surface engma is always predictable from the nasality of the previous vowel (Singerman 2016:§3.4). It is worth adding that this analysis reflects native speaker intuition as well: the schoolteachers led by Raul Pat'awre Tupari and Isaias Tarimã Tupari decided, over the course of 2013-2014, to eliminate the digraph $\langle ng \rangle$ from their orthography and to instead write all surface engmas with the letter $\langle k \rangle$. No orthographic ambiguity results from this decision, since [ŋ] is just how coda /k/ is realized following a nasal vowel. The elimination of $\langle ng \rangle$ from the orthography was implemented in *Wan Tupari Ema'en Nīka!* (Tupari et al. 2016).

A.1.4 Phonotactics

Syllables in Tuparí are of the shape (C)(V)V(C):

- (403) Syllable shapes in Tuparí
 - a. CV: ko [ko] 'eat', nẽ [nẽ] 'do, make', yã [pã] 'mother'
 - b. CVC: 'ap [?ap[¬]] 'fat', pen [pẽn[¬]] 'bow, gun', tak [tak[¬]] 'hard, tough'
 - c. $V(V)C: \dot{e}y [e:c^{-}]$ 'come!', $\partial p [o:p^{-}]$ 'my father', $\dot{e}t [e:t^{-}]$ 'your name'
 - d. V: *i* [i] 'third person proclitic'

No complex onsets or codas are permitted; all consonant-consonant sequences are heterosyllabic:

(404) Heterosyllabic CC sequences

- a. *apsirip'a*[ap[¬].si.rip[¬].?a]
 'outer ear'
- b. upsio

[up['].si.o] 'the wind'

c. *potpe*

[фot[¬].pe] 'knife'

```
d. topnã
[top<sup>1</sup>.nã]
'saw (NON-WITNESSED)'
e. omemsit
[õ.mẽm<sup>1</sup>.sit<sup>1</sup>]
```

'my child (female speech)'

- f. wãypa[wãŋ'.pa]'surubim (catfish)'
- g. *sik'e* [sik[]].?e]

'black'

- h. *ap'ap'a*
 - [ap⁷.?ap⁷.?a] 'a species of frog'

Consonant codas in Tuparí are always unreleased, as the phonetic transcriptions show.

Several other phonotactic restrictions apply to specific classes of segments. Fricatives, affricates, the glottal stop, and the voiced stops may never serve as codas. The engma (which I analyze as an allophone of /k/, not an independent phoneme) never occurs word-initially; rather, it always surfaces following a nasal vowel within the same phonological word. The voiced stops /b/ and /g/ share a particular set of phonotactic restrictions with /r/: except for the near future *ba*, these three segments are all restricted to word-internal, intervocalic position. One might therefore wish to analyze /r/ as a member of the voiced stop series, as Galucio (2001:21-23) does for Sakurabiát. But /r/, unlike /b/ and /g/, is a target for progressive nasal spreading; this fact alone suggests that it cannot be reduced to the same phonemic class that /b/ and /g/ belong to (Singerman 2016).

In the next subsection I discuss the distribution of several marginal phonemes.

A.1.5 Marginal/restricted phonemes

Not all vowels and consonants in Tuparí have equivalent functional loads. Among the vowels, /ʉ/ is rare and never appears in derivational or inflectional morphology; it is restricted to lexical roots.

Furthermore, /ʉ/ is the only (short, oral) vowel absent from language's proclitic pronouns and the weak nominative enclitics (Tables A.3 and A.4).

	SINGULAR	DUAL	PLURAL	
1 INCL	'on	'okit	'okitwat	
1EXCL	On	ote		
2	'en	۱	wat	
3		$e \sim \emptyset$		

Table A.3: No /u/ in the weak nominative enclitics (paradigm repeated from §2.1)

Table A.4: No / μ / in the proclitic pronouns (paradigm repeated from §2.2)

	SINGULAR	PLURAL	
1 INCL	o-/w-	ki-	
1EXCL	0-7	ote-	
2	е-	wat-	
3	<i>i-~y-~s</i>	-~Ø-	
3coref	te-		

Among the consonants, the voiced stops /b/ and /g/ are rare, though (near-)minimal examples do contrast them with voiceless /p/ and /k/ (and also with C? clusters).

- (405) Contrast between /p/, /p?/, and /b/
 - a. *opapa*[o.pa.pa]'my grandmother'
 - b. apap'a
 [a.pap'.?a]
 'head'
 - c. *akaba* [a.ka.ba] 'copaíba'

(406) Contrast between /k/, /k?/, and /g/

a. *okop*[o.kop[¬]]'1sg.moving'

- b. tok'om[tok'.?õm']'not far'
- c. *Kapsogo*[kap^{*}.so.go]'Kapsogo (proper name)'

It is worth adding that /b/ and /g/ are common in traditional indigenous names: *Apogo* [a.φo.go], *Tigi* [ti.gi], *Kapsogo* [kap³.so.go], *Kabatoa* [ka.ba.to.'a], *Abai* [a.ba.'i], *Aribo* [a.ri.'bo]. The occurrence of /b/ and /g/ in names is striking given that these phonemes are very rare in the rest of the the native lexicon.

The glottal fricative /h/ has a very circumscribed distribution. First, it can surface at the beginning of roots which show the zero/non-zero alternation discussed in §2.3.2 and §2.3.3. I illustrate here with the roots (*h*)*ek* 'house, home' and (*h*)*a'up* 'son of a man':

(407) <u>Alternations between /h/ and \varnothing </u>

- a. *òp hek*[o:p¹.hek¹]
 'my father's house'
- b. wek[wek[¬]]'my house'

c. *èk*[e:k[¬]]'your house'

d. iek

[i.ek] 'his/her/their house'

(408) <u>Alternations between /h/ and \varnothing </u>

a. *òp ha'up*[o:p[¬].ha.?^µp[¬]]
'my father's son'

- b. wa'up [wa.?ʉp[¬]] 'my son'
- c. *ea'up* [e.a.?ʉp[¬]] 'your son'
- d. *ia'up* [i.a.?ʉp'] 'his son'

Second, /h/ appears initially in certain demonstrative or locative roots: *hè* [he:] 'that one, that thing', *ho'op* [ho.?op'] 'this (sitting)', *het'aere* [het'.?a.e.re] 'where you are', *ham* [hãm'] 'hither'. And finally, /h/ can occur inside of reduplicated words: *hàhàke* [ha:.ha:.ke] 'scream, yell', *hu-rahura* ['hu.ra.'hu.ra] 'tucunaré'.

The absence of /h/ from anywhere other than morpheme-initial position in Tuparí lends support to the reconstruction proposed by Moore and Galucio (1994), who argue that Proto-Tuparían had an unstable phoneme that underwent different changes in the various daughter languages. They reconstruct this phoneme, *D, 'as a dental segment... whose exact phonetic shape is unknown and which is in complementary distribution with *r' (Moore and Galucio 1994:127). *D is restricted on their reconstruction to word-initial position, where *r is banned. In Sakurabiát the reflex of *D is /t/; the equivalent to Tuparí (h)ek 'house, home' in that language is (t)ek (Galucio 2001:46–47). If Moore and Galucio are correct that Proto-Tuparían *D was the ancestor of Tuparí /h/, then we have an explanation for why /h/ occurs only in initial position: it is the reflex of a segment that was itself restricted to word-initial position.

A.2 Stress

Although stress contrasts are infrequent in Tuparí, there are some minimal pairs that show that this language can employ stress to distinguish between otherwise homophonous lexical items. For instance, the verbal root for 'speak', $ma'\tilde{e}$ [mã.'? \tilde{e}], is stressed on the last syllable, whereas that for 'carry', $ma'\tilde{e}$ ['mã.? \tilde{e}], has initial stress. There is also at least one near-minimal pair in the domain

of reduplicated nouns: *korakora* [ko.'ra.ko.'ra] 'chicken' is stressed on syllables two and four, whereas *hurahura* ['hu.ra.'hu.ra] 'tucunaré' is stressed on syllables one and three. The community-approved Tuparí orthography used in *Wan Tupari Ema'en Nĩka!* and this dissertation does not distinguish visually between minimal pairs such as *ma'ẽ* [mã.'?ẽ] 'speak' and *ma'ẽ* ['mã.?ẽ] 'carry' (§1.6).

Functional morphology such as auxiliaries are unstressed:

(409) Functional morphology is unstressed

- a. *O'era o'apteka*. o-'et-a o-'apteka 1SG-sleep-TH 1SG-HABIT.SG 'I regularly sleep.' [o.'?e.rao.?ap^{*}.te.ka]
- b. O'era oyã õ'apteka.
 o-'et-a o-yẽ-a o-'apteka
 1SG-sleep-TH 1SG-AUX_{hzntl}-TH 1SG-HABIT.SG
 'I regularly sleep, lying down.'
 [o.'?e.rao.nãõ.?ap'.te.ka]~[o.'?e.raõ.nãõ.?ap'.te.ka]

In example (a) primary stress falls on the lexical verbal root 'et 'sleep'; the subsequent habitual auxiliary, 'apteka [?ap'.te.ka], is deaccented. In example (b) stress stills fall on 'et 'sleep', with both of the subsequent auxiliaries deaccented. Because of that deaccenting, nasality can travel progressively from the horizontal auxiliary $y\tilde{e}$ (realized as $y\tilde{a}$ [$p\tilde{a}$] when inflected with the theme vowel) onto the proclitic of the habitual auxiliary. This is the reason why the proclitic o- '1SG' on 'apteka is nasalized in (b): [o.'?e.rao.pa \tilde{a} .?ap'.te.ka]~[o.'?e.rao.pa \tilde{a} .?ap'.te.ka].

A.3 Phonological processes affecting consonants

A.3.1 Consonant lenition processes prior to vowel-initial suffixes

Three processes of consonantal lenition apply when a root bears a vowel-initial suffix. First, /p/ and /m/ are deleted from morpheme-final position when they precede vowel-initial suffixes. Here and below the plus sign (+) marks morpheme boundaries inside of rules.

 $\begin{array}{ll} \mbox{(410)} & \mbox{Process of morpheme-final labial deletion} \\ & \mbox{$C_{[+labial]} \rightarrow \varnothing \ / + V$} \end{array}$

Second, the alveolars /t/ and /n/ flap in the same contexts where /p/ and /m/ delete:

(411) Process of morpheme-final alveolar flapping $\frac{C_{[+alveolar]} \rightarrow r / + V}{C_{[+alveolar]} \rightarrow r / + V}$

Finally, the velar /k/ voices prior to vowel-initial suffixes. (Velars in Tuparí are often pronounced as geminates, especially across morpheme boundaries. The orthographic choice of the schoolteachers has been to write these geminates as $\langle kg \rangle$. Hence the nominal root *ek* [ek[¬]] 'house', when marked with the nuclear case, is written as *ekget*.)

(412) Process of morpheme-final velar voicing $\frac{C_{[+velar]} \rightarrow C_{[+velar,+voice]} / + V}{C_{[+velar,+voice]} / + V}$

These three processes are illustrated in Table A.5 through Table A.9. On nominal roots I illustrate with the nuclear case suffix -et/-t (nasalized to -en/-n); on verbal roots, with the nominalizer -ap. Note that the rule of velar voicing given in (412) never has the opportunity to affect the final /k/ of verbal roots, since the theme vowel -a triggers a velar resyllabilitation process instead (§A.4). This is why there is no table akin to Tables A.6 and A.8 for velar-final verbal roots.

Nominal root Root plus the nuclear case [ki.a.ko.et] kiakop [ki.a.kop]] kiakoet 'sun' [a.ku.ra.et] akurap [a.ku.rap] akuraet 'monkey' 'foot parasite' yõtap [nõ.tap]] võtaet [põ.ta.et[¬]] 'brother-in-law' [mē.põ.ēn] meyom [mẽ.nõm]] meyõen

Table A.5: Labial consonants delete prior to vowel-initial suffixes: nouns

Table A.6: Labial consonants delete prior to vowel-initial suffixes: verbs

Verb	al root	Root pl	us the nominalizer	
kop	[kop]]	koap	[ko.ap]]	'descend'
pap	[pap]]	pawap	[pa.wap [¬]]	'die, get drunk'
'em	[?ẽm]]	'ẽam		
om	[õm [¬]]	õam	[õ.ãm [¬]]	'fight' 'give'

Table A.7: Alveolars turn to flaps prior to vowel-initial suffixes: nouns

Nominal root		Root plus	the nuclear case	
wãkit	[w̃ā.kit]	wãkiret	[w̃ā.ki.ret]]	'pet'
memsit	[mẽm [¬] .sit [¬]]	memsiret	[mẽm [¬] .si.ret [¬]]	'child of woman'
yen	[ɲẽn]	yẽren	[pẽ.r̃ẽn]]	'feces'
men	[mẽn]	meren	[mẽ.r̃ẽn]	'husband'

Table A.8: Alveolars turn to flaps prior to vowel-initial suffixes: verbs

Verbal r	Verbal root Root plus the nominalizer			
'et	[?et]	'erap	[?e.rap]]	'sleep'
puop'ot	[\$u.op].?ot]	puop'orap	[фʉ.op [¬] .?o.rap [¬]]	'learn'
wan	[w̃ãn]	wãram	[w̃ã.r̃ãm]]	'go a short distance'
ẽken	[ẽ.kẽn]	ẽ.kẽram	[ẽ.kẽ.r̃ãm]]	'vomit'

Table A.9: Velars voice prior to vowel-initial suffixes: affects nouns only

Nom	inal root	Root pl	us the nuclear case	
wek	[wek]	wekget	[wek].get]~[we.get]	'my home, my house'
eak	[e.ak]	eakget	[e.ak].get]~[e.a.get]	'your daughter'
yõk	[ɲõŋ]]	yõkgen	[põŋ].ŋẽn]~[põ.ŋẽn]]	'pimple'
sĩk	[sĩŋ]	sĩkgen	[sĩŋ].ŋẽn]~[sĩ.ŋẽn]]	'smoke'

A.3.2 Consonant cluster simplification process

There are several suffixes in Tuparí which begin with CC sequences:

- (413) Suffixes which began with CC sequences
 - a. -pnē 'EV.SG', 'RSLT.SG.VRTCL'
 - b. -psē 'RSLT.SG.HZNTL'
 - c. -psira 'EV.PL', 'RSLT.PL'
 - d. -psiro 'POSS'
 - e. -ppe 'after doing X'

Since Tuparí does not permit tautosyllabic consonant clusters, any and all CC sequences must be heterosyllabic (example 404). Attaching *-pnẽ* 'EV.SG', 'RSLT.SG.VRTCL', *-psẽ* 'RSLT.SG.HZNTL' or *-psira* 'EV.PL', 'RSLT.PL' to a consonant-final root would result in a CCC sequence. Such sequences are by definition ill-formed in Tuparí, since there is no way to syllabify them without producing a tautosyllabic cluster. In such cases a straightforward rule of consonant deletion repairs the triconsonantal sequence:

(414) Consonant cluster simplification process $C_1C_2C_3 \rightarrow C_1C_3$

The practical effect of this rule is that a biconsonantal CC sequence will surface only when one of the suffixes in (413) attaches to a vowel-final stem. Table A.10 illustrates with the singular evidential suffix, which takes the surface allomorphs $-pn\tilde{e}$, $-mn\tilde{e}$ and $-n\tilde{e}$. Observe that the evidential suffix loses its initial labial when it follows the C-final roots *sut* 'cook' and $m\tilde{a}k$ 'send, hand over'.

Verb	al root	Root pl	us singular evidential	
ko	[ko]	ko pnẽ	[kop].nee]	'eat, drink'
ke	[ke]	ke pnẽ	[kep].nee]	'say, think'
nẽ	[nẽ]	ne mnẽ	[nẽm].nẽ]	'do, make'
mĩ	[mĩ]	mi mnẽ	[mĩm].nẽ]	'stab, pierce'
sut	[sʉt]		[sut].nee]	'cook'
mầk	[mã:ŋ]	mầ̀k nẽ	[mã:ŋ].nē]	'send, hand over'

Table A.10: Consonant cluster simplification with the singular evidential suffix

The examples in Table A.11 show the same alternations at work with the plural evidential suffix. Here, too, the initial labial of the suffix disappears after a consonant-final root:

Verb	al root	Root plus	s plural evidential	
ko	[ko]	ko psira	[kop].si.ra]	'eat, drink'
ke	[ke]	ke psira	[kep].si.ra]	'say, think'
nẽ	[nẽ]	ne msira	[nẽm].si.ra]	'do, make'
mĩ	[mĩ]	mi msira	[mĩm [¬] .si.ra]	'stab, pierce'
sut	[sʉt]	sut sira	[sut].si.ra]	'cook'
mầk	[mã:ŋ]	mầ̀k sira	[mã:ŋ].si.ra]	'send, hand over'

Table A.11: Consonant cluster simplification with the plural evidential suffix

The same process of cluster simplification applies with the possessive suffix *-psiro/-msiro/-siro* (§A.6.3). However, possessive *-psiro* is unlike the evidentials illustrated in Tables A.10 and A.11 in that it attaches to nominal rather than verbal bases.

The language has several prefixes which arguably undergo the same process of consonant cluster simplification. Table A.12 illustrates with the object focus prefix *y*-, which appears with a glottal stop prior to vowel-initial verbal roots: *at* 'get, take', *om* 'give', and so on. But prior to consonant-initial verbal roots (*top* 'see, watch, know', *si* 'spear, kill') the object focus prefix does not take a glottal stop.²

Verbal root		Root plu	is 2SG proclitic and object focus prefix	
at	[at]	ey'at	[ec ³ .?at ³]	'get, take'
om	[õm [¬]]	ey'om	[ec ⁻ .?õm ⁻]	'give'
etèy	[e.te:c]	ey'etèy	[ec [¬] .?e.te:c [¬]]	'bring'
top	[top]	eytop	[ec [¬] .top [¬]]	'see, watch, know'
si	[si]	eysi	[ec ³ .si]	'spear, kill'
ko	[ko]	eyko	[ec [°] .ko]	'eat, drink'

Table A.12: Object focus prefix takes a glottal stop prior to vowel-initial roots

One could interpret the pattern in Table A.12 as an application of the rule shown in (414) in the prefixal domain. That is, if the underlying form for the object focus prefix is /j?/, then the glottal stop will be deleted whenever the prefix attaches to consonant-initial stem. Alternatively,

²The object focus construction always requires a pronominal proclitic. For ease of exposition the forms in Table A.12 are shown with the second person singular e-.

the glottal stop seen prior to vowel-initial verbal roots could be analyzed as the result of a separate process of glottal stop insertion that applies prior to vowel-initial roots. Evidence in favor of the latter analysis comes from the set of adverbial prefixes analyzed in Chapter 3. All of the adverbial prefixes surveyed there – dismissive (*e*)tat- 'just', procrastinative $p\tilde{e}an$ - 'first', negative (*e*)tareman-'not again', evidential-like (*e*)tom'en- 'without someone being aware' – take a glottal stop prior to vowel-initial roots (§A.6.4). Even the second person plural proclitic *wat*- can take such a glottal stop. For example, the paucal AUX_{go} root, *oro'e*, occurs with an initial /?/ after *wat*-. But *oro'e* does not take an initial glottal stop following other proclitics:

- (415) Presence of glottal stop in paucal AUXgo root
 - a. *ki* '1PL.INCL' \rightarrow *kioro*'*e* [ki.o.ro.?e]
 - b. *ote-* '1PL.EXCL' \rightarrow *oteoro'e* [o.te.o.ro.?e]
 - c. *wat* '2PL' \rightarrow *wat'oro'e* [wat'.?o.ro.?e]
 - d. s- '3' \rightarrow soro'e [so.ro.?e]

I suggest, then, that the appearance of 'intrusive' glottal stops on consonant-final prefixes prior to vowel-initial roots be analyzed as a phenomenon separate from the process of consonant cluster simplification that applies with suffixes. So instead of belonging to the underlying form of the object focus prefix, the glottal stop seen in the first three lines of Table A.12 is probably the result of a general insertion process that applies prior to all vowel-initial roots. See §A.6.4, below, for discussion of how these glottal stops can interfere with rightward nasal spreading.

A.3.3 Labial gemination triggered by the third person weak nominative en-

clitic e

The third person weak nominative enclitic e triggers a unique process of labial gemination. Like vowel-initial suffixes, enclitic e triggers the processes of alveolar flapping and velar voicing that were discussed in §A.3.1:

- (416) Third person weak nominative enclitic e causes alveolar flapping
 - a. *kut* [kut] 'boy' + $e \rightarrow Kure$. ['ku.re] 'He's a boy.'
 - b. *omen* [õ.'mẽn'] 'my husband' + $e \rightarrow Om\tilde{e}r\tilde{e}$. [õ.'mẽ. $\tilde{r}\tilde{e}$] 'He's my husband.'

- (417) Third person weak nominative enclitic *e* causes velars to voice and geminate
 - a. wek [wek] 'my house' + $e \rightarrow Wekge$. ['wek].ge] 'It's my house.'
 - b. $y \tilde{o} k$ [nõŋ] 'pimple' + $e \rightarrow Y \tilde{o} k g \tilde{e}$ ['nõŋ.ŋ \tilde{e}] 'It's a pimple.'

However, the weak nominative enclitic e does not cause labials to delete in the fashion of vowelinitial suffixes. It instead causes them to geminate and, in the case of final /p/, to voice.

- (418) Third person weak nominative enclitic does not trigger labial deletion
 - a. opap [o.'pap'] 'corn' + $e \rightarrow Opapbe$. [o.'pap'.be] 'It's corn.'
 - b. kap [ka:p[¬]] 'must say' + $e \rightarrow Kapbe$. ['ka:p[¬].be] 'One/we must say that.'
 - c. yam [$p\tilde{a}m$] 'bench, chair' + $e \rightarrow Yamm\tilde{e}$. [' $p\tilde{a}m.m\tilde{e}$] 'It's a bench/chair.'
 - d. nam [nãm[¬]] 'must do so' + $e \rightarrow Namm\tilde{e}$. ['nãm.mẽ] 'One/we must do so.'

To better see the contrast between the third person weak nominative enclitic and vowel-initial suffixes, compare the examples in (418) against those in (419). Here the nuclear suffix -et/-t causes the final labial stop of the root to delete:

(419) Nuclear case deletes labials, unlike the third person weak nominative enclitic

- a. *opap* [o.'pap'] 'corn' + NUC \rightarrow *opaet* [o.'pa.et']
- b. kap [ka:p[¬]] 'must say' + NUC $\rightarrow kaet$ ['ka:.et[¬]]
- c. *yam* [$p\tilde{a}m^{\gamma}$] 'bench, chair' + NUC $\rightarrow y\tilde{a}en$ [' $p\tilde{a}.\tilde{e}n^{\gamma}$]
- d. *nam* [nãm[¬]] 'must do so' + NUC \rightarrow *naen* ['nã.ẽn[¬]]

A.4 Phonological effects of the theme vowel -*a* and related affixes

The theme vowel -*a* appears on main verbs in declarative, non-negated clauses. It also appears on auxiliaries, though its distribution in this case is sensitive to the position of the NP subject. Singerman (In preparation b) develops an analysis of this affix as a species of nominative agreement. See §4.1 as well as §6.3 for a theoretically-neutral description of the theme vowel's distribution.

The theme vowel and three related suffixes (the multipurpose nominalizer *-ap*, the adverbial focus suffix *-ap*, and the actor nominalizer *-at*) trigger a unique set of phonological processes. Like all other vowel-initial suffixes, they trigger the regular phonological processes of labial deletion and alveolar flapping that were discussed in §A.3.1. Tables A.13 and A.14 illustrate.

Bare	Bare root		neme vowel	
om	[õm]	õã	[õ.ã]	'give'
'em	[?ẽm]]	'ẽã	[?ẽ.ã]	'fight'
ãum	[ã.ʉ̃m]]	ãиã	[ã.ʉ̃.ã]~[ã.ʉ̃.w̃ã]	'enter'
top	[top]]	toa	[to.a]	'see'
kop	[kop]]	koa	[ko.a]	'descend'
pap	[pap]]	pawa	[pa.wa]	'die, get drunk'

Table A.13: Theme vowel triggers labial deletion

Table A.14: Theme vowel triggers alveolar flapping

Bare root		Plus theme vowel		
ẽken	[ẽ.kẽn]]	ẽkẽrã	[ẽ.kẽ.r̃ã]	'vomit'
tet	[tet]	tera	[te.ra]	ʻgo.SG'
ot	[ot [¬]]	ora	[o.ra]	'go.PAUC'
sut	[sut]	sura	[sʉ.ra]	'cook'
poatkat	[�wat`.kat`]	poatkara	[�wat`.ka.ra]	'prepare'
at	[at]	ara	[a.ra]	'catch, grab, obtain'
puop'ot	[\$uop].?ot]	puop'ora	[∮ʉop¹.?o.ra]	'learn'
'et	[?et [¬]]	'era	[?e.ra]	'sleep'
aot	[aot]	aora	[ao.ra]	'go out.SG'

In addition to triggering labial deletion and alveolar flapping, the theme vowel also forces previous velar stops to resyllabify. If a root ends in /k/, this stop will resyllabify as an onset prior to the theme vowel; this is shown in Table A.15. When final /k/ is preceeded by a nasal vowel,

Bare 1	root	Plus theme vowel		
epak	[e.pak]]	epaka	[e.pa.ka]	'wake up'
pek	[pek]]	peka	[pe.ka]	'purchase'
wak	[wak]	waka	[wa.ka]	'cry'
wek	[wek]	weka	[we.ka]	'bite'
epsik	[ep].sik]	epsika	[ep].si.ka]	'sit down'
sirik	[si.rik]	sirika	[si.ri.ka]	'cut down, knock down'

Table A.15: Theme vowel resyllabifies final velars: oral examples

the process of resyllabification gives rise to a predictable alternation between [k] and $[\eta]$ (see discussion in Singerman 2016). This alternation between [k] and $[\eta]$ is shown in Table A.16.³

³Singerman (2016:470) incorrectly gave the root of the verb 'transform' as $n\delta k$ [$n\delta\eta$] rather than $en\delta k$ [$\tilde{e}.n\delta\eta$] and the root of the verb 'send, hand over' as $m\delta k$ [$m\delta\eta$] (with short / δ /) rather than $m\delta k$ [$m\delta\eta$]. These errors are corrected

Bare root		Plus theme vowel		
'ẽk	[?ẽŋ]	'ẽka	[?ẽ.ka]	'dance'
nĩk	[nĩŋ]	nĩka	[nĩ.ka]	'write'
mầk	[mã:ŋ]	mầka	[mã:.ka]	'send'
õrõk	[õ.ĩõŋ]	õrõka	[õ.r̃õ.ka]	'place on surface'
enõk	[ẽ.nõŋ]	enõka	[ẽ.nõ.ka]	'transform'
emo'ãk	[ẽ.mõ.?ãŋ]	emo'ãka	[ẽ.mõ.?ã.ka]	'pass through'
(i)yma'ẽk	[ic].mã.?ẽŋ]	(i)yma'ẽka	[ic [¬] .mã.?ẽ.ka]	'speak with'
tomẽk	[tõ.mẽŋ]	tomẽka	[tõ.mẽ.ka]	'stand up, be standing'

Table A.16: Theme vowel resyllabifies final velars: nasal examples

The pattern in Table A.16 is prevalent in the speech of younger Tuparí. Speakers in their thirties or above, however, often include an additional /a/ in the bare root form. For example, those speakers generally have for 'stand up, be standing' the root *tomẽka* [tõ.mẽ.ka] rather than the *tomẽk* [tõ.mẽŋ] of younger speakers. As a result speakers who are in their thirties or above do not usually exhibit the kind of alternation between [ŋ] and [k] shown in Table A.16.

Alves (2004:§4.3.2.2) states that the theme vowel triggers the deletion of root-final vowels other than /ʉ/. While it is true that /ʉ/ never deletes prior to the theme vowel, it is not the case that the other vowels always do so; there are different patterns at work, as well as some lexically-conditioned exceptions. Deletion applies invariably following roots that end in /e/ (or /ẽ/), as shown by Table A.17. (The paucal form of 'come', given in the final line of Table A.17, usually collapses into a single vowel in faster speech: \tilde{a} [ã].) The deletion of final /e/ by the theme vowel *-a* also affects those morphemes which are better classified as 'functional' rather than 'lexical' items, such as inflectional affixes and auxiliary roots. This is shown in Table A.18.

The effect of the theme vowel on /o/ and /i/ varies. These two vowels often resist deletion, with the exact effects of the the theme vowel determined on a lexeme-by-lexeme basis (Table A.19). Note the irregular vowel lengthening that occurs with three /o/-final roots: *ko* 'eat, drink, ingest', *ako* 'have sex with', and *õpo* 'hit, strike, kill'.

Few verbal roots end in /ʉ/. The final /ʉ/ of these roots never deletes prior to the theme vowel (Table A.20).

in Table A.16.

Bare root		Plus theme vowel		
pop'e	[\op].?e]	pop'a	[�op ⁻ .?a]	'fear, be afraid of'
apsi'e	[ap].si.?e]	apsi'a	[ap [¬] .si.?a]	'hear, listen'
taray'e	[ta.rac [¬] .?e]	taray'a	[ta.rac [¬] .?a]	'grow tired'
nẽ	[nẽ]	nã	[nã]	'do, make, be, become'
morẽ	[mõ.r̃ē]	morã	[mõ.r̃ã]	'throw, chug, play'
ma'ẽ	[mã.?ẽ]	ma'ã	[mã.?ã]	'say, speak, command'
tet'anẽ	[tet].?ã.nẽ]	tet'anã	[tet].?ã.nã]	'go.PL'
ã'ẽ	[ã.?ẽ]	ã'ã	[ã.?ã]	'come.PAUC'

Table A.17: Theme vowel always deletes stem-final /e/: verbal roots

Table A.18: Theme vowel always deletes stem-final /e/: functional items

Bare root		Plus theme vowel		
-pnẽ	[p].nẽ]	-pnã	[p].nã]	'EV.SG', 'RSLT.SG.VRTCL'
-psẽ	[p].sẽ]	-psã	[p].sã]	'RSLT.SG.HZNTL'
уẽ	[ɲẽ]	yã	[ɲã]	'AUX _{hzntl} '
'e	[?e]	`a	[?a]	'AUX.SG'
tero'e	[te.ro.?e]	tero'a	[te.ro.?a]	'AUXgo.SG'
oro'e	[o.ro.?e]	oro'a	[o.ro.?a]	'AUXgo.PAUC'
'anẽ	[?ã.nẽ]	'anã	[?ã.nã]	'AUXgo.PL'

Table A.19: Theme vowel sometimes deletes stem-final /o/ and /i/, subject to lexical variation

Bare root		Plus t	theme vowel	
si	[si]	sa	[sa]	'spear, kill, sting'
nĩ	[nĩ]	niã	[nĩ.ã]	'be embarrassed'
mĩ	[mĩ]	miã	[mĩ.ã]	'stab, pierce'
ato	[a.to]	atoa	[a.to.a]	'bathe, swim'
ko	[ko]	kà	[ka:]	'eat, drink, ingest'
ako	[a.ko]	akà	[a.ka:]	'have sex with'
õpo	[õ.фo]	õpà	[õ.pa:]	'hit, strike, kill'

Table A.20: Theme vowel never deletes stem-final /ʉ/

Bare root		Plus theme vowel		
ери'и	[e.фʉ.?ʉ]	ери'иа	[е.фн.?н.а]	'spend the day, spend time'
esu	[e.su]	esua	[e.sʉ.a]	'summon, call'

Unsurprisingly, the addition of the theme vowel produces no audible effects on stems that already end in /a/. This is especially common with stems that end in the verbalizing suffix *-ka* or the plural evidential/plural resultative *-psira*, as shown by Table A.21.

Bare root		Plus theme vowel		
'apka	[?ap [¬] .ka]	'apka	[?ap [¬] .ka]	'fry'
mã	[mã]	mã	[mã]	'put/place inside of something'
aik'aika	[aik [¬] .?ai.ka]	aik'aika	[aik [¬] .?ai.ka]	'catch.PL'
pẽõyka	[pẽ.õŋ].ka]	pẽõyka	[pẽ.õŋʾ.ka]	'get cold'
tettetka	[tet].tet].ka]	tettetka	[tet].tet].ka]	'walk about.SG'
aka	[a.ka]	aka	[a.ka]	'AUX.PL _{habit} '
-psira	[p].si.ra]	-psira	[p [¬] .si.ra]	'EV.PL', 'RSLT.PL'
'apteka	[?ap [¬] .te.ka]	'apteka	[?ap [¬] .te.ka]	'HABIT.SG'
а	[a]	а	[a]	'AUX.PL'

Table A.21: Theme vowel has no audible effect following stem-final /a/

The quotative verb ke 'say, think, be like' shows no change when inflected with the theme vowel; it is still pronounced as ke [ke]. But when ke bears tense or nominalizing morphology, the stem-final /e/ changes to long /a:/: kàt [ka:t[¬]] 'said', kàp [ka:p[¬]] 'must say'. The same irregularity is found with the [+wh] VP katke 'do what, do how' (see example 241 in §4.4.1).

The suffixes -ap 'NMZ_{ap}', -ap 'ADV.FOC', and -at 'ACTOR' trigger the exact same phonological changes as the theme vowel proper does. So the verbal root $n\tilde{e}$ 'do, make, do so' loses its / \tilde{e} / prior to -ap 'NMZ_{ap}', -ap 'ADV.FOC', and -at 'ACTOR', just as it does prior to the theme vowel. With the exception of ke 'say, think, be like' and the related katke 'do what', I know of no verbal roots which undergo different phonological changes prior to the theme vowel when compared to -ap 'NMZ_{ap}', -ap 'ADV.FOC', and -at 'ACTOR'. That -ap 'NMZ_{ap}', -ap 'ADV.FOC', and -at 'ACTOR'. That -ap 'NMZ_{ap}', -ap 'ADV.FOC', and -at 'ACTOR' trigger the same phonological processes as the theme vowel does would support analyzing them as -p, -p, and -t, respectively, with the initial /a/ considered a separate morpheme (i.e., the theme vowel).

A.5 Loanword phonology

Present-day Tuparí speech contains many loanwords from Portuguese, which occupies an economically and socially privileged position in the linguistic ecology of southern Rondônia (§1.1; see also van der Voort 2016). Portuguese loanwords can contain phonemes not found in the native inventory of Tuparí, and they may violate otherwise robust phonotactic restrictions.

In native Tuparí words a vowel following a nasal onset must be nasal. Yet this restriction can be lifted in loanwords since Portuguese does distinguish between oral and nasal vowels following nasal consonants. In present-day Tuparí there exists a contrast between the name of the village of Tucumã (pronounced as [tu.ku.'mã]) and the name of the city of Ji-Paraná (pronounced as [ʒi.pa.ra.'na]). When these place names take the oblique suffix *-ere* the contrast becomes clear: the nasality of the final vowel of *Tucumã* spreads rightward onto the oblique case suffix, but no spreading applies with *Ji-Paraná*.

- (420) Loanwords allow for stressed oral vowels following nasal consonants
 - a. $Tucum\tilde{a}$ [tu.ku.'mã] + -*re* 'OBL' \rightarrow $Tucumar\tilde{e}$ [tu.ku.'mã.r̃e]
 - b. *Ji-Paraná* [zi.pa.ra.'na] + -*re* 'OBL' \rightarrow *Ji-Paranare* [zi.pa.ra.'na.re]

Loans from Portuguese, then, are capable of having stressed oral vowels following nasal consonants. This is not possible in the native Tuparí lexicon, in which vowels obligatorily nasalize after other nasal segments (Singerman 2016). Interestingly, in unstressed vowels this contrast is neutralized. The loanword *mãkinã* ['mã.ki.nã] 'camera' takes the post-nasal allomorph of the possessive suffix (Table A.22): *mãkinamsiro* [mã.ki.nãm[¬].si.ro] 'having a camera, owning a camera'.

There are a few common words in which nasality fails to propagate rightward. These include:

(421) Words in which nasality fails to propagate rightwards

- a. mòy
 [mo:c¹]
 'cow, cattle'
 b. aney
 [ã.nec¹]
 - 'mosquito net'

c. naoy'a
[na.oc[¬].?a]~[na.o.dʒa]]
'chameleon'

Example (a) is almost certainly a loan from the synonymous Portuguese word *boi*. The origins of (b) and (c) are not known to me; they may come from other indigenous languages of the area.

Although many residents of the Terra Indígena Rio Branco have indigenous names, Brazilian names are used with great frequency; some Tuparí rarely if ever go by their indigenous names. Brazilian names often shirk the phonemic and phonotactic restrictions found in the native Tuparí lexicon. For example, the Tuparí phoneme /s/ is realized as an unreleased palatal stop, [c[¬]], in coda position; there are no indigenous words that pronounce coda /s/ as [s]. But the Brazilian names Mateus and Isaias, as well as the loan word *Deus* 'God', end in /s/. I have heard speakers maintain the coda [s] from Portuguese when using these words in Tuparí utterances, in violation of Tuparí phonotactics.

A.6 Revisiting four claims made in previous literature

In this section I revisit four claims about Tuparí phonology that have been made in prior literature, including my own work (Singerman 2016). With these claims reevaluated, several aspects of the language's phonology become noticably simpler. For example, it turns out that there is no evidence for coda clusters in the native Tuparí lexicon; all native CC sequences are heterosyllabic. The phonological questions discussed in this section have diachronic implications, as well, though I mention these only briefly.

A.6.1 Does Tuparí have a glottalized labial stop?

In their survey of the Tupían family, Rodrigues and Cabral (2012:505–06) state that the Tuparí phonemic inventory includes a glottalized labial stop: $/p^2/$. One example they give of $/p^2/$ is the Tuparí word for 'wing', transcribed by them as pep^2o . However, multiple pieces of evidence show that this $/p^2/$ is not an independent phoneme but rather a heterosyllabic sequence of /p/ and /?/.

First, the purported p^2 / behaves identically to all of the other CC sequences in Tuparí, which

are invariably heterosyllabic (§A.1.4). (422) shows that *pep'o* 'wing' is just like *pok'a* 'turtle' and *pet'a* 'red macaw' in this respect.

- (422) Heterosyllabic sequencing of CC clusters
 - a. *pep'o* 'wing': [pep'.?o], not *[pe.p[?]o]
 - b. *pok'a* 'turtle':
 [φok⁷.?a], not *[φo.k²a]
 - c. pet'a 'red macaw':
 [pet[¬].?a], not *[pe.t[?]a]

It is not clear why the sequence of /p/ and /?/ should be given phonemic status, given that it behaves identically to the sequences /t?/ and /k?/.

Second, Tuparí has many sequences consisting of a nasal stop followed by a glottal stop. These sequences, too, are always divided heterosyllabically.

- (423) Heterosyllabic nasal-/?/ sequences
 - a. *miãk'ã* [mĩãŋ[¬].?ã]
 'knee'
 - b. kẽy'ã
 [kẽŋ'.?ã]
 'hawk'
 - c. nuy'ã
 [nų̃n'.?ã]
 'blue-headed parrot'
 - d. akan'ã

[a.kãn[°].?ã] 'bone, skeleton'

- e. merem'ã
 [mē.řēm'.?ã]
 'moth'
- f. *um'ẽ*

[ũm[?].?ẽ] 'forest' g. apsikum'ẽ
 [ap'.si.kʉm'.?ẽ]
 'inner ear'

There is no evidence that these sequences of a nasal stop and /?/ should be treated as independent, glottalized phonemes; they follow the same heterosyllabic syllabification pattern discussed in A.1.4. Since the data in (423) will already require us to posit heterosyllabic, /?/-final CC sequences in Tuparí, we can use that same analysis to account for the /p?/ of Rodrigues and Cabral, as well.

The lack of glottalized stops in the Tuparí phonemic inventory may have consequences for the reconstruction of Proto-Tupían. Rodrigues and Cabral (2012) observe striking correspondences between /k/-initial words in the Tuparían branch (such as Tuparí *kup* 'tree') and /?/-initial words elsewhere in Tupían. To account for these correspondences they posit a series of glottalized stops in the proto-language, with the purported /p[?]/ of Tuparí a reflex of that series. But there is, in fact, no evidence to posit /p[?]/ as a phoneme in Tuparí; words such as *pep'o* [pep'.?o] 'wing' and *pop'e* [ϕ op'.?e] 'fear, be afraid of' simply contain a sequence of coda /p/ and onset /?/. While it is possible that Proto-Tupían did have a series of glottalized stops, the phonemic inventory of Tuparí does not provide evidence for them.

A.6.2 Are there tautosyllabic CC sequences in the native Tuparí lexicon?

Seki (2001) and Alves (2004) report the existence of a single tautosyllabic cluster, which they transcribe as [jt]. It appears only in coda position in their data, and it would seem to violate the language's otherwise rigid prohibition on tautosyllabic consonant clusters. This 'cluster' is in fact a single segment, the palatal glide /j/, allophonically realized as an unreleased palatal stop ([c[¬]]) in coda position. (See also example 400, above.)

- (424) Palatal /j/ in coda position
 - a. koroykap
 [ko.roc'.kap']
 'paddle'

```
b. kuy
    [kuc]
    'land, earth'
c. okoy
   [o.koc]
    'my sister' (male speech)
d. kaykay'a
    [kac<sup>]</sup>.kac<sup>]</sup>.?a]
    'severe macaw' (Ara severus; in Brazilian Portuguese: maracanã-guaçu)
e. hayto
    [hac].to]
    'be many, be a lot'
f. Sitèy!
    [si.te:c]
    'Bring it here!'
g. aney
   [a.nec]
    'mosquito net'
h. mòy
    [mo:c<sup>¬</sup>]
    'cow, cattle'
```

This /j/ behaves like a plain glide for all phonological processes and for the purposes of syllabification, and speakers identify it as a single segment – not a cluster. From these facts I conclude that there is no evidence for tautosyllabic consonant clusters in the Tuparí lexicon.

A.6.3 Is [ps] an allophone of /p/?

Seki (2001:299) states that /p/ has two allophones other than [p]: [ϕ] before round vowels and [ps] before the high non-round front vowel /i/. The occurrence of [ϕ] prior to /o/ and /u/ is systematic, as shown by *poat* [ϕ oat[¬]]~[ϕ wat[¬]] 'good, ready, easy', *pu'u* [ϕ u.?u] 'afternoon' in contrast to *opap* [o.pap[¬]] 'corn' and *pep'o* [pep[¬].?o] 'wing' (§A.1.3).

The realization of /p/ as [ps] before /i/, however, is less straightforward. It is true that the Tuparí lexicon contains many sequences of coda /p/ followed by onset /s/: *apsi* [ap⁷.si] 'dad, father', *upsi'o* [up].si.?o] 'wind', *apsirip'a* [ap].si.rip].?a] 'outer ear', '*epsi* [?ep].si] 'price, cost', *opsika* [op].si.ka] 'step on'. There are also functional morphemes that contain /p/ and /s/ before /i/; ex-amples include the possessive suffix *-psiro* or the plural evidential/plural resultative *-psira*. The problem is that in all of these circumstances the sequence of /p/ and /s/ behaves like a heterosyllabic consonant cluster, not like a single segment. Consider possessive *-psiro*, which has three surface allomorphs: *-psiro*, *-msiro*, and *-siro* (Table A.22). The initial labial of *-psiro* nasalizes to

Nominal root Root plus possessive suffix aoro [oo.ro] 'parrot' [ao.rop].si.ro] 'having a parrot' aoro**psiro** korakora [ko.ra.ko.ra] 'chicken' [ko.ra.ko.rap].si.ro] 'having chickens' korakora**psiro** apsikum'ẽ [ap].si.kũm].?ẽ] 'inner ear' apsikum'emsiro [ap].si.kum].?em.si.ro] 'having an ear, hearing' 'having meat' yen'ã [pen].?a] 'meat' yen'amsiro [pen].?am.si.ro] 'tooth' yãysiro [nãn].si.ro] 'having teeth' yãy [pãp]] 'husband' [men].si.ro] 'having a husband' men [men] mensiro

Table A.22: Allomorphy of the possessive suffix -psiro/-msiro/-siro

[m] following a nasal vowel, and it is deleted following a consonant-final stem. If we consider [ps] to be an allophone of /p/ before /i/, then the examples in Table A.22 put us in the uncomfortable position of having to treat [s] as an allophone of /p/ as well. In particular, we would need to posit [s] as the allophone of /p/ that surfaces after another consonant and prior to /i/.

But sequences of /p/ and /s/ can surface before vowels other than /i/, too, as in the singular resultative allomorph *-psē*. This suffix behaves exactly like *-psiro*: it nasalizes to *-msē* after nasal vowels but loses its labial altogether, yielding *-sē*, after consonants. Table A.23 illustrates. Since

Verbal root Root plus singular horizontal resultative [e.\u00f60.te.ka] epoteka**ps**ẽ [e.\u00f60.te.kap].se] 'be changed, sitting' epoteka 'change' taray'e [ta.rac[¬].?e] 'tire' taray'e**psẽ** [ta.rac[¬].?ep[¬].sẽ] 'be tired, sitting' 'be reclining' anẽ [ã.nẽ] 'recline' ane**msẽ** [ã.nẽm[¬].sẽ] 'place' [mãm⁻.sẽ] 'be placed horizontally' тã [mã] ma**msẽ** 'be finished, sitting' poatkat [\$\oat'.kat'] 'finish' *poatkatsẽ* [\$\oat'.kat'.se] 'sit down' 'be sitting' epsik [ep].sik] epsik**sẽ** [ep].sik].see]

Table A.23: Allomorphy of the singular horizontal resultative

this suffix contains \tilde{e} rather than i or \tilde{i} , we cannot state [ps] as an allophone conditioned by a following i. In addition, the singular evidential/vertical resultative morpheme *-pne* and the

adverbial *-ppe* 'after doing X' display the same kind of allomorphy shown above but do not contain /s/ at all: these morphemes become *-mnẽ* and *-mpe*, respectively, after a nasal vowel, and they lose their initial labial after a consonant: *-nẽ*, *-pe*. So the kind of phonologically-conditioned allomorphy illustrated in Tables A.22 and A.23 does not depend on the presence of /s/, either underlyingly or on the surface, either.

To summarize, the sequence of /p/ and /s/ which Seki (2001) considers an allophone of /s/ behaves like a heterosyllabic sequence of two independent consonants. It is subject to the same processes of coda nasalization (Singerman 2016) and consonant cluster simplification (§A.3.2) that are known to affect all CC sequences in the language. Even if a diachronic change did affect the realization of /p/ before /i/ in Tuparí, in the synchronic phonology [ps] does not behave like an allophone of /s/.

Finally, there is a common noun in Tuparí where /p/ occurs before /i/: epip [e.pip] 'banana'.

A.6.4 Does nasality spread rightward from all verbal prefixes?

Singerman (2016:§3) stated that nasality can spread rightward from verbal prefixes onto roots; one example given in that work was $m\tilde{a}on$ [m $\tilde{a}.\tilde{o}n$] 'send out, send off', which appears to consist of *aot* [a.ot] 'go.out.SG' plus the causative prefix *m*-. However, at the time that article was written I did not yet know of the language's rich set of adverbial prefixes. These prefixes include:

- (425) Examples of nasal-final adverbial prefixes described in Chapter 3
 - a. pēan- [pē.ān] 'first'
 - b. (e)tāreman- [(e).tā.re.man'] 'not again'
 - c. (e)tom'en- [(e).tom'.?en] 'without someone being aware'

All three of these prefixes end in a nasal segment, so – all things being equal – we would expect them to trigger rightward nasal spreading. But as many of the examples in Chapter 3 show, verbal roots and other verbal prefixes can remain oral even when they immediately follow these prefixes.

Why does nasality fail to spread rightward from the prefixes in (425)? One possibility is that these prefixes have some special diacritic that prevents them from triggering rightward nasal spreading. Alternatively, some other phonological process might intervene to ensure that nasality

does not spread from them. The kind of glottal stop insertion discussed in §A.3.2, above, seems to play a role here. The prefixes in (425) are usually followed by an epenthetic glottal stop prior to vowel-initial morphemes. Hence the combination of *te-* '3COREF', *pẽan-* 'first', *aoros* 'arrive.SG' and the theme vowel *-a* (example 162b) surfaces with an epenthetic glottal stop in between the adverbial prefix and the root: *tepẽan'aorosa* [te.pẽ.ãn'.?a.o.ro.sa]. These epenthetic or intrusive glottal stops are especially clear prior to the incorporated noun *arop* 'food, stuff, possession', which remains oral even after *pẽan-* 'first' and *(e)tãreman-* 'not again' (see §3.5.5 for examples). I therefore propose that what blocks the rightward spreading of nasality from the prefixes in (425) is the epenthesis of /?/. Although the crosslinguistic tendency is for /?/ to allow nasality to spread (see Walker 2000, 2003), it has already been established that glottal stops block rightward nasal propagation across morpheme boundaries in Tuparí (Singerman 2016:§3.3.5).

In sum, the phonological behavior of *pẽan-* 'first', *tãreman-* 'not again' and *tom'en-* 'without someone being aware' shows that rightward nasal spreading from prefixes is more restricted than was stated in Singerman (2016).

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