Chapter for collective volume “Amazonian Languages. An International Handbook”, edited by Patience Epps and Lev Michael, to be published by De Gruyter Mouton.
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Takanan languages

Abstract

This chapter provides the first extensive survey of the linguistic characteristics of the languages of the small Takanan family, composed of five languages, Araona, Cavineña, Ese Ejja, Reyesano and Tacana, spoken in the Amazonian lowlands of northern Bolivia and southeastern Peru. To date, there have been very few general comparative works on these languages, apart from old studies based on scanty materials collected around the turn of the 20th century (Rivet & Créqui-Montfort 1921; Schuller 1933), more recent studies restricted to the phonological domain (Key 1968; Girard 1971) and very small sketches listing a few noteworthy typological properties (Aikhenvald & Dixon 1999: 364–367; Adelaar 2004: 418–422). Drawing on data from the most recent fieldwork-based studies, which have appeared since the past two decades, the chapter offers a typologically and (when possible) historically informed presentation of their main linguistic features and of their most interesting characteristics. All the major levels of linguistic structure are presented, including phonetics and phonology, the word classes and their morphology, noun phrases, verbal and non-verbal predicates, main and dependent clauses and discourse.

Acknowledgements

I am deeply indebted to the Cavineña, Reyesano and Tacana people for generously sharing with me data and thoughts on their respective languages. I am appreciative to Adam J. Tallman, Marine Vuillermet, an anonymous reviewer and Pattie Epps and Lev Michael as editors of this volume for their valuable comments and insights on earlier versions of this paper. Pattie Epps and Lev Michael are especially thanked for providing me with the opportunity to present this comparative work in a prestigious venue. Finally, I am grateful to the ASLAN project (ANR-10-LABX-0081) of Université de Lyon for its financial support within the program “Investissements d'Avenir” (ANR-11-IDEX-0007) of the French government operated by the National Research Agency (ANR).

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1 Classification, demographics, and sociolinguistic background[1]

The Takanan language family consists of five extant languages, Araona, Ese Ejja, Cavineña, Reyesano (aka Maropa) and Tacana. Two of these languages have reported dialectal variants: Ese Ejja with its Sonene/Madidi and Baawaja dialects and Tacana with its Tumupaseño and Ixiameño dialects. In both cases, the dialectal differences seem to be essentially lexical and phonological, although no systematic comparative studies have yet been carried out.

The Takanan languages are spoken, to varying degrees, in contiguous regions in the Amazonian lowlands of northern Bolivia and (in the case of some Ese Ejja communities) southeastern Peru. The languages are listed in Table 1, together with information on their glottocode (Hammarström et al. 2016), location, estimated number of speakers and ethnic group members, and the main general grammatical works and (for the languages I studied myself) corpora used in this study. (Studies on specific grammatical topics will be mentioned when these topics are addressed in this paper.)

Table 1 Takanan languages (figures from Crevels & Muysken 2009)

name	glottocode	location	no. speakers	no. ethnic group	main grammatical works and corpora
Araona	arao1248	Bolivia	111	158	D. Pitman (1980), M. Pitman (1981), Emkow (2006; 2012)
Ese Ejja	esee1248	Bolivia & Peru	518[2]	732	Vuillermet (2012a; 2012b)
Cavineña	cavi1250	Bolivia	601	1683	Guillaume (2004; 2008a; texts and fieldnotes 1996-2003)
Tacana	taca1256	Bolivia	50	7345	Guillaume (2013a; texts and fieldnotes 2009-2013)
Reyesano	reye1240	Bolivia	12	4019	Guillaume (2009b; 2012a; texts and fieldnotes 2004-2008)

In terms of **vitality**, Tacana and Reyesano are the most threatened languages of the family, despite their relatively high number of ethnic group members. They are now spoken by very few people, most of them elderly, and only on rare occasions and in reduced contexts. By contrast, Araona, despite having the smallest ethnic group, appears to be the least endangered, being still learned and spoken as the maternal language of the majority of its people, many of which are monolingual in Araona. Cavineña and Ese Ejja represent an intermediate stage, with relatively important populations and number of speakers. These languages are still transmitted in at least a number of traditional communities.

In the literature, some of the Takanan languages are sometimes **named** differently, or the same name is spelled differently. Ese Ejja has been alternately referred to, among other denominations, by the derogatory terms Chama or Guarayo (Huarayo) (Vuillermet 2012a: 44–46). Nowadays, the language is named and generally spelled Ese Ejja in Bolivia and Ese eja in Peru, despite an identical pronunciation [eseʔeχa]. Reyesano has also been known, among other names as Sapibocona and Guariza. Nowadays, both Reyesano and Maropa are used, with the second name gaining in popularity among the ethnic group and Bolivian indigenous organizations. Tacana is sometimes spelled Takana. As for the name of the family, it alternates

[1] This section draws heavily on the information provided in Spanish in Valenzuela & Guillaume (2017).

[2] The number of Ese Ejja speakers (and ethnic group members) given here corresponds to a very low estimation of the Ese Ejja in Bolivia. According to Vuillermet (2012a: 70, 80), the total number of speakers in Bolivia and Peru would be around 1,500.

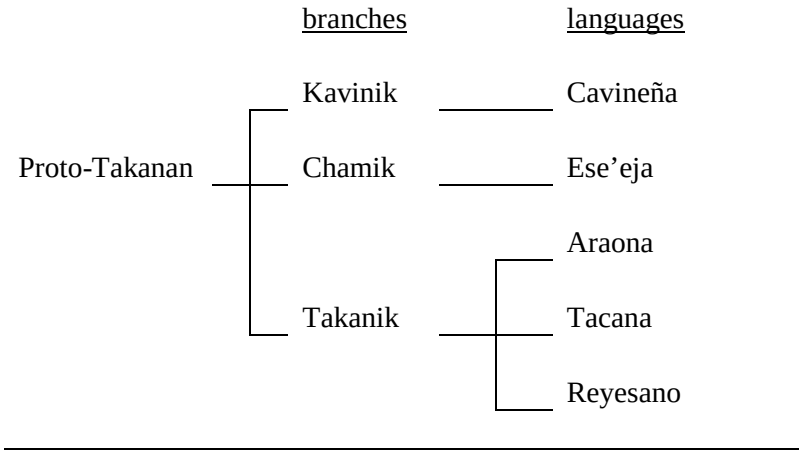
between Tacana(n) and Takana(n). In this study, I use the spelling Takanan (with a 'k' and the suffix *-an*) to clearly distinguish it from the name of the language Tacana.

In several past classificatory works on South American languages, many other names of **Takanan languages, dialects or 'tribes'** have been listed. Rivet & Créqui-Montfort (1921) and Mason (1950), for example, included up to 37 names in their classifications. But a major part of these designations was posteriorly eliminated, in particular by Girard (1971), as part of his phonological and morphological reconstruction work on Proto-Takanan. Girard showed that these names were either *nomina nuda* – names for which there is no (or no reliable) linguistic data – or extinct dialects of one or the other five actual Takanan languages. However, despite the lack of appropriate data, one of Girard's *nomina nuda*, **Toromona** (or Toromono), has nevertheless continuously been cited over time as an independent Takanan language, including in a number of modern classifications; see for example Campbell (2012), Lewis et al. (2014) and Hammarström et al. (2016; glottocode toro1255). This name is actually an ethnonym for an uncontacted group of people who live in complete isolation in the Madidi National Park in Bolivia's northern Amazon, close to the Peruvian border (Cingolani 2011: 72). As far as I know, the only linguistic data that exist on Toromona (which Girard manifestly did not have knowledge of) is a list of 97 words collected by the naturalist-traveler Marius Del Castillo published in Del Castillo (1929: 122–123). But according to Del Castillo, the Toromona he encountered spoke basically the same language as the Araona ("*hablan con muy poca diferencia la lengua de los "Araunas*""), an opinion which receives support from comparing his Toromona word list with the Araona words of Pitman's (1981) dictionary, where 66% (64 out of 97) of the words are almost identical (Guillaume 2011a).

Finally, it is worth mentioning the possible existence of an additional, dead, Takanan language, †**Mabenaro**, known from a list of 54 words collected by the explorer William Farabee, published in Farabee (1922). In Girard's study, †Mabenaro is included as a separate language, with some hesitation with regard to its classification – whether forming a separate branch by itself (Girard 1971: 41) or belonging to the Takanik branch (Girard 1971: 42); see next paragraph on the internal classification of the Takanan languages. Following Girard, †Mabenaro is also cited in some modern classifications (in particular Hammarström et al. 2016; glottocode mabe1235).

Moving to issues of language classification, Figure 1 gives the **internal classification** of the family as per Girard's (1971), the most extensive and scientifically rigorous comparative study available to date, despite important shortcomings; for a summary and evaluation of this and other classificatory works, in particular that of Key (1963; 1968), see Valenzuela & Guillaume (2017). Girard's classification derives from a phonological and morphological reconstruction based on 504 cognate sets extracted from word lists collected by travelers in the 19th century and missionary linguists from the Summer Institute of Linguistics (SIL) in the 1950s-1960s. The classification consists of three branches (Kavinik, Chamik and Takanik), all placed at the same level within the family tree, with two branches consisting of a single language (Kavinik and Chamik) and one branch consisting of three languages (Takanik).

Figure 1. Internal classification of Takanan languages (Girard 1971: 197)



Attempts have also been made to establish genetic relationships between the Takanan languages and other South American linguistic families (Arawak, Chon, Matacoan, Panoan) or language isolates (Aymara, Mosetén-Chimane, Quechua, Yurakaré, Lule-Vilela, Uru-Chipaya). Of all these proposals, however, the only serious one is that of a Pano-Takanan genetic link, defended by Key (1963; 1968) and Girard (1971) through the application of the comparative method. Unfortunately, as acknowledged by their authors (especially Girard), there are many problems with these studies and neither of them uncontroversially settle the issue of whether the numerous similarities between the languages of the two families are due to common ancestry or language contact (or both); see discussion in Valenzuela & Guillaume (2017).

The **history of the linguistic studies** on Takanan languages goes back to the end of the 18th century. From that period and until the first decades of the 20th century, the first data were collected (or at least disseminated) by missionaries (e.g. N. Armentia, J. Cardús, A. Gili and J. P. Aza), travellers (e.g. M. Del Castillo, W. Farabee, E. Heath, L. Hervás y Panduro, E. Nordenskiöld, E. Robuchon, H. Weddell) or local administrators (e.g. L. de Ribera). The materials they produced consisted of ethnonyms, word lists, religious texts and grammatical notes. Between 1954 and 1985, a second phase of description and documentation of the Takanan languages was carried out by the missionaries of the Summer Institute of Linguistics (SIL) (E. Camp, M. R. Key, M. Liccardi, J. & M. Ottaviano, D. & M. Pitman, J. and K. Prettol, J. & N. Shoemaker, D. & M. Van Wynen, R. and L. Wyma). Among the most valuable materials that SIL produced and made available to the public are collections of non-religious texts (myths, life stories, etc.), dictionaries (or at least vocabularies) accompanied by (non-tagmemic) grammar sketches and a few studies on specific topics (phonetics and phonology, pronominal systems, motion affixes and complementation). Finally, in the late 1990s and early 2000s, a third wave of linguistic investigations was initiated by three academic scholars who started as MA or PhD students (in chronological order: A. Guillaume, C. Emkow and M. Vuillermet). On the basis of extensive immersion fieldwork and the modern typological-functional framework, they worked on all five Takanan languages. They produced the first comprehensive phonological and grammatical descriptions of three Takanan languages (in chronological order: Cavineña, Araona and Ese Ejja (Sonene/Madidi dialect); see references in Table 1). Comparable comprehensive descriptions of Reyesano and Tacana (Tumupaseño dialect) are also underway, conducted by myself. Besides these monographic-style publications, these projects also yielded a fair number of specific studies from a range of diverse perspectives (typological, comparative-historical and areal) which are published in academic journals or collective volumes investigating specific grammatical domains, in particular for Cavineña, Ese Ejja and Reyesano.

To date, there have been relatively few **general comparative works** on the Takanan family. These correspond to (1) old studies based on the scanty materials collected around the turn of the 20th century (Rivet & Créqui-Montfort 1921; Schuller 1933), (2) more recent studies restricted to the phonological domain (Key 1968; Girard 1971) and (3) small sketches listing a few noteworthy typological properties (Aikhenvald & Dixon 1999: 364–367; Adelaar 2004: 418–422). None of these studies, however, reflect the breath of research done during the past two decades. And none of them has been conducted by linguists experts in any of the Takanan languages.

Nowadays, most of the remaining speakers of Takanan languages are bilingual in (lowland Bolivian) Spanish (Araona being a noteworthy exception, see above). Exposure to Spanish started when speakers of Takanan languages had their first contacts with the Spaniards in the late 16th - early 17th centuries. The contact became more intensive during the period of missionization in Jesuit, Franciscan and Dominican reductions starting at the end of the 17th century, and continuously increased from the mid-20th century. Although the effects of Spanish on Takanan languages have not been studied systematically, it is clear is that an enormous number of Spanish lexical items have entered all the languages – in this study, they are marked with the abbreviation '(Sp)'. Depending on the borrowed items and the borrowing languages, the degree of adaptation to the phonology, morphology and syntax of the languages is quite variable. Today, knowledge of additional languages (besides Spanish) does not appear to be very common; when this happens, it seems that these languages are most often other Takanan languages rather than languages from different linguistic families; see, for instance, PROEIB Andes (2000). In the past, however, speakers of Takanan languages have most likely been multilingual, at different periods of their history and in different settings, in a fairly wide range of languages and language families, although this has not been investigated in detail. From what we know of their lexicon, it is clear that they have borrowed an important number of words from at least Aymara and Quechua, probably during the time of Inca expansion (cf. 31 loans identified by Girard 1971: 138–139). During the colonial period, in particular that of missionization in Jesuit, Franciscan and Dominican reductions starting at the end of the 17th century, we also know that speakers of Takanan languages were forced to live together within many other neighboring languages. Although it is not altogether clear from the historical records which languages exactly these people would speak, it is quite likely that at least some of these would have corresponded to the ancestors of the languages presently still spoken in the areas surrounding them, such as Apurinã, Iñapari, Machineri, Mojeño and Yine (Arawak), Chácobo-Pacahuara, Kasharari and Yaminawa (Panoan), Aymara, Canichana, Cayubaba, Harakmbut, Leko, Mosetén-Chimane, Movima, Quechua and Uru-chipaya (isolates).

2 Phonology

Takanan languages have an average of 18 consonant and 4 vowel phonemes, as listed in Table 2 and Table 3, respectively, where they are transcribed using the symbols of the IPA and sorted according to their place of articulation. In the case of Ese Ejja and Tacana, as elsewhere in the paper, the data comes from the best studied dialects of, respectively, Sonene/Madidi and Tumupaseño.

Table 2 Consonants in Takanan languages

	bilabial	dental-alveolar-palatal						velar-uvular	glottal
all languages	p, m, w	t, n, ʦ/tʃ/tç, ɕ/ʃ/ç, j						k, k^w	h
Cavineña	b	d,	s,	ts,	**ɺ**,		t^j, d^j, $ɺ^j$, n^j		
Ese Ejja	**ɓ̥**	**ɗ̥**~ʔ,	s				n^j	χ	ʔ
Araona	**^{m}b**	**^{n}d**,	s,	ts,	l,	z,	d^j		ʔ
Tacana	b	**ḍ**,	**ṣ**,	**ṭṣ**,	ɾ,	**d͡t̪**,	ð		
Reyesano	**^{m}b**	**^{n}ḍẓ**,	s,	**ṭṣ**,	ɾ,	l,	ð		

Table 3 Vowels in Takanan languages

	anterior	central	posterior
all languages	i, e	a	ʊ~o
Ese Ejja	j͡o, j͡a		w͡e

Depending on the languages, formally related segments can display more or less complex articulations, as with the following:

1. **voiceless implosives** /ɓ̥/ and /ɗ̥~ʔ/ in Ese Ejja;
2. **voiced-and-voiceless dental** /d̪͡t̪/ in Tacana;
3. **apical postalveolar** /ḍ/, /ṭṣ/ and /ṣ/ in Tacana and /^{n}ḍẓ/ and /ṭṣ/ in Reyesano;[3]
4. **prenasalized** /^{m}b/ and /^{n}ḍẓ/ in Reyesano and /^{m}b/ and /^{n}d/ in Araona;
5. **lateral flap** /ɺ/ in Cavineña;

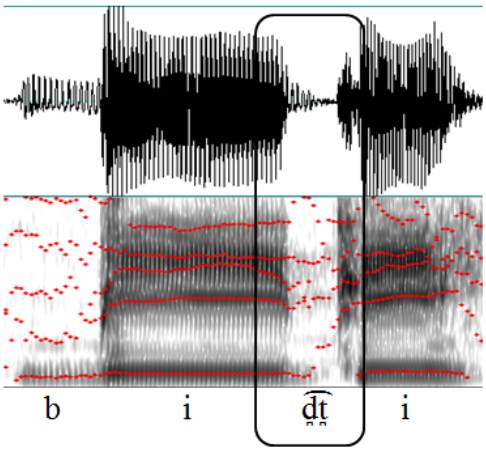
Two types of segments are particularly remarkable for their cross-linguistic rarity. The first involves the Ese Ejja **implosives ɓ̥/ and /ɗ̥~ʔ/**, unusual because of their voiceless realization (Vuillermet & Demolin 2006; Vuillermet 2012a: 187ff). The second is the Tacana **voiced-and-voiceless dental** /d̪͡t̪/, with its mixed voicing articulation. According to Ladefoged and Maddieson (1996, 80) and Maddieson (p.c., March 2013), such a type of segment is only found very few languages of the world. In an earlier description of Tacana by SIL missionaries Wynen & Wynen (1962: 18), this sound was described as a 'voiced laminal fricative flap' (*aleteo fricativo y sonoro realizado por el predorso de la lengua*). However, my own fieldwork and (still unpublished) instrumental investigations, the latter conducted in collaboration with Ian Maddieson, indicate that its articulation is rather that of a dental voiced-voiceless occlusive, realized [d̪͡t̪] between vowels, as in *bid'i*[4] [bid̪͡t̪i] 'balsa' (1a), and [ˢd̪͡t̪] word-initially, as in *d'ije* [d̪͡t̪ije] 'corn' in (1b). In the two spectrograms, note in particular the sequence between a voicing phase followed by a voiceless one.

[3] Note that in Guillaume (2012a), I described Reyesano /^{n}ḍẓ/ and /ṭṣ/ as retroflex segments.

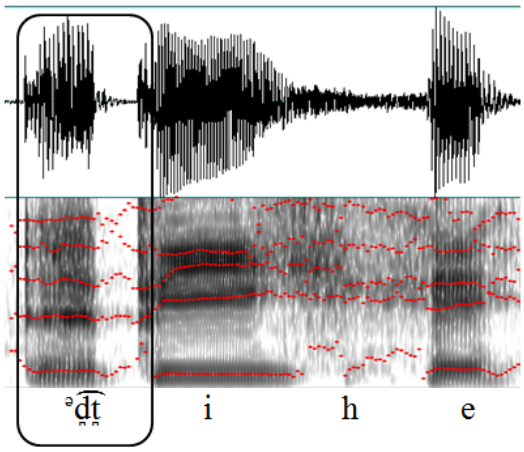
[4] The phonetic value of the graphemes used for writing the different Tacanan languages in this study (coded as follows: A = Araona, C = Cavineña, E = Ese Ejja, R = Reyesano, T = Tacana) is that of their equivalent IPA symbols, except for the following: b [ɓ̥] in E and [mb] in A and R; ch [ʦ/tʃ/tç]; d [ɗ̥~ʔ] in E, [nd] in A, [ḍ] in T and [ṇḍẓ] in R ; dh [ð] in R and T; d' [d̪͡t̪] in T; j [h]; r [ɺ] in C and /ɾ/ in T and R; s [ṣ] in T; sh [ɕ/ʃ/ç]; ts [ṭṣ] in R and T; u [ʊ]; wi [ᵝi] in C; y [j]; x [χ] in E; ' [ɗ̥~ʔ] in E.

(1)

a. *bid'i* 'balsa'



b. *d'ije* 'maïs'



TACANA (wl_LeoMarupa_024, wl_LeoMarupa_016 - Guillaume word list 2003)

All Takanan languages have **simple V and CV syllables**, at least in their native words. In addition, depending on the languages and/or the language analysts, more complex syllable structures have also been posited, such as VV and CVV. Basically, the problem revolves around how to analyze phonologically what surfaces phonetically as vowel clusters or clusters involving a vowel and a preceding or following glide [j] or [w]. In my own work on Tacana and Reyesano, I have posited VV and CVV syllable structures, as illustrated in (2) for Tacana.

(2)					
	a.	/ʊ.p**ia**/	[ʊ**pj**a]	'here'	[ia]
		/bi**ʊ**.ke/	[bj**ʊ**ke]	'toucan bird'	[iʊ]
	b.	/ha.p**ai**.na/	[hap**aj**na]	'patujú palm'	[ai]
		/ba**ʊ**.ḍa/	[ba**w**ḍa]	'tall'	[aʊ]
	c.	/i.d̪t̪**ʊi**/	[id̪t̪**wi**]	'ant'	[ʊi]
		/m**ʊe**.ṣʊ.mʊ/	[m**we**ṣʊmʊ]	'heart'	[ʊe]
		/e.tɛ**ʊa**/	[etɛ**wa**]	'head'	[ʊa]
	d.	/ḍʊ.k**ei**/	[ḍʊk**ej**]	'deer'	[ei]
		/ð**eʊ**.ta.hi/	[ð**ew**tahi]	'cut-ABIL'	[eʊ]

TACANA (Guillaume 2013a; texts and fieldnotes 2009-2013)

Clusters involving a vowel and a preceding or following glide [j] or [w] are also found in the other Takanan languages, although they are more restricted than in Tacana and Reyesano ([j] or [w] do not combine with all the vowels). In those languages, as a result, they are analyzed differently and complex syllable structures do not need to be posited. In Ese Ejja, for example, [ja], [jo] and [we] clusters are analyzed by Vuillermet (2012a: 177–178) as phonological diphthongs; see Table 3. Therefore, very similar words can be analyzed quite differently in different Takanan languages such as, e.g., the verb 'put in', which is /biʊ/ [bjʊ] with a CVV syllable in Tacana and /bjo/ [b̥**jo**] with a CV syllable in Ese Ejja Vuillermet (2012a: 179).

Takanan phonemes can display a range of phonetic variants – Ese Ejja is particularly noteworthy in this respect (see Vuillermet 2012a: 173–178) – but few of them are the result of

well-circumscribed phonological processes. Two regular phonological processes are attested in several languages: **develarization** of /w/ (/w/→[β̞] / [i, e]_) and **glidization** of /i/ and /ʊ~o/ (e.g. /i/→[j] / _[a, ʊ~o], as in (2a), and /ʊ~o/→[w] / _[i, e, a], as in (2c)). Other phonological processes are only found in individual languages, as with the Araona rules of **palatalization** of /d/, /n/ and /t/ and **prenasalization** of /b/ and /d/ in Araona (Emkow 2006: 69, 75).

There are also processes of a more morphophonological nature, only found within specific morphemes or at morpheme boundaries. Most languages have, for instance, a rule of **identical vocalic cluster reduction**, as between e.g. the Tacana suffixes *-ta* '3A' and *-ani* 'IPFV.SIT' in */e-abu-t**a**-**a**ni/* 'IPFV-carry-3A-IPFV.SIT' → [*jabʊt**a**ni*], from (42b). Interestingly, in the same phonological environment, an opposite process of **glottal stop/fricative epenthesis** is found in Araona for one of its tense markers, the recent past *-(j)a*, as in e.g. /a-a/ 'AUX.TR-PST' → [aha], from (80b), and three of its case enclitics (ERG/GEN/DAT, LOC, PERL)**,** as in e.g. /*tata=a*/ 'man=ERG' → [tata**h**a] (Emkow 2006: 77). Finally, Araona also displays a noteworthy interaction between a process of **affix deletion** and one of **accent shift**. The phenomenon concerns three Araona homophonous prefixes which have the shape *e-*: the dummy noun prefix (§4.1) and two verb prefixes *e-*, one part of a set of imperfective circumfix markers and one a narrative past marker (§5.1). When used with multisyllabic consonant-initial words, these prefixes are dropped and the stress is shifted from the second syllable, which is its normal position (see below), to the first syllable (Pitman & Pitman 1976: 13ff; Pitman 1980: 29, 75). Thus compare /e-mae^{n}da^{n}da/ 'NPF-front' [**máe**^{n}da^{n}da], in which the rule applies, with /e-izaha/ 'NPF-ear' [ei**zá**ha], where the rule does not apply because the noun begins with a vowel (Pitman & Pitman 1976: 11, 13).[5]

Takanan languages have complex and still poorly understood **accentual systems**. The function of these systems is to delimit the phonological/prosodic word; none of them are lexically/morphologically constrastive. Ese Ejja and the three Takanik languages have stress systems while Cavineña has a pitch-accent system. In the stress systems that have been studied to some degree (i.e., Ese Ejja, Araona and Tacana), stress falls on one of the first three syllables or morae counting from the left. Which syllable/mora receives stress (1st, 2nd or 3rd) depends on a range of different phonological and morphological factors which differ according to the languages. In Tacana, the basic rule is that, underlyingly, most lexemes are stressed on the 3rd mora (vowel or semi-vowel *y* [j]) from the left. This pattern is revealed on the surface when the prosodic word contains at least four morae, as in (3). When the prosodic word has less than four morae, stress surfaces on the penultimate syllable, as in (4) (van Wynen & van Wynen 1962; Guillaume fieldnotes).

(3) a. monomoraic syllables

*tata=kw**á**na*	'father=PL'	CV.CV.C**V́**.CV
*tumup**á**sa*	'(village of) Tumupasa'	CV.CV.**CV́**.CV
*ebakw**á**=kwana*	'child=PL'	CV.CV.**CV́**.CV.CV
*nashat**ú**rudu*	'pacay palm'	CV.CV.**CV́**.CV.CV
*wabuk**é**re=kwana*	'collared peccary=PL'	CV.CV.**CV́**.CV.CV.CV

b. bimoraic syllables

*yaw**í**kwase*	'hot drink'	VV.**CV́**.CV.CV
*yan**á**na=sa*	'child=GEN'	VV.**CV́**.CV.CV
*yan**á**na=kwana*	'child=PL'	VV.**CV́**.CV.CV

TACANA (Guillaume texts and fieldnotes 2009-2013)

[5] The phonetic transcription of these examples is mine, taking into account Pitman and Emkow's phonological descriptions.

(4)

*t**á**ta*	‘father’	**CV́**.CV
*eb**á**kwa*	‘child’	V.**CV́**.CV

TACANA (Guillaume texts and fieldnotes 2009-2013)

In Araona, according to Pitman & Pitman (1970; 1976), by default, stress appears to rather fall on the 2nd syllable, as illustrated by the following words: *sob**é**lele* ‘baby hat’, *a-b**ó**zeboze* ‘ASF-slow’ (Pitman & Pitman 1976: 11, 13); but see a different analysis in Emkow (2006: 86ff). In Ese Ejja, stress also regularly falls in the initial three syllable window; however, unlike in Tacana (and apparently Araona), no default syllable appears to be identifiable and, at least in the case of verbal words, a range of complex factors (including the number of syllables, the root transitivity, and the type of suffix used) needs to be taken into account for predicting its position; see Vuillermet (2012a: 98ff; chap. 5) and Rolle & Vuillermet (2019). For Reyesano, I argued that stress falls on the penultimate syllable and showed evidence for it in a certain number of words (Guillaume 2012a: 199). However, this was not based on any detailed investigation and the system is likely to be more complex.

Cavineña differs from the other Takanan languages in having a pitch-accent system, rather than a stress system. As described by Guillaume (2008a: 41ff), the system operates as follows: (1) the first syllable of a phonological word receives a high pitch, (2) the last two syllables receive a mid-pitch (only the last syllable if it is a two syllable word), and (3) the high pitch of the first syllable extends rightwards to any syllable(s) preceding the last two syllables. (A low pitch is used on the last syllable(s) of an uttarence.) The pattern is illustrated by the following words in which the high pitches are indicated by an acute accent and the mid pitches by no accent: *b**é**ta* ‘two’, *m**á**tuja* ‘jacaré’, *j**ú**t**á**kiju* ‘therefore’, ***í**w**á**r**á**-kware* ‘call-REM.PST’, *kw**é**j**á**-m**é**r**é**-kware* ‘tell-CAUS-REM.PST’.

3 Word classes

Takanan languages have formally distinct open lexical classes of **nouns** and **verbs** with mutually exclusive syntactic and morphological properties: only a noun can head an NP and only a verb can head a verbal predicate, and only verbs can take verbal affixes (nouns have very little morphology). A third open major lexical class is what I will call **coverbs** in this study, using this term in the sense it has in the descriptive literature on Australian and Afroasiatic languages (see for example Amberber, Baker & Harvey 2007, among others). Like verbs, coverbs are used in predicative function, but unlike verbs, they cannot take verbal affixes and an accompanying light verb is used for this purpose. Semantically, coverbs overlap with both nouns and verbs, expressing a wide variety of notions, concrete time-stable referents, property concepts, stative and active events.

Besides nouns, verbs and coverbs, Takanan languages have a range of more grammatical / functional word classes with small(er) inventories, closed membership and, in some cases, no prosodic independence (clitics). With the exception of personal pronouns, these classes display no morphology and can only be distinguished on the basis of their (semantic and) syntactic properties. A first range correspond to noun modifiers within an NP – these include **attributive adjectives**, **number**, **quantifiers** / **numerals** and **demonstratives** – and **personal pronouns**, which are used instead of full NPs. Personal pronouns have a restricted distribution within the clause, generally in first or second position, unlike NPs, which have much freer distributional possibilities. Besides, they are distinct from all other word classes by being morphologically

complex, with their own affixes that form mildly synthetic and agglutinative words. Another range of grammatical / functional word classes correspond to modifiers that operate at higher levels of structure, including various types of **adverbs** and **particles** and markers of semantic or syntactic relational functions, including **case enclitics / postpositions** and **markers of dependent clauses**. Finally, Takanan languages have **interjections** and **onomatopoeias** which, like in many languages, display unexpected phonological and/or phonetic properties.

All the word classes are further discussed and illustrated in this paper, with the exception of interjections and onomatopoeias; for information on these two classes, see Guillaume (2008a: 87–91) for Cavineña and Vuillermet for Ese Ejja (2012a: 283–284).

4 Nouns, pronouns, and the noun phrase

We begin this section with a presentation of the different subclasses of nouns, with information on their semantics and morphological properties when used as heads of NPs (§4.1). Other possible functions of nouns are discussed elsewhere in the paper, such as incorporation into verbal predicates (§5.6) and adjectival predicates (§6.2).

The next section in §4.2 deals with lexical nominalization, including a presentation of various morphological means used to derive new nouns out of different types of lexemes (including nouns), as well as a discussion of the phenomenon of 'direct conversion'.

In §4.3, we move to a presentation of the types of elements that can be used to modify a noun in an NP, including attributive adjective, juxtaposed noun, plural marker, genitive NP or pronoun, quantifier, demonstrative and relative clause. A structural diagram of the NP is provided, showing the position of the noun modifiers with respect to the head noun and with respect to each other.

Finally, in §4.4, we describe the different sets of personal pronouns and their morphology.

4.1 Nouns

Nouns in Takanan languages subdivide between at least two major morphological classes which roughly distinguish the alienable versus inalienable properties of their referents. The class of **independent nouns** encodes alienable concepts (humans, animals, plants, natural entities, artifacts, etc.). It includes thousands of lexemes and is open to both derivation and borrowings. In citation form or as NP heads in sentences, independent nouns do not require any particular morphology.

The class of **bound nouns** encodes inalienable concepts, prototypically body parts (internal or external), but also parts of plants (e.g. leaf, fruit, root), landscape entities (e.g. path, stream), kinship relations (e.g. husband, son, grandfather), spatial relations (e.g. bottom, outside, tip), and other miscellaneous concepts (e.g. name, female, house, sound, spirit). This subclass comprises from 100 to 150 lexemes and is closed. A bound noun root cannot be given in citation form or used in a noun phrase unless it is marked by a dummy/empty prefix *e-* 'Noun Prefix', as in (5a,b), or immediately preceded by another (juxtaposed/compounded) noun lexeme which specifies a whole of which the referent of the bound noun is a part of, as in (6a,b).[6]

(5)	a.	…	*ju-nati-tsu*	*=tu-ke*	*=ekwana*	***e-rami***	*kwawi-kware.*
			be-GO.TEMP-TMP.SS	=3SG-FM	=1PL	NPF-flesh	cook.on.embers-REM.PST

[6] See footnote 4 for the phonetic value of the graphemes used in this study.

‘We arrived (at San Carlos) and we cooked the meat on embers.’
CAVINEÑA (Guillaume 2008a: 410)

b. … *e-rara* ***e-jaki****=kwana* *ju-kware*
RES-dry NPF-leaf=PL be-REM.PST
‘… the leaves were dry.’ CAVINEÑA (Guillaume 2008a: 410)

(6) a. [***Duu*** ***rami***] *=tu* *patse-da*.
howler.monkey flesh =3SG bitter-ASF
‘The meat of the howler monkey is bitter.’
CAVINEÑA (Camp & Liccardi 1989: 88; cited in Guillaume 2008a: 460)

b. *Chamakama* [***tumi*** ***jaki***] *tubu-tsu*…
finally motacú.palm leaf cut-TMP.SS
‘Finally, he cut some motacú palm leaves…’ CAVINEÑA (Guillaume 2008a: 412)

The prefix *e-* is found in all five Takanan languages and is reconstructible to **e-* in Proto-Takanan (Girard 1971: 79). Note however that its properties can differ slightly depending on the languages and the specific bound noun it is used with, showing in some cases advanced degrees of lexicalization. Note finally that bound nouns do not behave differently from independent nouns with regards to possessive constructions; that is, neither the prefix *e-* nor the juxtaposed noun play a role in the encoding of a possessor, which must be marked through a distinct system with genitive marking on pronouns or NPs (see §4.3).

In Cavineña, a third important subclass of nouns must be postulated for about 30 kinship terms (‘father’, ‘mother’, ‘child’, ‘brother’, ‘sister’, ‘husband’, ‘wife’ ‘uncle’, ‘aunt’, etc.) which are obligatorily marked for the person of their possessor. Person marking is realized through different combinations of a prefix *e-*, an enclitic *=ke* and zero marking, where the prefix *e-* alone encodes 1st person (7a), zero marking 2nd person (7b) (or vocative) and the simultaneous combination of *e-* and *=ke* 3rd person (7c).

(7) a. ***E-wane****=ra* *=Ø* *peta-ya.*
1-wife=ERG =1SG look.at-IPFV
‘My wife was looking at me.’ CAVINEÑA (Guillaume 2008a: 419)

b. *Jutakiju* ***wane*** *pa-ani=jari*!
therefore wife HORT2-sit=STILL
‘So let your wife stay (lit. sit) for a while!’
CAVINEÑA (Tabo Mayo 1978: 60; cited in Guillaume 2008a)

c. ***E-wane=ke****=ra* *amena* *ba-ti-kware* *tu-ke*.
3-wife=3=ERG BM see-GO.TEMP-REM.PST 3SG-FM
‘His wife went to see him.’ CAVINEÑA (Guillaume 2008a: 420)

If the number, or any other additional information about the possessor is to be specified, the possessed noun, together with its person marker, is preceded by a genitive pronoun (71b) or genitive NP (17b), (26a); see discussion on possessive constructions in §4.3.

4.2 Lexical nominalization

New lexical nouns can be derived morphologically from other nouns or lexemes from other word classes, with different degrees of productivity, depending on the languages. Two nominalizers are cognate among the different languages. The first, reconstructible to **-puki* (Girard 1971: 113), and found in most Takanan languages, derives **agentive nouns** principally out of verbs (8) or other nouns (9). In all the languages this marker has low productivity, being only found in a restricted number of items in the available corporas.

(8) a. *nawi-* → *nawi-**puji***
'bathe' 'so. who bathes very early morning'

b. *chiri-* → *chiri-**puji***
'steal' 'so./sth. good at stealing, thief'

CAVINEÑA (Guillaume 2008a: 432)

(9) a. *karetu* → *karetu-**puji***
'cart(Sp)' 'so. good at making carts'

b. *waburasa* → *waburasa-**puji***
'peccary' '(dog) good at hunting peccaries'

CAVINEÑA (Guillaume 2008a: 434)

The second cognate nominalizer, reconstructible to the circumfix **e-…-ki*, and found in all the Takanan languages, principally derives **instrumental nouns** from verbs (10). It is more productive than *-puji*.

(10) a. *bade-* → ***e**-bade-**ki***
'hang' 'hammock'

b. *tawi-* → ***e**-tawi-**ki***
'sleep' 'bedding'

c. *sama-* → ***e**-sama-**ki***
'cure' 'medicine'

CAVINEÑA (Guillaume 2008a: 435–436)

In (at least) Ese Ejja, if the verb is transitive, it is possible to overtly express its patient argument. In this case, the patient noun is compounded to the verb root in place of the *e-* prefix, as in the second occurrence of the nominalized verb 'ventilate' in (11).

(11) *Majoya* *sipi-anya,* ***e**-pe-**xi**,* ***kwaki**-pe-**xi**.*
then weave-PRSA1/2 NMLZ-ventilate-NMLZ fire-ventilate-NMLZ
'Then I weave a fan *(lit. a thing to ventilate X),* a bellows *(a thing to ventilate the fire).'*

ESE EJJA (Vuillermet 2012a: 314)

Cavineña has an inventory of lexic al nominalizers which is richer than those of the other languages. Besides the two markers discussed above, it has two **locative nominalizers**. The first, *e-…-kware*, attaches to intransitive verbs and derives nouns that refer to places where the verb event can be performed occasionally, as in e.g. *e-tawi-kware* ‘camp (lit. place to sleep occasionally)’, from *tawi* ‘sleep’ or *e-nawi-kware* ‘(public) place to bathe’, from *nawi* ‘bathe’. The second, *-kini*, attaches to nouns and derives new nouns that refer to locations where there are many Xs, X being the referent of the noun involved in the derivation, as in e.g. *akwi-kini* ‘place with many trees’ from *akwi* ‘tree’, *nutsa-kini* ‘place with a lot of grass’ from *nutsa* ‘grass’ or *makana-kini* ‘place with a lot of gravel’ from *makana* ‘gravel’.

Most Takanan languages do not have **action/state** or **objective morphological nominalizers** (in the sense of Comrie & Thompson 2007). Instead, what we generally find is that the verb roots are ‘directly converted’. For example, compare the verbal use of the Tacana root *kisa* ‘(to) relate’ in (89c) with its nominal root ‘story, what is related’ in (12).

(12) [*Mike* ***kisa***=*kwana*] *etseju* *e-dere-netia.*
2SG.GEN story=PL 1DU.EXCL IPFV-paint-IPFV.STAND.1/2
‘We are writing down what you related (on the tape).’
TACANA (n4.0327 - Guillaume texts and fieldnotes 2009-2013)

Reyesano stands out for having a suffix *-ta* which was found in my corpus on some agentive nouns derived from transitive verbs (e.g. *dia* ‘eat’ → *dia-**ta*** ‘the eating’, *be* ‘carry’ → *be-**ta*** ‘the carrying’); note that Reyesano agentive nouns derived from intransitive verbs do not carry any morphology (e.g., *duinini* ‘become angry’ or ‘the anger’).

4.3 Noun modifiers and the noun phrase

Table 4 lists the different types of noun modifiers that are found in Takanan languages and indicates their typical position with respect to the modified noun in an NP and with respect to each other. Below the table, we provide a discussion of each type, in the following order: attributive adjective, juxtaposed noun root, number, genitive, quantifier and numeral, demonstrative and relative clause.

Table 4 NP structure in Takanan languages

-4	demonstrative
-3	quantifier & numeral
-2	genitive
-1	noun root (modifier)
0	**noun root (head)**
+1	attributive adjective
+2	number
+3	relative clause

A class of **attributive adjectives** is identified in most grammars of Takanan languages for a number of bound modifier morphemes that are used immediately after the head noun (slot +1) and that express typical property concepts (dimension, age / value, color, physical properties, etc.). The class is closed, containing, depending on the languages, from one dozen (e.g. in Cavineña) to a few dozen members (e.g. in Ese Ejja). Many attributive adjectives correspond to instances of lexical compounding where certain roots from a major lexical class,

typically that of predicative adjectives (§6.2) or (less often) nouns (§4.1), are compounded to the head noun. Such attributive adjectives are poorly productive, being only combinable with a restricted number of nouns. Examples of both types of compounds in Cavineña are given below, one with the predicative adjective root *wiri(-da)* 'tiny' in (13a) and one with the bound noun root *(e-)kaka* 'small and round fruit' in (13b).

(13) a. [*Wiwipa* ***wiri***=*ra*] =*taa* =*Ø* *dunu-wa*.
eagle tiny=ERG =EMPH =1SG surround-PRF
'The tiny eagles surrounded me.' CAVINEÑA (Guillaume 2008a: 468)

b. *Jee-ju* =*ri* [*e-spere* ***kaka***] *jara-ya*.
here-LOC =3PROX.SG NPF-stream small.and.round lie-IPFV
'Here there is (lit. lies) a nice little stream.' CAVINEÑA (Guillaume 2008a: 467)

Other attributive adjectives, however, have different sources and can be much more productive. Here, one finds in particular a number of items which have more or less clearly grammaticalized into the domain of evaluation / emotions marking, as with e.g. Tacana diminutive/affective marker =*chidi* in (14a), compassion marker =*ichenu* in (14b) and depreciative marker =*base* in (14c); see also the Araona diminutive =*lipi* in (117).

(14) a. *Ebakwa*=***chidi*** *mesa* *y-ani*.
child=DIM 3SG.DAT IPFV-sit
'He had a small / dear child.' TACANA (Guillaume 2018a: 121)

b. *Da*=*putsu* *da* *iche-ta-idha*=*wekwana* [*jida* *uchi*=***ichenu***=*kwana*].
thus=TMP.SS thus hit-3A-REM.PST=3PL that dog=COMPAS=PL
'For that reason they would whip these poor dogs.' TACANA (Guillaume 2018a: 124)

c. [*Metse-sa* *kunu*=***base***=*ja*] =*da* *metse* *e-pisa-ta*.
2DU-GEN brother=DEPR=ERG =PTC 2DU FUT-shoot-3A
'(Escape!) Your damned brother will kill you.' TACANA (Guillaume 2018a: 130)

Note that similar emotions can also be encoded by verbal affixes (§4.3) and particles (§7.1.3). For a detailed description of the grammatical expression of emotions in Tacana and other Takanan languages, see Guillaume (2018a).

As already discussed and illustrated in (6a,b), a noun can be **modified by another immediately preceding noun**. This is a highly productive construction used for a fairly wide range of semantic relations which have to do with the general idea of specification, i.e., "the dependent nominal indicates the type of entity that is being referred to by the head nominal" (Chappell & McGregor 1989: 28). In Cavineña, for example the modifying noun can express the whole (6a,b), the location (*yarapesiki ujeje* [shoulder blade + disease] 'back pain'), the goal/target (*e-na diji* [NPF-water path] 'path leading to water)', the name (*Galilea epu* 'village of Galilea'), the time (*nei mara* [rain + time] 'rainy season'), the 'substance' (*arusu name* [rice + soup] 'rice soup'), or the 'creator' (*iba mekware* [jaguar track] 'track of a jaguar').

Plural number is expressed in all five languages by way of a formally similar enclitic word =*kwana* or =*kana*, reconstructible to *=*kwana* in Proto-Takanan (Girard 1971: 92), which is optional. An illustration of Cavineña =*kwana* can be found in (5b). In Cavineña, Araona and Tacana (but not in Ese Ejja and Reyesano), **dual number** is further distinguished by way of a distinct enclitic word, =*ekatse* in the first language, illustrated in (15), and =*detse* in the last two.

(15) *Tu-wa* *=shana* *juye**=ekatse*** *nereka-da*.
there-LOC =COMPAS ox=DU miserable-ASF
'The oxen (du) were miserable (having to pull the terribly heavy cart).'
CAVINEÑA (Guillaume 2008a: 408)

Plural and dual are only two of several readings that can be expressed by the plural/dual markers. Other possible and frequent meanings are that those of associative (16a,b), distributive and collective.

(16) a. … *esiri=kwana(=ke)=ra* *e-kwa=ke**=ekatse*** *nimearitura-ya*.
old=PL=REL=ERG 3-mother=3=DU console-IPFV
'(When a child dies,) the elders console his parents (lit. his mother and associated person) (*mothers).'
CAVINEÑA (Camp & Liccardi 1989: 85; cited in Guillaume 2008a: 482)

b. … [*e-kwe* *e-tima**=kwana***] *uje-da*.
1SG-GEN NPF-lower.back=PL painful-ASF
'… my lower back area (*lower backs) hurts.' CAVINEÑA (Guillaume 2008a: 482)

A noun can be preceded by a **genitive-marked NP** (or genitive pronoun). The genitive markers are enclitics which attach to the last word of the possessor NP. They are all cognate across the different languages, *=ja* in Cavineña and Ese Ejja, *=(j)a* in Araona, *=sa* in Tacana and *=dha* in Reyesano, and reconstructible to *=*sa* in Proto-Takanan (Girard 1971: 116). The same forms can also be used as dative oblique markers at the clause level; see §7.1.2. Examples of genitive-marked NPs in Cavineña are given in (17a), with the possessor noun modified by a plural marker, and in (17b), with a double-embedded structure.

(17) a. … [***kwanubi=kwana=ja*** *e-tsau=kwana*] *ba-nati-wa*.
animal=PL=GEN NPF-bone=PL see-GO.TEMP-PRF
'… he saw the bones of animals (that a giant boa snake had eaten).'
CAVINEÑA (Guillaume 2008a: 485)

b. [[[***Tu-ja***] ***e-wane=ke=ja***] *e-tata=ke=ra*] *kweja-kware* [*peya* *ata=kwana*]
3SG-GEN 3-wife=3=GEN 3-father=3=ERG inform-REM.PST other relative=PL
'His father-in-law (lit. his wife's father) informed his other relatives.'
CAVINEÑA (Guillaume 2008a: 486)

Genitive markers can express a range of different relations such as e.g. in Cavineña interpersonal/kinship relations (17b), whole-part relations (16a,b), ownership relations (e.g. Antoni's mosquito net) and a few other related notions (e.g. the light of the sun, the bite of the viper, etc.).

Quantifiers (e.g. 'all', 'many', 'a lot of, 'few'), **numerals** and the term meaning '**other**' form a more or less homogenous class, depending on the languages. In Cavineña, these normally precede the NP head, as in (18a) and (19a,b), and (if present) a genitive NP / genitive pronoun, as in (18b).

(18) a. *Wirakucha=ja* *=tu* [***umada*** *waka*] *ani-ya*.
white.man=DAT =3SG many cow(Sp) sit-IPFV
'The white man has many cows (lit. many cows sit to the white man).'
CAVINEÑA (Camp & Liccardi 1989: 57; cited in Guillaume 2008a: 521)

b. [***Dutya*** *tu-ja* *kasa=tsewe*] *kueti-kware* *e-puna=ekatse=eke*.
all 3SG-GEN strength=ASSC pass-REM.PST NPF-female=DU=PERL
'(An agouti appeared suddenly and) passed with all its strength between two women.'
CAVINEÑA (Camp & Liccardi 1973: 29; cited in Guillaume 2008a: 494)

(19) a. *Ju-kware* *=tu* [***peadya*** *ekwita*].
be-REM.PST =3SG one person
'There was one man.' CAVINEÑA (Guillaume 2008a: 493)

b. [***Beta*** *kwaba*] *=tu-ke* *=Ø* *a-kware*.
two canoe =3SG-FM =1SG do-REM.PST
'I made two canoes.' CAVINEÑA (Guillaume 2008a: 493)

In Araona and Ese Ejja these words form a less homogeneous class, with members that must precede, members that must follow, and members that can occur on either sides of the NP head, as with Araona *beta* 'a few / a little' in (20a) and (20b) (Emkow 2006: chap. 11).

(20) a. [***Beta*** *akwi* *inya*] *di-mane*.
a.few/a.little tree leaf eat-HAB
'(It) eats few tree leaves.' ARAONA (Emkow 2006: 330)

b. [*Moye* ***apamo***] [*kwawea* ***apamo***]
brazil.nut many/a.lot.of cassava many/a.lot.of
[*zia* ***beta***] *jalili=metse* *walo*.
sweetcorn a.few/a.little camote=INS mix.
'(We) mix a lot of Brazil nuts and cassava and a little bit of sweet corn with camote.'
ARAONA (Emkow 2006: 330)

Adnominal **demonstratives** systems consist of several markers which normally precede the NP head and (if present) other prenominal modifiers (juxtaposed noun, genitive modifier, quantifier) and contrast according to (at least) the dimensions of distance, visibility and/or familiarity with respect to the speaker, depending on the languages. The simplest system is found in Ese Ejja with only two members, described by Vuillermet (2012a: 356) as follows: *jikyo* 'DEM1' "tends to refer to things than can be seen or pointed to (visible)" (21a) – see also (32) – and *ma* 'DEM2' "tends to be used with objects that are not present (not visible)" (21b).

(21) a. [***Jikyo*** *e-sho'i*] *mentana=jo* *koxa-neki*.
DEM1 NPF-child window(Sp)=LOC look.at-STAND/PRS
'This child is watching from the window.'
ESE EJJA (Vuillermet 2012a: 631; 2012b: 16)

b. *Mano'yo-naje* [***ma*** *etii*].
die-REC.PST DEM2 adult
'That old woman died.' ESE EJJA (Vuillermet 2012b: 87)

The other languages have either more markers (three in Reyesano, four in Cavineña and – possibly – five in both Tacana and Araona). These systems appear to manifest (at least) a contrast between proximal, medial and distal form, as with Araona *ma* 'this' and *ojo* 'this (referent no familiar)' versus *da* 'that (referent close or already identified)' and *joda* 'that (referent identified among various referents)' versus *joma* 'that over there (from the distance, indistinct or half-hidden)' (Pitman 1980: 86). The Cavineña adnominal demonstrative construction is unlike that of all the other languages in not making use of any basic (underived) forms. As illustrated in (22), the adnominal demonstrative forms are all morphologically complex, built from a set of adverbial (presentational) demonstratives (§7.1.3) and marked by the relative clause marker *=ke* (see below and §8.2); for a detailed description, see Guillaume (2008a: 80–81, 502–504).

(22) a. [***Jee=ke*** *ebakwapiji=ra=dya*] *=yatse* *duju-chine.*
here=REL small.child=ERG=FOC =1DU take-REC.PST
'This child (in the picture) took us (to the other side of the river in his canoe).'
CAVINEÑA (Guillaume 2008a: 502)

b. [***Yume=ke*** *jipamu*] *ji-u=piji.*
over.there=REL papaya good-ASF=DIM
'That papaya (tree) over there (that we see in the distance) is nice.'
CAVINEÑA (Guillaume 2008a: 503)

The last type of noun modifier, the **relative clause**, consists of a finite clause embedded within an NP, with or without a specific relative clause marker. Relative clauses most often occur postposed to the NP head (23a), but they can also occur before it (23b). In (at least) Cavineña, a relative clause can be also be internally headed; see §8.2 for more details about the internal structure and functions of relative clauses.

(23) a. [*Ai* *bakani*] *=tu* *ju-kware*
INDF name =3SG be-REM.PST
[*pushi* *ekwita* [[***makei*** ***iye=ra]*** ***kwa-kware=ke***]]?
four person enemy kill=PURP.MOT go-REM.PST=REL
'What are the names of (lit. what names are) the four men who went to kill the enemies?'
CAVINEÑA (Tavo Mayo 1977: 73; cited in Guillaume 2008a: 499, 747)

b. *E-ju* *=taa* *=ri* [***ju-na-chine=ke*** *hermano*]?
Q-LOC =EMPH =3PROX.SG be-COME.TEMP-REC.PST=REL brother(Sp)
'Where on earth is the brother who has arrived?'
CAVINEÑA (Guillaume 2008a: 501, 759)

4.4 Pronouns

Takanan languages have several sets of **personal pronouns** which differ according to their position and function in different constructions. Starting with pronouns that express core grammatical functions (S, A and P), the languages first have a set of pronouns which are normally used in one of two possible positions in the clause correlating with two distinct discursive functions: in first position when referring to emphatic participants and in

('Wackernagel') second position when referring to non-emphatic continuing topics. Examples of Tacana 1SG A (ERG) and S (ABS) pronouns in first position and in second position are given in (24) and (25), respectively.

(24) *Mawe!* ***Y-Ø-a-ma*** *=da* *e-manuame.* ***E-Ø-ma*** *ebiasu* *tuche-da.*
NEG 1-SG-ERG-FM =PTC FUT-kill 1-SG-FM a.lot strong-ASF
'No! It's me who will kill him (and not him who will kill me). It's me who is the strongest.'
TACANA (Guillaume 2018b: 229)

(25) a. *Jiawe* *=da* ***y-Ø-a-ma*** *e-manuame.*
now =PTC 1-SG-ERG-FM FUT-kill
'Now I will kill him.' TACANA (Guillaume 2018b: 230)

b. *Mi=e-bianetia=puji* ***e-Ø-ma*** *pue-iti-a…*
2SG=PURP.GNL.SS-protect=PURP.GNL 1-SG-FM come-TDM-PST
'I came to protect you (the dog$_i$ said to his master, after he$_i$ arrived).'
TACANA (Guillaume 2018b: 236)

Note that in second position, there is evidence for an incipient or advanced process of grammaticalization, depending on the languages, where second position pronouns acquire distinct phonological and morphophonological properties (e.g. loss of stress or case distinctions; see discussion in §7.1.1).

The number of members per pronominal systems varies from six in Reyesano, 15 in Ese Ejja and Tacana, 23 in Araona to 24 in Cavineña. The pronominal forms have an agglutinative structure which consists of a root that expresses person (1, 2, 3) and up to three suffixes. The first two suffixes separately express, normally in the following order, number (sg, du, pl) and case (ergative). The third and last suffix expresses either clusitivity (incl./excl.) or a semantically empty category (cf. formative *-ma* in the Tacana examples above). As argued in Guillaume (2015a; 2015b; 2015c), person, number and case are reconstructible to Proto-Takanan (**e* '1', **mi* '2', **tu* and **su* '3', **-Ø* 'SG', **-tse* 'DU', **-(kwa)na* 'PL', **-ra* 'ERG'). This is not the case with clusivity, which has developped at later stages and only in some languages (Ese Ejja, Araona and Tacana). Empty formatives are present in all the languages but are not reconstructible to Proto-Takanan either.

Some Proto-Takanan pronominal distinctions and meanings have been lost in certain languages, such as the dual vs. plural contrast in Ese Ejja and Reyesano and the ergative case in Reyesano and (partly) in Tacana. In Tacana, ergative marking is only retained in 1st and 2nd person, resulting in an interesting pattern that goes against Silverstein's (1976) 'animacy' (referential) hierarchy predictions (see more on this patter in §7.1.1). In some pronouns in Araona, the ergative case has been lost and later renewed, resulting in a pattern where ergative case follows the clusivity/formative suffixes (compare e.g. Araona *mi-Ø-**dya-ja*** [1-SG-**FM-ERG**] with Tacana *mi-Ø-**a-da*** [1-SG-**ERG-FM**]).

In addition to first position and second position pronouns, two Takanan languages, Ese Ejja and Tacana, have an additional set of pronominal clitics which are used in certain dependent clauses for encoding core arguments (e.g. *mi=* '2SG' in (25b)). These are formally related to the first position and second position pronouns, displaying a more reduced form; see discussion in §8.1.4.

Finally, all Takanan languages have pronouns used to express oblique/adjunct grammatical functions. These have either the same morphological structure as first position / second position core pronouns (i.e., [person-number-case-clusivity/formative]) or more reduced forms. In §4.3,

we have already commented on and illustrated **genitive pronouns**, used instead of genitive NPs modifying a noun inside an NP. Like genitive NPs (§4.3), genitive pronouns in at least some Takanan languages can also be used at the clause level in **dative** function; see §7.1.2. Depending on the languages, there are further oblique pronominal sets for referring to participants in various roles such as locative, perlative, instrumental, comitative, etc.; see §7.1.2.

5 Verbs, predicates, and verbal predication

All Takanan languages have a large class of verbs (several hundred items) which are distinguished from the other word classes by their ability, when used in predicate function, to carry directly the inflectional morphology; by contrast, the predication of other word classes requires a light verb to carry the inflections (§6).

Verbs in Takanan languages head predicative constituents which can be highly elaborate in terms of the number of constituting elements. The complexity of predicative constituents is however counterbalanced by a strong tendency for a rather loose structure with very clear morphological boundaries and constituting elements that display very little allomorphic variation. Table 5 represents the typical morphological structure of a verbal predicate in the different Takanan languages.

Table 5 Structure of verbal predicate in Takanan languages (bold elements are inflectional/obligatory)

-3	tense-aspect-mood prefix
-2	valency-changing prefix
-1	noun root (incorporated)
0	**verb root (head)**
+1	verb/adjective root (compounded)
+2	valency-changing suffix
+3	'adverbial' suffix
+4	**3rd person suffix**
+5	'adverbial' suffix
+6	tense-aspect-mood suffix

The inflectional (obligatory) affixes are discussed first. They fill the most external slots -3, +4 and +6 and form systems of markers which are exclusive to each other. These include markers of **tense, aspect** and **modality** which, in certain languages, coexpress **associated motion** / **posture** (§5.1), markers of **mood / commands** (§5.2) and of certain 3rd **person** subject arguments (§5.3). The non-inflectional (non-obligatory) affixes, which fill slots -2, +2, +3 and +5, are presented next. These consist of **'adverbial'** affixes, (§5.4) and **valency-changing** affixes (§5.5). **Noun incorporation** (slot -1) and **verb/adjective compounding** (slots +1) are discussed in §5.6, followed by **reduplication** (§5.7) and **verbalization** derivational processes (§5.8), these latter two not represented in Table 5.

5.1 Tense, aspect and modality

Most Takanan languages have multiple **past tense** markers for expressing different degrees of temporal distance. In particular, they usually have dedicated markers for **recent** and **remote past**. Recent past markers, such as *-chine* in Cavineña (26a), *-(a)naje* in Ese Ejja, *-(j)a* in Araona and *-ana* in Tacana are used for events that took place between yesterday to several weeks.

Remote past makers, such as *-kware* in Cavineña (26b), *-a=pwa* in Ese Ejja, *-asha, -ana* or *-isa* in Araona and (cognate) *-idha* in Tacana, refer to more remote times.

(26) Cavineña

a. [*Malili=ja* *e-bakujuna=ke=ra*] *=Ø* *kweja-ti-**chine*** *riyabarepa…*
Malili=GEN 3-daughter=3=ERG =1SG inform-GO.TEMP-REC.PST yesterday
'Yesterday (at 7:30 pm) Malili's daughter went to tell me (that I was invited by my brother for a drink).' (Guillaume 2008a: 167)

b. [*I-ke* *ashasha=ju=piji*] [*e-kwe* *tata-chi*] *maju-**kware***.
1SG-FM small=TMP.DS=DIM 1SG-GEN father-AFF die-REM.PST
'When I was little my father died.' (Recorded from Teresa Rutani, a 60 year old woman.) (Guillaume 2008a: 166)

Within the remote past domain, Araona is exceptional in displaying more temporal distinctions than the other languages, possibly up to three according to Pitman (1980: 35–36), with *-asha* 'from various weeks to various years', *-ana* 'distant past' and *-isa* 'remote past', or at least two according to Emkow (2006: 450–452), with *-asha* 'at least a year ago' and *-isa* 'very remote past, for events that the speaker remembers only vaguely'.

For events that took place the same day of the utterance time, i.e., the **immediate past**, there do not seem to be dedicated markers. This function is taken over by a perfect/anterior marker, *-wa* in Cavineña (27), *-eti/-iki* in Araona (116), the sequence *-iti-a* in Tacana (25b) and (apparently) *-a* in Ese Ejja (Vuillermet p.c. 2016)[7].

(27) *Ai* *=tu-ke* *=mi* *mare-**wa***? *Iye-**wa*** *=tu-ke* *=Ø* *matuja*.
INDF =3SG-FM =2SG shoot.at-PRF kill-PRF =3SG-FM =1SG caiman
'What did you (just) shoot at?' 'I (just shot and) killed a caiman.).'
CAVINEÑA (Guillaume 2008a: 175–176)

Finally, at least Tacana has a dedicated **habitual past** marker, the remote past habitual *-ina* (28a), which can be contrasted with the remote past non-habitual *-idha* in (28b).

(28) a. [*Ete* *naja=su*]*=we* [*tueda* *animalu=kwana*] *tsu-**ina***.
house near=LOC=REST eso animal(Sp)=PL meet-HAB.PST
'(When I was young, some 50 years ago) I used to find these animals very close to my house.'
TACANA (Guillaume 2013a; texts and fieldnotes 2009-2013)

b. *Da=puji* *pue-**idha*** [*da* *tiempo=su*].
that=PURP.GNL come-REM.PST that time(Sp)=LOC
'(The subprefect) came for that (for visiting us) at that time (some 30 years ago).'
TACANA (Guillaume 2013a; texts and fieldnotes 2009-2013)

Reyesano is exceptional in displaying only one past tense marker, the circumfix *a-…-a*, which is neutral with respect to temporal distance and aspect; see e.g. (98), (111).

[7] This suffix is not mentioned in Vuillermet (2012a).

Future tense is most often coexpressed with particular modal values, such as potential, as with the Cavineña circumfix *e-…-u* (29) and Tacana *-kwa*.

(29) *Ebakwa=kwana =mikwana Biata=ju **e-iye-diru-u**.*
child=PL =2PL Biata.river=LOC POT-kill-GO.PERM-POT
'You (pl) could lose (lit. kill) your children in the Biata river (if you try to cross).'
CAVINEÑA (Guillaume 2008a: 178)

Another type of future modal (or mood) marker, which has been studied in detail, is the Ese Ejja **apprehensive** *-chana* (30), "used for an event considered as highly potential (epistemic dimension) and highly undesirable (deontic dimension) by the speakers" (Vuillermet 2012a: 474; 2018a).

(30) *Koya e-shawa wowi-ani meka=xe ixya-ka-'yo-**chana**=mi!*
watch.out NPF-spirit whistle-PRS night=PERL eat-3A-TEL-**APRH**=2SG.ABS
'Watch out! the devil whistles at night, (watch out) he might eat you!'.
ESE EJJA (Vuillermet 2012a: 475; Vuillermet 2018a: 267)

Cavineña is the only language with a future marker sensitive to temporal distance, the **remote future** *-buke*, illustrated in (31).

(31) *I-ke* [*muke mere=ra*] *kwa-**buke*** [*peya mara*] *enero=ju.*
1SG-FM brazil. nut work=PURP.MOT go-REM.FUT other year January(Sp)=LOC
'I will go collecting brazil nut next year in January (2004).' (Said 3rd June 2003.)
CAVINEÑA (Guillaume 2008a: 169)

Ese Ejja might be the only language with a **future** marker not expressing additional modal, emotional or temporal distance meanings, *-je*, illustrated in (32) and (126b).

(32) *Pya esowi eyaya wowi-**je** jikyo xeya viernes poxa=jo.*
other story 1SG.ERG tell-**FUT** DEM1 now Friday(Sp) day=LOC
'I will now tell another story on this present day Friday.'
ESE EJJA (Vuillermet 2012a: 460)

Present tense, unlike past and future tenses, is expressed in all Takanan languages but Ese Ejja (see below) by way of non-dedicated morphemes, especially aspectual markers with imperfective semantics, which can also be used for events that occurred in the past or in the future. Such is the case in Cavineña with the imperfective *-ya*, which can be seen expressing present tense in (51d) and (63a,b), past tense in (7a) and future tense in (47a). Such is also the case in the three languages of the Takanik branch (Araona, Tacana and Reyesano) with their sets of inflectional associated motion (Guillaume 2016a)[8] and associated posture (Enfield 2002; Vuillermet & Grinevald 2016) circumfixes, grammaticalized out of independent motion and posture verbs in combination with a prefix *e-*; see more on this prefix below. Examples from the two sets expressing present tense (in addition to associated motion or associated posture) in Tacana are provided in (33) and (34); see also (106). For an example of one of these affixes

[8] Note that associated motion is also expressed by non-inflectional affixes in all of the languages; see §5.4.

used in past tense, see (43a).

(33) a. *Zorro* *=mu* *beu,* ***e****-id'ebati-****u****.*
fox(Sp) =CONTR PTC IPFV-laugh-IPFV.GO
'(The fox) is going away laughing.' TACANA (Guillaume 2017a)

b. ... *ema* *kema* *ewane* ***e****-chaku-****siu*** *e-dia=puji.*
1SG 1SG.GEN wife IPFV-look.for-IPFV.COME PURP.GNL.SS-eat=PURP.GNL
'… I'm coming searching for my wife in order to eat her.'
TACANA (Guillaume 2016a: 164; Guillaume 2017a)

(34) a. *Dukei=base* *e-neti* *ena=su* ***e****-(ja-)id'i-ti-****neti****.*
deer=DEPR EXS-stand stream=LOC IPFV-MID-drink-MID-IPFV.STAND
'There is a deer standing in the water and drinking [standing].'
TACANA (Guillaume 2017a)

b. *Tata* *edhi* *=mu* ***e****-tawi-****sa*** *mesa* *masha=su.*
father old.person =CONTR IPFV-sleep-IPFV.LIE 3SG.GEN bed=LOC
'The grandfather is sleeping lying in his bed.' TACANA (Guillaume 2017a)

Ese Ejja also has a set of inflectional associated posture suffixes, grammaticalized out of the same posture verbs (but without the prefix *e-*). However, in this language these affixes are only used in the present tense (Vuillermet 2009; 2012a: 450–454).

The meaning and historical origin of verbal prefix *e-*, illustrated above in combination with motion or posture suffixes, is an interesting yet complex question. In most Takanan languages, a likely cognate prefix *e-* appears on its own and with varying meanings and functions. For instance, in Araona, it encodes a type of narrative past (or perhaps historical present), for actions that are part of the main event line (Pitman 1980: 29), as in (117). The same use if also found in Tacana (35) and Reyesano. But in Tacana, *e-* is also a basic future tense marker, as in (14c), (24), (25a).

(35) *Zorro=ja* *=pa* *beu* *buni* ***e****-ina,* ***e****-inuamutsu-ta.*
fox(Sp)=ERG =RPT PTC partridge PST-grab PST-pluck-3A
'The fox grabbed the partridge and plucked it.'
TACANA (Guillaume 2013a; texts and fieldnotes 2009-2013)

In Cavineña and Ese Ejja, *e-* is a derivational resultative adjetivizer, as in Cavineña (5ab). Finally, in all the languages, when marking one of the four posture verbs ('sit, stand, lie, hang'), *e-* turns them into existential predicates, as in Tacana (34a).

5.2 Mood

A range of inflectional prefixes (slot -3), suffixes (slot +6) – and sometimes independent particles – combine in different ways in order to yield four distinct mood (command) categories: imperative (affirmative command exclusive to 2nd person), prohibitive (negative command exclusive to 2nd person) and two types of hortative (command directed to 1st or 3rd person, possibly in combination with 2nd person). These categories are often additionally specified for the number (singular, dual or plural) of the performer.

Imperative commands are expressed by a cognate suffix (reconstructed as *-*kwe* by Girard 1971: 93) in all five Takanan languages: *-kwe* in Cavineña (36) and Ese Ejja, *-ke* in Araona and Tacana and *-je* in Reyesano.

(36) *Esiri=ke* *pa-diru*! *Mi-ke* *ani-**kwe***!
old=REL HORT2-go 2SG-FM sit-IMP
'Let the old one (man) leave! You (sg) stay (lit. sit)!'
CAVINEÑA (Guillaume 2008a: 116, 188)

Prohibitive commands also make use of suffixes, but these are not related to the imperative ones, they display more heterogeneous morphology across the different languages, and some require an additional particle to form discontinuous markers: *-ume* in Cavineña (37), *-mae* in Araona and discontinuous *a'a ...-xi* in Ese Ejja (126a) and *be …-ji* in Tacana, the latter two involving a preverbal independent particle and a cognate suffix likely historically related to *-xi, -ji* and *-ki* morphemes found in nominalization (§4.2) and clausal subordination (§8.1.2).

(37) *Mi-ke* *ani-kwe*! *Mi-ke* *je-**ume***!
2SG-FM sit-IMP 2SG-FM come-IMP.NEG
'You (sg) stay (lit. sit)! You (sg) don't come!'
CAVINEÑA (Guillaume 2008a: 104, 183)

In all the languages except Ese Ejja, imperative and prohibitive markers used alone encode that the command is directed to a singular addressee; in Ese Ejja, the addressee can be either singular or plural. In order to encode a plural addressee, an additional marker, in the form of a prefix, formally similar in the different languages, must be added to the verb, resulting in discontinuous markers: *ne-* in Cavineña (38) and *me-* in both Araona and Tacana.

(38) ***Ne-**kwinana-wisha-**kwe***! ***Ne-**kemi-**kwe***
IMP.NSG-emerge-FAST-IMP.NSG IMP.NSG-take.out-IMP
[*mikwana-ja* *carga=kwana*]!
2PL-GEN load(Sp)=PL
'(You (pl)) go out (of the plane)! (You (pl)) take your (pl) luggage out!'
CAVINEÑA (Guillaume 2008a: 183)

Finally, Takanan languages also have inflectional markers for hortative commands. One finds two recurrent patterns, both marked by prefixes which are formally similar. There is a **'restricted hortative'**, found at least in Cavineña and Tacana. This hortative marking is used for commands restricted to 1DU and 1PL inclusive addressees. Interestingly, it is marked by the same morphemes that mark plural in imperative and prohibitive commands: *ne-* in Cavineña (39a,b) and *me-* in Tacana.

(39) a. *Chine=keja* *je-ya* *salon=tsewe.* ***Ne-**iye* *chai=kwana*!
night=LOC.GNL come-IPFV rifle(Sp)=ASSC HORT.DU-kill bird=PL
'I will come late afternoon with my rifle. Let us (du) hunt (lit. kill) birds!'
CAVINEÑA (Guillaume 2008a: 116, 187)

b. *Jutakiju* *gobierno* ***ne-**baka-**ra*** [*ekwana* *tsawa=ishu*]!
therefore government(Sp) HORT.PL-ask-HORT.PL 1PL help=PURP.GNL
'Therefore, let's (pl) ask the government to help us!'

CAVINEÑA (Guillaume 2008a: 187, 775)

When used alone, as in (39a), the 'rectricted' hortative prefix encodes a dual addressee (1SG+2SG). For encoding a plural addressee (1SG+2SG+3SG/PL), a suffix is added, which is cognate: *-ra* in Cavineña and *-ja* in Tacana (reconstructible as **-ra* in Proto-Takanan).

The second hortative marker, the '**extended hortative**', is found in all the languages. It is used to encode commands directed to a much broader range of possible addressees, the nature of which depends on the language, including 1SG, 3SG/PL ('jussive' function), 1DU/PL exclusive and even 1DU/PL inclusive (at least in Tacana). The form of the 'extended hortative' marker is *pa-* in all the languages but Ese Ejja, where it is *ka-…-awa*. For illustrative examples, see Cavineña *pa-* with a 1SG addressee in (40a), 1PL addressee in (40b),[9] 3SG addressee in (36) and 3PL addressee in (108) and Tacana *pa-* with a 1DU inclusive addressee in (41a,b).

(40) a. *Ikwene* *e-ra* *e-kwe* *rimu* ***pa-keti***!
first 1SG-ERG 1SG-DAT lemon(Sp) HORT2-fetch
'Let me first fetch a lemon for myself!'
CAVINEÑA (Tavo Mayo 1977: 18; cited in Guillaume 2008a: 187)

b. *Jadya* *=pa* *=ekwana* ***pa-a=ama.***
thus =RPT =1PL HORT2-do=NEG
'Let's (me and my fellow Cavineña) not call (lit. do) him so.'
CAVINEÑA (ap049 - Guillaume texts and fieldnotes 1996-2003)

(41) a. *Pue-yu-**ke*** *papá,* *asau* ***pa-dia-ti***!
come-ITER-IMP father(Sp) grilled.food(Sp) HORT2-eat-GO
'Come daddy! Let's eat 'asau! (you and me)'
TACANA (Guillaume 2017b)

b. *Jiawe* *te* ***pa-dhutu-ti-iti-ja*** *mama*!
now garden HORT2-plant-GO-TDM-HORT.PL mummy(Sp)
'Now let's plant the garden, mummy!' (you, me and my mother in law)
TACANA (Guillaume 2017b)

In (at least) Tacana, in contexts where the 'extended hortative' *pa-* encodes a non-singular 1st person addressee (whether exclusive or inclusive) and when *pa-* is used alone, the addressee is understood as dual (1SG+2SG or 1SG+3SG), as in (41a). For encoding a plural addressee (1SG+2SG+3SG/PL or 1SG+3PL), similarly to what happens with the 'restricted hortative', the same suffix *-ja* must be used, as in (41b). Note that *-ja* is never used with 3rd person addressees.

5.3 Person and number

All Takanan languages but Reyesano are predominantly dependent-marking, a feature that can be traced back to Proto-Takanan (Guillaume 2018b). The grammatical functions of their core participants (S, A and P) are distinguished by way of ergative case systems on NPs/pronouns (see §7.1.1). When available, participant indexation is restricted to 3rd person. Third person indexation is found in Ese Ejja, Araona, Tacana and Reyesano, by way of a cognate suffix *-ta*

[9] Note that this is a revision of Guillaume (2008a: 186–188), where I wrongly stated that Cavineña *pa-* only marks 1SG ('hortative') and 3SG/PL ('jussive') addressees.

or *-ka* (Proto-Takanan **-ta*) in slot +4. This suffix is used to index 3rd person A arguments (singular or plural) in transitive clauses (42) and 3rd person plural S arguments in intransitive clauses (43). In Cavineña, this suffix has developed into a passive marker (§5.5).

(42) a. *Aya* *=papu* *=mida* *e-dia-**ta**.*
who.ERG =INDF =2SG FUT-eat-3A
'Someone will eat you.' TACANA (Guillaume 2018b: 232)

b. *Jiawe* *=da* *id'eti* *biwa=ja* *y-abu-**ta**-(a)ni.*
now =PTC sun spider.monkey=ERG IPFV-carry-3A-IPFV.SIT
'Now the spider monkey is carrying the sun.' TACANA (Guillaume 2018b: 232)

(43) a. *Enekita* *beu* *se=**kwana*** *e-manu-**ta**-sa.*
really PTC fish=PL IPFV-die-3S.PL-IPFV.LIE
'Really the fish (pl) were dying.' TACANA (Guillaume 2018b: 232)

b. … *beu* [*mesa* *ebakwa*] *manu-iti-a.*
PTC 3SG.GEN child die-TDM-PST
'… his child had died.' TACANA (Guillaume 2018b: 232)

Reyesano stands out for displaying, in addition to the 3rd person suffix, a set of four portmanteau prefixes which mark the person and number of core speech-act participants: *m-* '1SG', *mi-* '2SG', *k-* '1PL' and *mik-* '2PL'. In intransitive clauses, these prefixes straightforwardly index the S argument when it is a speech-act participant (44).

(44) a. ***m**-a-puti-a* [1SG-PST-go-PST] '**I** went' 1SG
b. ***k**-a-puti-a* [1PL-PST-go-PST] '**we** went' 1PL
c. ***mi**-a-puti-a* [2SG-PST-go-PST] '**you (sg)** went' 2SG
d. ***mik**-a-puti-a* [2PL-PST-go-PST] '**you (pl)** went' 2PL
REYESANO (Guillaume 2009b: 34–35)

In transitive clauses, the prefixes operate according to a **hierarchical indexation pattern** where the same forms mark the argument that is higher on a 2>1>3 scale, regardless of its grammatical function (A or P). This is illustrated in (45), with the 1↔3 configuration and (46), with the 2↔3 and 2↔1 configurations.

(45) a. ***m**-a-ba*(*-a*) [**1SG**-PST-see-PST] '**I** saw him/her/it/them' **1SG** → 3
b. ***m**-a-ba-ta*(*-a*) [**1SG**-PST-see-3A-PST] 'he/she/it/they saw **me**' 3 → **1SG**
REYESANO (Guillaume 2009b: 35–40)

(46) a. ***mi**-a-ba*(*-a*) [**2SG**-PST-see-PST] '**you (sg)** saw him/her/it/them' **2SG** → 3
'**you (sg)** saw me/us' **2SG** → 1
'I/we saw **you (sg)**' 1 → **2SG**
b. ***mi**-a-ba-ta*(*-a*) [**2SG**-PST-see-3A-PST] 'he/she/it/they saw **you (sg)**' 3 → **2SG**
REYESANO (Guillaume 2009b: 35–40)

A detailed description of the Reyesano indexation system can be found in Guillaume (2009b) and a historical reconstruction in Guillaume (2011c; 2018b), where I show that indexation of speech-act participants and lack of case correspond to innovations, not retentions of the Proto-Takanan system.

5.4 'Adverbial' morphology

The suffixes that are used in slots +3 or +5 are numerous, encoding a wide range of notions having to do with aspect, pluractionals, spatial distribution, associated motion, time of the day, emotions, etc. They display a high degree of productivity without being obligatory, which makes them difficult to classify according to the traditional notions of derivational vs. inflectional morphology.

Some of these suffixes can be used in complementary distribution, forming small paradigms of contrasting values, as with e.g. Cavineña *-tere/-tirya* 'completive' vs. *-bisha* 'incompletive' and *-baka* 'a short time' vs. *-siri* 'a long time', or Ese Ejja *-nei(nei)* 'very' vs. *-pishana* 'a bit' and *-kwaji(kwaji)* 'fast' vs. *-shono* 'slow, late'. Some paradigms are more elaborated, as with the four **time-of-the-day affixes** of Cavineña which distinguish whether the action is performed 'at dawn' (47a) – see also (137c) –, 'at dusk' (47b), 'during the whole day' (47c) or 'during the whole night' (47d).

(47) a. *Metajudya=piisi =ekwana kwa-**wekaka**-nuka-ya.*
tomorrow=JUST =1PL go-AT.DAWN-ITER-IPFV
'Tomorrow (at sunrise), we will keep going.' CAVINEÑA (Guillaume 2008a: 237)

b. *Chine=ju =pa =tuna wikamutya=ra kwa-**apuna**-ya.*
night=LOC =RPT =3PL fish=PURP.MOT go-AT.DUSK-IPFV
'They say that they will go fishing tonight.' CAVINEÑA (Guillaume 2008a: 239)

c. *Weka-da=ju =tu tawi-**chinepe**-ya.*
bright-ASF=LOC =3SG sleep-ALL.DAY-IPFV
'It (the scissor-tailed nightjar) sleeps all day long (lit. in the bright one).'
CAVINEÑA (Guillaume 2008a: 239)

d. *Apuna-wa=ju =tuna katsa-**sisa**-ya*
be.at.dusk-PRF=TMP.DS =3PL beat-ALL.NIGHT-IPFV
[*tume=ke kunu wenenu* [*jae iye=ishu=ke*]].
there=REL liana venom(Sp) fish kill=PURP.GNL=REL
'After dusk had fallen, they pounded (lit. beat) all night long that poisonous liana which is used to kill fish.'
CAVINEÑA (Tavo Mayo 1977: 14; Guillaume 2008a: 240)

A particularly interesting semantic category expressed by 'adverbial' suffixes in Takanan languages is that of **associated motion** (Guillaume 2016a). As already seen, this category is also found at the level of the inflectional morphology (see §5.1). Associated motion suffixes have been extensively studied in Cavineña (Guillaume 2000; Guillaume 2006; 2008a: 212–236; 2009a; 2013b) and Ese Ejja (Vuillermet 2012a: chap. 15; 2013). They have also been explored from a comparative perspective, within the Takanan family (Guillaume 2013c) and within the Takanan and Panoan families (Guillaume 2017c). Takanan languages are among the languages

of the world (together with the Arandic languages of Central Australia) where this semantic category reaches its highest degree of elaboration, with systems that commonly have more than a dozen members. Some examples of associated motion morphemes in Cavineña are *-ti* 'go temporarily' (7), (26a), *-diru* 'go permanently' (29), *-nati* 'going temporarily' (17a), *-na* 'come temporarily' (109); see also Araona *-jao* 'come' in (132). Takanan languages are also among the few languages of South America (and of the world) to display associated motion markers dedicated to the motion of the transitive object argument (rather than that of the subject argument, S or A), as with Cavineña *-tsa* 'do the verb action while the P argument is moving towards the A argument' (48a) – see also (133) – and *-dadi* 'do the verb action while the P argument is moving away from the A argument' (48b) – see also (112).

(48) a. *Tume* *=pa* *=taa* *=tu-ja* *=tu* *ba-**tsa**-ya* *ekwita…*
then =RPT =EMPH =3SG-DAT =3SG see-COME(O)-IPFV person
'Then he$_i$ saw a man coming towards him$_i$.'
CAVINEÑA (Guillaume 2008a: 234; 2016a: 113)

b. [*Peadya* *ekwita*] *=tu-ke* *=Ø* *ba-**dadi**-wa…*
one person =3SG-FM =1SG see-GO(O)-PRF
'I saw a man going away from me (with the duck he had stolen).'
CAVINEÑA (Guillaume 2008a: 234; 2016a: 113)

Another noteworthy semantic field expressed by 'adverbial' suffixes that has been studied in some detail is that of **evaluation / emotions** (see Guillaume 2008a: 241–244; 2018a). Three broad types of emotions are recurrently found in the different languages: diminutive/affection, compassion and depreciation; note that similar emotions can also be encoded as noun modifiers (§4.3) and particles (§7.1.3), sometimes via formally identical morphemes (see more on this phenomenon below). The following examples from Tacana, from Guillaume (2018a), illustrate three types of emotions: diminutive/affection in (49a), compassion in (49b) and depreciation in (49c).

(49) a. *Baja-**chidi**-icha-ke* *kema*!
buy-DIM-ITER-IMP 1SG.DAT
'(I'm running out of coca leaves, don Antonio.) Could you again buy <u>a little bit</u> for me / <u>please</u>!'
TACANA (Guillaume 2018a: 122)

b. *Etsau=kama=we* *pamapa* *tsine* *e-tia-**ichenu**-ta-ani*
bone=RESTR=RESTR all day IPFV-offer-COMPAS-3A-IPFV.SIT
mesa *uchi=kwana.*
3SG.GEN dog=PL
'Everyday they would give only bones to their dogs, <u>the poor ones</u>.'
TACANA (Guillaume 2018a: 126)

c. *Dapia* *=da* *manu-**madha**-iti-a.*
there =PTC die-DEPR-TDM-PST
'He died there (the <u>despicable</u> caiman that almost ate me).'
TACANA (Guillaume 2018a: 133)

As seen in some examples above, it is possible for two 'adverbial' suffixes to co-occur in a single verb, as with e.g. Cavineña *-wekaka* and *-nuka* in (47a) and Tacana *-chidi* and *-icha* in

(49a). In Cavineña, there are even exemples with three co-occuring suffixes, as with *-eti*, *-bare* and *-nuka* in (50).

(50) [*Tu-wa* *kwa-atsu*] *=ekwana* *mesa=ju*
there-LOC go-TMP.SS =1PL table(Sp)=LOC
*ani-**eti-bare-nuka**-chine.*
sit-COME.PERM-DISTR-ITER-REC.PST
'After going there (to the toilets), we sat back around the table (at the market).'
CAVINEÑA (Camp 1982: 114; cited in Guillaume 2008a: 245)

When several suffixes co-occur, there do not appear to be strict ordering restrictions. A difference in order can correlate with a difference in meaning and scope, although this is not always the case.

5.5 Transitivity and valency-changing morphology

Most verbal lexemes are strictly either intransitive or (di)transitive – ambitransitive verbs are exceptional – and overt valency-changing mechanisms are required for changing transitivity. Valency-changing affixes are used in slot -2 and +2 of the verbal predicate structure. Most languages have only one **valency-decreasing** marker, the cognate middle circumfix, found in all the languages and reconstructible as **ka-…-ti* (Girard 1971: 86, 124). When applied to transitive verbs,[10] this marker has a broad range of meanings and functions such as reflexive (51a), reciprocal (51b), autobenefactive (51c), antipassive (34b), anticausative and (at least in Ese Ejja) passive (52).

(51) a. *Señora* ***ka**-peta-**ti**-wa* *espejo=ju.*
lady(Sp) MID-look.at-MID-PRF mirror(Sp)=LOC
'The lady looked at herself in the mirror.' CAVINEÑA (Guillaume 2008a: 269)

b. *Ekwana* *=bakwe* ***ka**-peta-**ti**-bare-kware*
1PL =CONTR MID-look.at-MID-DISTR-REM.PST
'We looked at each other.' CAVINEÑA (Guillaume 2008a: 269)

c. *Señora* ***ka**-peta-**ti**-wa* [*tu-ja* *chapa* *ushuri=ke*].
lady(Sp) MID-look.at-MID-PRF 3SG-GEN dog skinny=REL
'The lady examined her skinny dog carefully (concerned that he could be sick).'
CAVINEÑA (Guillaume 2008a: 269)

(52) *Owe* *e-sho'i* *taxakaka=jo* ***xa**-xasowa-**ki**-ani.*
one NPF-child(ABS) frog=LOC MID-scare-MID-PRS
'A child is scared by the frogs (as they are so many).
ESE EJJA (Vuillermet 2012a: 524)

Cavineña stands out for having, in addition to the middle circumfix, two additional valency-decreasing markers: a productive passive-anticausative *-tana* and a lowly productive passive *-ta*, which is cognate to the 3rd person suffix in the other languages (§5.3); see Guillaume (2012b) for a detailed description of these suffixes and Guillaume (2011c) for a

[10] A formally identical circumfix is found as a verbalizer of nouns and adjectives (see §5.8).

reconstruction of the *-ta* passive to a 3rd person plural suffix **-ta* in Proto-Takanan.

Valency-increasing affixes are more numerous. First, all Takanan languages share a cognate causative suffix reconstructed as **-mere* in Proto-Takanan (Girard 1971: 101) which is productive and used for 'regular' causation. In the Ese Ejja example in (53a), this suffix, *-mee*, derives a transitive verb out of an intransitive one, and in (53b), a ditransitive verb out of a transitive one.

(53) a. *Kya-kiyo=jojo=ya* *oya* *besa-**mee**-naje* *eyaya**.***
APF-hot=REASON.NOTA/S=FOC 3ABS bathe-CAUS-REC.PST 1SG.ERG
'Because it was hot I made him bathe.' ESE EJJA (Vuillermet 2012a: 504)

b. *E-sho'i=a* *inyawewa* *taxakaka* *ba-**mee**-ka-ani*.
NPF-child=ERG dog frog see-CAUS-3A-PRS
'The child shows the frog to the dog.' ESE EJJA (Vuillermet 2012a: 505)

In Cavineña, the cognate marker *-mere* can be used with transitive verbs; intransitive verbs require a distinct marker, *-sha* (54).

(54) *Ekwita=ra* *=tu* *ebakwa* *pakaka-**sha**-kware.*
person=ERG =3SG child fall-CAUS-REM.PST
'The man made the child fall.' CAVINEÑA (Guillaume 2008a: 286)

All Takanan languages also display a sociative causative' (causative of involvement), which indicates that "the causer not only makes the causee do an action but also participates in it" (Shibatani & Pardeshi 2002; Guillaume & Rose 2010). The form of this morpheme varies from *-kere* in Cavineña, as in (55b), *-sawa* in Ese Ejja, and *-tsawa* in the languages of the Takanik sub-branch, suggesting that the suffix can be reconstructed to Proto-Takanan **-tsawa*, with the Cavineña form being an innovation.

(55) *E-ra* *=tu* *ara-**kere**-chine* *torta* [*Don* *Francisco*].
1SG-ERG =3SG eat-CAUS.INVLT-REC.PST cake(Sp) Mr. (Sp) Francisco
'I invited Mr. Francisco to eat a cake with me.'
CAVINEÑA (Guillaume 2008a: 298; Guillaume & Rose 2010: 389)

5.6 Compounding / incorporation

In all Takanan languages, a transitive verb root (slot 0) can be compounded with an immediately preceding noun root (slot -1), an immediately following verb root (slot +1), and (at least in Ese Ejja) an immediately following bound predicative adjective root[11] (also slot +1). In all cases, the resulting construct (noun-verb, verb-verb or verb-adjective) is a complex verbal lexeme which has the same transitivity value as the verb in slot 0.

The first process (noun-verb) primarily involves bound noun roots – these express inalienable entities, typically body parts; §4.1 – and corresponds to the well known mechanism of **noun incorporation**. More specifically, the process corresponds to Mithun's (1984) type II incorporation, the function of which being to promote highly affected 'possessors' from oblique genitive function to core P function, and demote the 'possessed' part from core P function to

[11] In this study, the lexical class of bound predicative adjectives is discussed under the topic of coverbs (see §6.2).

being part of the predicate. Normally, only transitive verbs can incorporate a noun, as in the following examples from Cavineña (56) and Ese Ejja (57).

(56) *Santiago=ra =tu e-ju=ke* ***metuku-tubu-****wa.* (Cf. *e-metuku*)
Santiago=ERG =3SG 3-younger.brother=3 hand-cut-PRF 'NPF-hand'[12]
'Santiago has cut the finger (lit. hand) of his younger brother.'
CAVINEÑA (Guillaume 2008a: 146–147)

(57) *A'a kwichi* ***jyoxi-jeyo****-naje*? (Cf. *e-jyoxi*)
Q pig.ABS foot-tie-REC.PST 'NPF-foot'
'Did (you) tie up the foot of the pig (lit. did you foot-tie the pig)?'
ESE EJJA (Vuillermet 2012a: 514; 2014a: 114)

In Ese Ejja, however, the process is also applicable to certain intransitive verbs, in particular posture and path verbs, as with e.g. *dobi* 'go in' in (58), a phenomenon that appears to be rare in the world's languages. For a detailed study of noun incorporation in Ese Ejja, see Vuillermet (2014a).

(58) *Inyawewa botella=asixe* ***wi-dobi****-ki-'yo-naje*. (*e-wi* 'NPF-nose)
dog bottle(Sp)=ALL nose-go.in-GO-TEL-REC.PST
'The dog put its nose (lit. nose-entered) into the bottle.'
ESE EJJA (Vuillermet 2012a: 517; 2014a: 128)

The second and third compounding processes involve, respectively, verbs (verb-verb) and (in Ese Ejja) bound predicative adjectives (verb-adjective). In the case of verbs, depending on the languages, the process is more or less productive and can involve different semantic categories of verbs. Most languages allow for compounding of path motion verbs, as with Cavineña *tsura* 'go up' (59a) and *bute* 'go down' (59a,b), and posture verbs, as with Tacana *netia* 'stand' (60).

(59) a. ***Ani-tsura****-kwe*!
sit-go.up-IMP
'Sit on the cart (so that you don't have to walk)!'
CAVINEÑA (Guillaume 2008a: 314)

b. *Bandia Tata! Nubi-kwe!* ***Ani-bute****-kwe!*
good.morning(Sp) sir enter-IMP sit-go.down-IMP
'Good morning Sir! Come in! Have a seat (lit. sit down)!'
CAVINEÑA (Guillaume 2008a: 316)

(60) ***Rubiu-netia****-ta-idha* *shita* *etsuti=su*.
put.in-stand-3A-REM.PST sugarcane house.corner=LOC
'He put the sugarcane in a vertical position in the corner of the house.'
TACANA (Guillaume 2013d)

Ese Ejja goes a step further in allowing for wider range of verbs, notably highly transitive verbs

[12] Note that in noun incorporation, the dummy prefix *e-* which obligatorily accompanies bound noun roots in citation form is left out.

(61a), as well as predicative adjectives (61b), to also enter the compounding construction.

(61) a. *Mei* *=pa* ***jaja-pojo****-ka-ani-naje.*
stone =RPT cut-divide-3A-IPFV-REC.PST
'(They had no machete), they used to cut stones into pieces.'
ESE EJJA (Vuillermet 2012a: 395; Vuillermet 2017: 180)

b. *Mikye=bakwa* ***tii-'ao****-naje.*
2SG.GEN=child grow-big-REC.PST
'Your child grew up (lit. your child became big from growing).'
ESE EJJA (Vuillermet 2012a: 406; Vuillermet 2017: 189)

In a number of verb-verb compounding constructions, the transitivity value of the second verb needs to be the same as that of the first. This is the case, for instance, with constructions involving 'downward motion' verbs in several languages, which can be illustrated in Cavineña with the intransitive *bute* 'go down' used with the intransitive *ani* 'sit' in (59b) and *butya* 'lower, put down' used with the transitive *iya* 'put' in (62); the combinations **ani-butya* and **iya-bute* are ungrammatical.

(62) [*E-kwe* *e-nasi*] *=bakwe* *iya-**butya**-kware.*
1SG-GEN 1-older.sister =CONTR put-GO.DOWN-REM.PST
'She (my mother) put my older sister down (from her shoulder).'
CAVINEÑA (Tavo Mayo 1977: 28; cited in Guillaume 2008a: 316)

For specific and detailed studies on the three types of compounding processes in Ese Ejja, see Vuillermet (2014a) for the first (noun-verb) and Vuillermet (2017) for the second (verb-verb) and the third (verb-adjective).

5.7 Reduplication

Verbs in Takanan languages can undergo a fairly wide range of heterogeneous reduplication processes. These differ according to whether reduplication is productive vs. non-productive vs. inherent, partial vs. full, simple vs. 'automatic' (i.e., obligatorily accompanied by an additional affix) and according to the semantic and formal effect of the reduplication process on the verbal base. For a specific study of all the different reduplication processes in Cavineña (involving verbs but also other word classes) see Guillaume (2014).

A particularly productive and typologically noteworthy verbal reduplication process, common to most Takanan languages, is that of 'antipassive full reduplication', illustrated in Cavineña in (63a,b); see (126a) for Ese Ejja. This mechanism only applies to transitive verb roots, normally turning them into intransitive verb stems with an antipassive effect in the rearrangement of the semantic roles (A→S, P→Ø or oblique). Semantically, the reduplicated verb denotes a culturally-codified activity, i.e., an activity that people or animals regularly repeat in the same way with respect to the same types of entities (patients).

(63) a. *Era* *takure* ***ara****-ya.*
1SG.ERG chicken(ABS) eat-IPFV
'I am eating chicken.' CAVINEÑA (Guillaume 2008a: 279; 2014: 328)

b. ***Ara~ara**-ya* *ike.*
eat~ANTIP-IPFV 1SG(ABS)
'I am eating / having a meal.' CAVINEÑA (Guillaume 2008a: 279; 2014: 328)

In Cavineña, the notional P cannot be overtly expressed. In Ese Ejja, however, its overt expression is possible, via an oblique locative phrase, as illustrated in (64).

(64) *Piye* ***kaaoxe=jo*** ***ixya~ixya**-ani,* *shixexe=a=pi'ai*
parrotlet.spec. fruit.spec.=LOC eat~ANTIP-PRS parrotlet.spec.=ERG=ALSO
ixya-ka-ani.
eat-3A-PRS
'Parrotlets eat (the ambaibo) fruits, (other sorts of) parrotlets eat them too.'
ESE EJJA (Vuillermet 2012a: 438)

5.8 Verbalization

All Takanan languages have derivational affixes which are used to verbalize roots that belong to other word classes. The number of such morphemes and/or their productivity differ depending on the language. Here, we illustrate three cognate markers that are found in most of the languages with simar functions.

The first one is a circumfix **ka-…-ti* (Girard 1971: 86, 124) used to derive an intransitive verb stem normally out of a noun (65).

(65) a. ***ka**-kaka-**ti**-* *e-kaka*[13]
'give fruit' 'NPF-fruit'

b. ***ka**-puna-**ti**-* *e-puna*
'become an adult woman' 'NPF-female'

c. ***ka**-tsa-**ti**-* *e-tsa*
'blossom' 'NPF-flower'

d. ***ka**-bakwa-**ti**-* *bakwa*
'have a child' 'child'

e. ***ka**-chipiru-**ti**-* *chipiru*
'become rich' 'money'
CAVINEÑA (Guillaume 2008a: 128–129)

(Note that a circumfix **ka-…-ti* is also used as a valency-decreasing middle marker, also reconstructible to Proto-Takanan; see §5.5.)

The second one is the suffix with the form *-na* in all the languages (therefore probably reconstructible as **-na*), used to derive intransitive verb stems out of bound predicative adjectives (66).

[13] Note that in derivational processes, like in noun incorporation (§5.6), the dummy prefix *e-* 'NPF' which obligatorily accompanies bound noun roots in citation form or in an NP is left out.

(66) a. *ari-**na**-* *ari-*
‘become very big’ ‘big’

b. *apu-**na**-* *apu-*
‘become very dark’[14] ‘dark’

c. *kasa-**na**-* *kasa-*
‘become very strong’ ‘strong’

CAVINEÑA (Guillaume 2008a: 135–136)

The third one is the suffix *-ne*, which derives a transitive verb out of nouns (67).

(67) a. *diji-**ne**-* *e-diji*
‘open a path in (e.g., forest)’ ‘NPF-path’

b. *tisu-**ne**-* *e-tisu*
‘put a strap on’ ‘NPF-strap’

c. *kani-**ne**-* *kani*
‘make a hole in’ ‘hole’

d. *uu-**ne**-* *uu*
‘raise as a domestic animal’ ‘domestic animal’

CAVINEÑA (Guillaume 2008a: 129–130)

Derivation of transitive verbs out of bound predicative adjectives (§6.2) is available in all the languages, but only via primarily non-cognate affixes (Cavineña *-tura*, Araona *-ta*, Tacana *-ba*, Reyesano *-na* and Ese Ejja *-wana*). Possibly, the Cavineña suffix *-tura*, illustrated in (68), is cognate with Araona *-ta* (following the regular phonological correspondance between *r* in Cavineña and Ø in the four other languages (Girard 1971: 31)).

(68) a. *ari-**tura**-* *ari-*
‘make big’ ‘big’

b. *apu-**tura**-* *apu-*
‘darken’ ‘dark’

c. *kasa-**tura**-* *kasa-*
‘strengthen’ ‘strong’

CAVINEÑA (Guillaume 2008a: 140–141)

6 Coverbs and non-verbal predication

The predication of non-verbal elements requires a light verb construction. This construction subsumes what is analyzed in the recent grammatical descriptions of Takanan languages as two distinct constructions: ‘complex predicates with generic auxiliaries’ and ‘copula clauses with a copula’. The structure of the light verb construction is presented in §6.1 and the different types of non-verbal elements (coverbs) in §6.2.

[14] This term also means ‘be at dusk’.

6.1 Light verb construction

In the light verb construction, the predicated element, called a coverb,[15] is accompanied by one of two semantically empty verbs, called a light verb, which carries the inflections (with or without additional non-inflectional affixes). An illustration of this construction in Cavineña is given below, with the coverb *jae* 'fish' combined with the light verb *ju* 'be' in (69a) and the coverb *endya* 'say yes to, accept' combined with the light verb *a* 'do' (69b).

(69) a. *Tume ekana* [*tume=ke wekaka*] ***jae*** ***ju****-kware*.
then 3PL there=REL day fish be-REM.PST
'That day they fished.' CAVINEÑA (Guillaume 2008a: 156)

b. *E-puna=ra* ***endya*** ***a****-kware* [*peya ekwita*].
NPF-female=ERG say.yes.to do-REM.PST other person
'The woman went (to live) with (lit. said yes to) another man.'
CAVINEÑA (Guillaume 2008a: 283)

The two light verbs used in the different Takanan languages are reconstructible in Proto-Takanan to the intransitive verb **pu* 'be, be located, say' (Girard 1971: 112) and transitive verb **a* 'do, make, affect, tell' (Girard 1971: 50), which are still also used as independent verbs synchronically in all the languages – see e.g. Cavineña *a* 'do' in (19b) and *ju* 'be' in (70).[16]

(70) *I-ke* ***ju****-kware edanaka=eke=dyane e-na=ju.*
1SG-FM be-REM.PST knee=PERL=APPROX NPF-water=LOC
'I was (walking) in the water, (with water) somewhere up to my knees.'
CAVINEÑA (Guillaume 2008a: 660)

In the construction, the light verb must follow the predicated element, whether directly, as in (69a,b), or indirectly, as in (71a,b), where the two components are separated by a second position clitic.

(71) a. ***Kwatsabiji*** *=tu* ***ju****-ya ekwita=tsewe*.
story =3SG be-IPFV person=ASSC
'He is talking with the man.
CAVINEÑA' (Camp & Liccardi 1989: 24; cited in Guillaume 2008a: 160)

b. ***Nereda*** *=tuna* ***a****-wa* [*tuna-ja e-ju=ke*].
scold =3PL do-PRF 3PL-GEN 3-younger.brother=3
'They scolded their younger brother (because he didn't stay quiet as they were preparing an ambush to kill their enemies)'
CAVINEÑA (Tavo Mayo 1977: 70; cited in Guillaume 2008a: 421)

Apart from being specified for transitivity, the light verbs are semantically empty and more or less optional, depending on the type of coverb (see below). Their main function is to carry the inflectional morphology and to overtly mark the transitivity of the predicate: in the Cavineña

[15] See a definition of this term in §3.

[16] Note that Cavineña *ju* is not phonologically regular; it should be *pu*, as in the other Takanan languages.

examples above, the reflex of **pu* is used when the predicate is intransitive (69a), (71), and that of **a* when it is transitive (69b).

6.2 Types of coverbs

Coverbs are fairy heterogenous in terms of their meanings and morphological possibilities, these being generally related to their etymologies, which are transparent in most cases. Here, six broad types will be distinguished. A first type corresponds to **native nouns**. If the intransitive light verb is used, the resultant meaning can be either active (i.e., 'do X'), such as 'to fish' (69a) and 'tell a story' in (71a), or stative/inchoative (i.e., 'be(come) X'), such as 'be(come) a giant anteater' (72a).

(72) a. ***Bari*** *=mi* ***ju****-ya.*
giant.anteater =2SG be-IPFV
'You are going to be(come) a giant anteater.' CAVINEÑA (Guillaume 2008a: 96)

b. *E-ra* *=mi* ***kwatsabiji*** ***a****-ya* *Antuku…*
1SG-ERG =2SG story do-IPFV Antuku
'I will tell you a story, Antuku…' CAVINEÑA (Guillaume 2008a: 157)

When the resultant meaning is stative, the (intransitive) light verb is optional and has the exact same function as a(n optional) copula verb in a copular clause construction, being able to express the semantic relations of inclusion, as in (72a), equation, naming, etc.

A second type of coverbs corresponds to **loan lexemes** (verbs, nouns or adjectives), typically borrowed from Spanish, such as Cavineña *aterisa* '(to) land' (73), and Ese Ejja *buscando* 'look for' Ejja (74).

(73) *Lanueve* *=tu* *avioneta* *re-wa* ***aterisa*** ***ju****-ya.*
at.nine.o'clock(Sp) =3SG plane(Sp) here-LOC land(Sp) be-IPFV
'At nine o'clock the plane will land here.' CAVINEÑA (Guillaume 2008a: 154)

(74) *E'é* ***buscando*** *bobi* ***a****-ka-ani.*
DISC **look**.**for**(Sp) food **do**-3A-PRS
'Indeed they are searching for food.' ESE EJJA (Vuillermet 2012a: 383)

A third type of coverbs corresponds to the large word class (100 to 150 items) of **bound predicative adjectives** or **adjectival verbs**, which express typical property concepts (dimension, age / value, color, physical properties, etc.). They are predicated with the intransitive light verb and morphologically well defined. They consist of bound roots which cannot form independent words unless they are marked by one of a range of special affixes (mainly affirmative, negative or interrogative) or used in a reduplicated form (expressing spatial or temporal distribution, attenuation, approximation, etc.). The Cavineña predicative adjective *-ari-* 'big' is illustrated below, marked by the special affirmative suffix *-da* in (75a) and with a reduplicated shape in (75b); note that the use of the bare root *ari* would be ungrammatical in both examples.

(75) a. ***Ari-da*** ***ju****-kware* *aja.*
big-ASF be-REM.PST monkey

‘The monkey was big.’ CAVINEÑA (Guillaume 2008a: 68, 358, 368)

b. *Amena* ***ari~ari*** *=ekwana* ***ju****-kware.*
BM big~DISTR =1PL be-REM.PST
‘We (my brothers and I) grew up (lit. grew up a little bit many times).’
CAVINEÑA (Guillaume 2008a: 371)

One primarily finds three types of special affixes. Their forms display only partial similarities between the languages. The first type corresponds to affirmative markers that are found in all five languages and which is semantically empty in most of them: *-da* in Cavineña[17] (75a), Araona[18] and Tacana, *-me* in Reyesano and *kya-* in Ese Ejja. The second type consists of negative markers which are diachronically analyzable as the affirmative marker followed by a negative marker *ma*: *-dama* in Cavineña (76), *-'ama* in Ese Ejja (Vuillermet p.c. 2019)[19] and *-da=mawe* in Araona and Tacana; Reyesano does not appear to have an equivalent marker. As for the third type, it is made of interrogative degree markers: *eje-* in Cavineña (77), *ache-* in Ese Ejja, *ke-* in Araona[20] and Tacana, and *se-* in Reyesano.[21,22]

(76) *Jipake =taa* [*peya kistyanu=kwana*] ***japa-dama*** ***ju****-chine.*
LUCKILY =EMPH other person(Sp)=PL far-NEG be-REC.PST
‘Luckily, there were other people nearby (lit. other people were not far).’
CAVINEÑA (Guillaume 2008a: 374)

(77) ***Eje-ari*** *=tu* ***ju****-wa kwaba*?
Q-big =3SG be-PRF canoe
‘How big was the canoe?’ CAVINEÑA (Camp & Liccardi 1972: 4)

A fourth type of coverb consists in a verb root or verb stem which is marked by one of several other special affixes (different from the ones used with ‘predicative adjectives’) or special syntactic modifiers, or which has a reduplicated form. These morphological or syntactic markers or processes generally express modal or aspectual values. Most of the languages have (likely cognate) special affixes that express desire, obligation and ability. The Cavineña **desiderative** *-kara* is illustrated in (78); see also (103b) and (104b). The corresponding and phonologically regular forms are *-jae* in Araona and *-ja* in Tacana and phonologically irregular *-sa* in Ese Ejja and *-ya* in Reyesano.

(78) a. *Jutakiju, e-ju =mi tawi-****kara*** ***ju****-ya*?
therefore Q-LOC =2SG sleep-DESID be-IPFV
‘So, where do you want to sleep?’ CAVINEÑA (Guillaume 2008a: 322)

b. *Tuna-ra =ekwana iye-****kara*** ***a****-ya.*
3PL-ERG =1PL kill-DESID do-IPFV

[17] In certain contexts, Cavineña *-da* alternates with a suffix *-u*, without any difference in meaning, as in e.g. (23b).

[18] Araona has a second affirmative marker, *a-*, which appears to be used when the predicated quality is temporary (‘actual’ in Pitman 1980: 62’s terms).

[19] This suffix is given as *-ama* in Vuillermet (2012a: 559).

[20] In Araona, *ke-* also used on verbs (see §5.2).

[21] In Tacana and Reyesano, the interrogative affixes are not productive, being only found in a couple of items.

[22] A fourth special affix, apparently only attested in Ese Ejja, is an equative degree marker, *-(a)xa* ‘equally’, used with predicative adjectives in comparison functions (Vuillermet 2018b: 151–153).

‘They want to kill us.’ CAVINEÑA (Guillaume 2008a: 323, 775)

The Cavineña **deontic modality** marker *-taki* is illustrated below. Like its cognate marker *-ta.…-(j)i* in Tacana and Reyesano, it can have meanings of both **ability** (capacity) (79a) and **obligation** (79b). (The cognate *-ka...-xi* in Ese Ejja only encodes obligation and does not seem to require a light verb.)

(79) a. *I-ke* *aje-**taki**=ama* ***ju**-kware*.
1SG-FM walk-ABIL=NEG be-REM.PST
‘I could not walk (because I was too weak).’ CAVINEÑA (Guillaume 2008a: 393)

b. *E-ju* *=tunaja* *=tu* *duju-**taki*** ***ju**-kware* *carga*?
Q-LOC =3PL.DAT =3SG take-ABIL be-REM.PST load(Sp)
‘Where did they have to carry the load?’ CAVINEÑA (Tavo Mayo 1977: 3)

Some special affixes are only found in one language, such as e.g. the standard negation markers *pi-…-ma* in Araona (80a,b) and *-xima* ‘not yet’ and *-'axa* ‘never’ in Ese Ejja (Vuillermet 2012a: 289–290).

(80) a. ***Pi**-noati-**ma*** ***po**-a.*
NEG-return-NEG be-PST
‘(S/he) did not return (from the field).’ ARAONA (Emkow 2006: 446)

b. *Yama* *joda* *eowi* ***pi**-izi-**ma*** ***a**-ja.*
1SG.ERG that water NEG-drink-NEG do-PST
‘I didn’t drink that water.’ ARAONA (Pitman 1980: 25)

A fifth type of coverb, attested in at least Cavineña and Tacana, involves **unmarked native verbs** (which can otherwise directly carry the inflectional morphology). Here, unlike the preceding type of coverb, the verb is not marked by a special affix or syntactic marker or by reduplication, as with the Tacana verb root *tutua* ‘spill’ in the last clause of the following narrative excerpt, to be compared with its inflected use in the first clause.

(81) *Dapia* *=da* *etse* *beu* *se* *e-**tutua**.* *E-jemi-tsua* *=da* *etse,*
there =PTC 1DU PTC fish FUT-spill FUT-take.out-go.up =PTC 1DU

beu ***tutua*** *=da* *etse* *y-**a.***
PTC spill =PTC 1DU FUT-do
‘There we are going to spill the fishes (on the ground). We are going to remove (the fish trap) and then spill them (on the ground).’
TACANA (em044-045 - Guillaume texts and fieldnotes 2009-2013)

Note that the factors that motivate the use of the light verb construction with native verbs in these languages are not clearly understood yet.

Finally, there is a sixth type of coverbs which consists of a fairly large number of (several dozen) elements of unknown origin, or elements which can be traced back to some of the types of coverbs discussed above but which are lexicalized. In the descriptions of Takanan languages, these are called ‘independent predicative adjectives’ (by contrast with bound predicative adjectives) when they express property concepts, as with Cavineña *pureama* ‘happy’ in (82),

and ‘non-inflecting verbs’ (by contrast with inflecting verbs) when they express more active meanings (whether transitive or intransitive), as with Cavineña *endya* ‘say yes to, accept’ in (69b) and (71).

(82) ***Pureama*** *=ekwana* ***ju****-kware…*
happy =1PL be-REM.PST
‘We were happy…’ CAVINEÑA (Guillaume 2008a: 69, 359)

7 Main clauses

In this section, we primarily focus on the syntax of **declarative** and **interrogative** verbal main clauses, which are formally very similar. The first type is discussed in §7.1 and the second in §7.2. For both types of clauses, we provide information about constituent order, core and oblique argument marking and modification possibilities by way of adverbs and particles.

‘**Command’** clauses cover a range of more or less heterogeneous constructions which also display globally similar syntactic properties as declarative and interrogative clauses, apart from certain restrictions. They are briefly discussed in §7.3.

Note that non-verbal clauses were discussed under the concept of ‘light verb construction’ in §6, together with complex predicates from which they are formally indistinguishable.

7.1 Declarative clauses

The only strictly obligatory constituent of a declarative clause is the predicate, whether verbal (§5) or non-verbal (§6), although some overt syntactic expression of the core arguments (S, A and P), by way of NPs or pronouns is generally provided, especially when they refer to speech-act participants.

Both core NPs and core independent pronouns (§7.1.1) are (more or less consistently) case-marked according to an ergative-absolutive pattern in all but one language, namely Reyesano, which does not have case marking. Their position in the clause is essentially determined by discourse-pragmatic factors. Oblique participants (§7.1.2) are also expressed by way of case markers which distinguish between a fairly wide range of relations, such as locative, perlative, instrumental, comitative, etc.

The next type of clausal constituents are adverbs and particles. They consist of closed classes of (generally) monomorphemic words which are fairly heterogeneous in term of their phonological status (prosodically independent words or clitics), locus in the clause (free position in the clause vs. first position in the clause vs. second position in the clause vs. fixed position vis-à-vis a particular clausal constituent) and scope (clausal or phrasal), their semantics (time, location, manner, tense, aspect, mood, evidentiality, etc.). They are discussed in §7.1.3.

7.1.1 Core NPs and pronouns

Core NPs can potentially occur in any position in the clause. The motivations for particular positions are determined by discourse factors that have not been studied in depth in any Takanan language. The basic constituent order (pragmatically unmarked / statistically more frequent) is reported to be SV and APV in Araona (Emkow 2006: 193–194) and Ese Ejja (Vuillermet 2012a: 285–286). In Reyesano, my data seem to rather point to VS, VPA order. As for Cavineña, an unpublished text count study (Guillaume 2012c) showed that S and P NPs are only slightly more

frequently used preverbally (60% for S, 57% for P) than postverbally (40% for S, 43% for P); that A NPs are overwhelmingly more frequent in preverbal position (95%) than postverbally (5%); and that A and P NPs are hardly ever expressed simultaneously (3%). The same study also revealed a number of correlations between certain positions and the particular discourse status of the referents. In particular, it showed that preverbal NPs occurring in the first position of the clause tend to refer to unpredictable (and often contrastive) referents. For instance, in content questions (§7.2) and answers to these questions, both the question word and the constituent that provides the requested information (i.e. the focus of the clause) generally occur in the first position, as illustrated in (83).

(83) a. ***Ai*** *=tu-ke* *=mi* *iji-wa*?
INDF =3SG-FM =2SG drink-PRF
'WHAT did you drink (that made you so sick)?' CAVINEÑA (Guillaume 2012c)

b. *Aijama*! ***Refresco=kamadya*** *=tu-ke* *=Ø* *iji-kena-wa*.
not.exist.at.all soft.drink=REST =3SG-FM =1SG drink-LEAVE-PRF
'Nothing! I just had A SOFT-DRINK WHILE LEAVING.'
CAVINEÑA (Guillaume 2008a: 223; 2012c)

Similarly, the first position of the clause is used for NPs which express contrastive / switched topics, often in combination with a particular second position particle, such as *=bakwe* (84); see more on such particles in §7.1.3.

(84) ***Eskupeta*** ***=bakwe*** *=Ø* *ina-nuka-ya=dya*.
shotgun(Sp) =CONTR =1SG grab-ITER-IPFV=FOC
'Shotguns, I handle (lit. grab) too (in addition to rifles).'
(Preceding context: the speaker explains how he learnt how to use rifles)
CAVINEÑA (Guillaume 2008a: 653; Guillaume 2012c)

Case marking on core NPs is found in four of the five languages, Cavineña, Ese Ejja, Araona and Tacana, where it operates on an ergative-absolutive basis; Reyesano does not have core case marking. Absolutive arguments (in S or P functions) are consistently unmarked for case, as can be seen in numerous examples of S and P NPs in all four languages throughout this study. Ergative arguments (in A function) receive, more or less consistently, depending on the languages, an enclitic postposition which, like any postpositions (see §7.1.2), attaches to the last word of the A NP, as in the Cavineña example (85), which shows a relative clause following the NP head and preceding the ergative marker.

(85) [*E-puna* [*ordeña=ra* *kwa-wa(=ke)*]***=ra***] *=yatse* *ba-kware*.
NPF-female milk(Sp)=PURP.MOT go-PRF=REL=ERG =1DU see-REM.PST
'The woman who had gone to milk saw us.'
CAVINEÑA (Guillaume 2008a: 40, 71, 751)

The ergative marker is morphologically similar in all the languages (Cavineña *=ra*, Ese Ejja *=(y/w)a*, Araona *=(j)a*, Tacana *=ja*) and most likely reconstructible to Proto-Takanan **=ra* (Guillaume 2018b). Its use displays some differences depending on the languages, from being strictly obligatory in Cavineña, Ese Ejja and Araona, to optional in Tacana (86), a phenomenon that I have argued to be a recent innovation in this language; that is, ergative marking on NPs would have been rigid in Proto-Takanan (Guillaume 2018b).

(86) a. *Tataedhi=**ha*** *=pa* *bakwa* *tidhi-ta-iti-a*.
grandfather=**ERG** =RPT viper step.on-3A-TDM-PST

b. *Tataedhi* *=pa* *bakwa* *tidhi-ta-iti-a*.
grandfather =RPT viper step.on-3A-TDM-PST
Both: 'Grandfather is reported to have stepped on the viper.'
TACANA (Guillaume 2018b: 235)

A remarkable property of Takanan languages is that they have a number of basic ditransitive / trivalent verbs ('give', 'inform', 'ask', 'steal', etc.) which instantiate a genuine double-object construction in the expression of their two non-subject arguments. The theme (T) and recipient (R) arguments manifest the same coding and behavior-and-control properties, which are also the same as those of the patient (P) argument of monotransitive verbs (T=R=P): absence of case-marking, syntactically free position in the clause, access to various valency-reducing mechanisms (passive, antipassive, middle). For a detailed study of this phenomenon in Cavineña, see (Guillaume 2008b).

Core pronouns are more constrained than core NPs in their positioning in the clause. As already presented and illustrated in §4.4, they have two main loci: first position when referring to emphatic participants – see (24) – and second position when referring to continuing topics – see (25a,b). Case marking on pronouns, like case marking on NPs, is only available in Cavineña, Ese Ejja, Araona and Tacana. In Reyesano, there is single set of case-neutral pronouns used indistinguishably for S, A and P arguments, whatever their referents. In Cavineña, Ese Ejja, Araona and Tacana pronouns, case marking differs from language to language and, within particular languages, depends on the position of the pronouns (in first position or second position) and the type of referents encoded. Pronouns in first position in Cavineña, Ese Ejja and Araona, as with NPs in these languages, display a strict ergative-absolutive pattern, whatever their referents. In Tacana, by contrast, only singular speech-act participant pronouns display strict ergative-absolutive marking (24); with 3rd person singular pronouns (like with NPs), either the ergative or the absolutive form can be used (87a,b); and with non-singular pronouns, the system is completely neutralized, consisting of only a single set of unmarked forms (88).

(87) a. ***Tuaweda*** *se* *duse-ta-iti-a*.
3SG.ERG fish fetch-3A-TDM-PST

b. ***Tueda*** *se* *duse-ta-iti-a*.
3SG fish fetch-3A-TDM-PST
Both: 'He brought fish.'
TACANA (Guillaume 2018b: 235)

(88) a. ***Ekwanaju*** *=mida* *e-tsawa*.
1PL.EXCL =2SG FUT-help
'We (excl.) will help you.' TACANA (Guillaume 2015a; 2015b)

b. ***Ekwanaju*** *=da* *e-puti* *ekwa=su*.
1PL.EXCL =PTC FUT-go fish.with.poison=LOC
'We (excl.) will go fishing with poison.' TACANA (Guillaume 2015a; 2015b)

From a typological perspective, the Tacana split case-marking system is norteworthy in

manifesting three alignment patterns at the same time (strictly ergative, optionally ergative and strictly neutral), each system being characteristic of a different category of referents, as indicated in Figure 2, where the referents are ranked according to Silverstein's (1976) 'animacy' (referential) hierarchy. Tacana case-marking is even more remarkable in that the distribution of ergative marking across the different types of referents goes against Silverstein's predictions: strict marking should be at the right hand side, optional ergative marking in the middle, and lack of ergative marking at the left hand side (Guillaume 2015a; 2015b; 2015c).

Figure 2. Case marking in Tacana and Silverstein's (1976) 'animacy' (referential) hierarchy

Independent pronouns		Nouns	
1sg, 2sg	1du, 1pl, 2du, 2pl, 3du, 3pl	3sg	kinship > humans > animates > inanimates
ERG obligatory	ERG absent (neutral forms)	<----------ERG optional---------->	

In second position, there is evidence for an incipient or advanced process of grammaticalization, depending on the languages. This process is observable in the fact that in second position, unlike in first position, certain pronouns are unstressed (enclitics), display a range of variant forms (in free variation or conditioned by morphophonological rules) and lose their case distinctions. In Tacana, for instance, in second position, 2SG arguments in A function can be alternatively expressed by the same ergative stressed full form *mi-Ø-a-da* (89a), by the 'absolutive' unstressed (clitic) form *=mi-Ø-Ø-da* [1-SG-ABS-FM] (89b), or by an even more reduced form which only retains the person root *=mi* (89c).

(89) a. *Ai* *=tse* ***mi-Ø-a-da*** *mi=mewa* *abu-kwa*.
INDF =MAYBE 2-SG-ERG-FM 2SG=ALONE carry-ABIL
'How can you carry it alone?' TACANA (Guillaume 2018b: 236)

b. *E-tsedu* ***=mi-Ø-Ø-da*** *e-jemi* [*asau* *y-a=puji*].
NPF-chest =2-SG-ABS-FM FUT-remove grilled.food(Sp) PURP.GNL.SS-do=PURP.GNL
'You will remove the chest (of the capybara) in order to cook it on embers.'
TACANA (mc032 - Guillaume texts and fieldnotes 2009-2013)

c. *Daja* ***=mi-Ø*** *sobrino* *e-kisa*.
thus =2SG-SG nephew(Sp) FUT-relate
'So you will say to your nephew.' TACANA (Guillaume 2018b: 236)

Another interesting property of pronouns in second position in most (possibly all) Takanan languages is that they must occur in a fixed order if there is more than one pronoun in that position (the lower on a 1>2>3 hierarchy, the earlier in the sequence), as illustrated with more Tacana data in (90).

(90) a. [*Ye* *waka* *biti=neje*] ***=mida*** ***yama*** *e-manuame*.
this cow(Sp) skin=ASSC =2SG 1SG.ERG FUT-kill
'I'm going to kill you with this whip.' TACANA (Guillaume 2018b: 245)

b. *Ai=puji* ***=mida*** ***ema*** *tuajududu-iti-a*?
INDF=PURP.GNL =2SG 1SG run.away.from-TDM-PST
'Why did you run away from me?' TACANA (Guillaume 2018b: 245)

In Cavineña, there is an additional property that further sets apart the pronouns in second position from those in first position, which is that a second position pronoun can co-occur with a first position pronoun or an NP referring to the same argument in the same clause, as seen in (91a) with the second position 2nd person singular clitic *=mi* and the first position 2nd person singular pronoun *mike* and in (91b) with the second position 3rd person singular clitic *=tu* and the NP *iba* 'jaguar'.

(91) a. ***Mi-Ø-ke*** ***=mi-Ø*** *kwa-wa=ama* *escuela=ju.*
2-SG-FM =2-SG go-PRF=NEG school(Sp)=LOC
'You didn't go to school (, did you?) (the priest asked me).'
CAVINEÑA (Tavo Mayo 1977: 39; cited in Guillaume 2008a: 602)

b. [*Tu-Ø-ke* *tupuju*] ***=tu-Ø*** ***iba*** *tsajaja-chine.*
3-SG-FM behind =3-SG jaguar run-REC.PST
'The jaguar ran behind him (i.e. the jaguar chased him).'
CAVINEÑA (Camp & Liccardi 1972: 33; cited in Guillaume 2008a: 124, 510)

7.1.2 Oblique NPs and pronouns

Oblique NPs, like core NPs, are positioned in the clause according to discourse factors, with a tendency to occur at the beginning of the clause when constrastive. The various types of relations they can entertain with the predicate are expressed by markers which are postposed to the last word of the NP. The markers can be monomorphemic enclitics, similarly to the genitive and ergative markers discussed in §4.3 and §7.1.1, respectively; or they can be monomorphemic or polymorphemic independent words.

All the languages share a cognate **locative** marker used primarily to express static location or a target of motion.[23] It is reconstructible to **=su* in Proto-Takanan (Girard 1971: 119) and shows up as *=ju* in Cavineña (29), (50), *=jo* in Ese Ejja (21a), *=(j)o* in Araona, *=su* in Tacana (28a) and *=dhu* in Reyesano. The same marker can have extended meanings, in particular temporal meanings with time expressions: see e.g. (31b) and (47b,c) in Cavineña and (32) in Ese Ejja. In Ese Ejja it can mark the demoted agent of the middle-passive construction (52) and the demoted patient of the antipassive reduplication construction (64).

Most languages also have a formally similar **perlative** marker which might be reconstructible to Proto-Takanan (as **=ke* or **=eke*): Cavineña *=eke*, Ese Ejja *=xe*, Araona *=(j)e* and Tacana *=(e)je*. This marker is used to express spatial meanings such as, in Cavineña, 'through/along a place, between' (18b), 'up to' (70) or ablative meanings (92), a function which lacks a dedicated marker in all the languages. It is also used to encode means of locomotion, as in '(going) by foot' in (99b). And it can be extended to temporal uses, as with 'at night' in (30) in Ese Ejja.

(92) *E-wane=kwana=ke* *kwa-ya* *epu=**eke**.*
3-wife=PL=3 go-IPFV village=PERL
'Their wives would go from the village (to the forest to meet their husbands, who were hunting there).'
CAVINEÑA (Guillaume 2008a: 535)

Comitative markers are also formally similar among most Takanan languages, as with Ese Ejja *=nixe*, Araona *=nae*, Tacana and Reyesano *=neje*; the Tacana marker is illustrated in (93).

[23] In Ese Ejja, target of motion is encoded by a dedicated allative marker, *=asixe* (Vuillermet Forthcoming).

These contrast with the formally different Cavineña marker *=tsewe*.

(93) [*Piada deja*] *ani-ina,* [*mesa ewane=sa kwara=**neje***].
one man sit-HAB.PST 3SG.GEN wife=GEN mother=ASSC
'There was a man who was living (lit. sitting) with his mother-in-law (lit. wife's mother).'
TACANA (gu003 - Guillaume texts and fieldnotes 2009-2013)

The **instrumental** markers show a more diverse range of forms (and therefore historical origins). In Cavineña, Tacana and Reyesano, the instrument relation is expressed by the same comitative markers; compare the comitative use of Tacana *=neje* in (93) with its instrumental use in '(kill) with this whip' in (90a). By contrast, Ese Ejja and Araona have a distinct form: Ese Ejja *=a* and Araona *=metse* (20b).

Finally, all the languages have a cognate **dative** marker, which can also be used in genitive function within NPs (§4.3). It is reconstructible as *=*sa* in Proto-Takanan (Girard 1971: 116), with reflexes *=ja* in Cavineña and Ese Ejja, *=(j)a* in Araona, *=sa* in Tacana and *=dha* in Reyesano. In its (clausal) dative function, this marker can encode a range of closely-related relations, such as possessor (18a), benefactive (94a) and experiencer (94b). (In some transitive dependent clauses, the dative/genitive marker can also encode the A argument; see §8.1.4.)

(94) a. *Churu* [*ebakwa nana=**ja***] *pa-a*!
bonnet child young=DAT HORT2.SG-do
'I'm going to make a bonnet for the baby!'
CAVINEÑA (Camp & Liccardi 1989: 27; cited in Guillaume 2008a: 518)

b. *Bari=**ja** =tu rapa biji-da.*
anteater=DAT =3SG termite desirable-ASF
'Anteaters like termites (lit. termites are desirable to anteaters).'
CAVINEÑA (Camp & Liccardi 1989: 10; cited in Guillaume 2008a: 519)

Depending on the languages, there are other oblique markers, which are generally less clearly related among each other and which can be either clitics or separate words. Among these, an interesting one that has been studied in detail in Ese Ejja is the **timitive** *=yaxajo* 'for fear of' (95) (Vuillermet 2012a: 278; 2018a).

(95) *Inyawewa kwajikwaji-ani biya=**yaxajo***.
dog run-PRS bee=TIM
'The dog runs for fear of the bee.' ESE EJJA (Vuillermet 2012a: 278; 2018a: 282)

7.1.3 Adverbs and particles

Adverbs are phonologically independent words which do not have any well-defined position in the clause. They include words that are used to locate events in space and time, such as deictic time words (e.g. 'long ago', 'yesterday' (26a), (98), 'now/today' (32), (42), (25), and 'tomorrow' (47a)), words for the time of the day ('in the morning', 'at noon', 'in the afternoon', 'at night', 'at midnight'), deictic location words / demonstratives ('here' vs. 'there' vs. 'over there', 'this riverbank' vs. 'that riverbank') and non-deictic location words ('above' vs. 'under', etc.). There are also words which serve to modify an event in term of its aspect or 'manner' of realization ('a little bit', 'for a short while', 'a lot', 'again', 'for the first time', 'finally' (6b),

'sometimes', 'in vain', 'suddenly', 'really' (43a)). Note that a number of coverbs (§6.2), especially those expressing property concepts, can also be used with an adverbial function (e.g., 'thick', 'good', 'sick', 'vigorous', 'big', 'long time' and 'far' in Cavineña; Guillaume 2008a: 361–365).

First position particles are also phonologically independent words, but they must occur as the first constituent in a clause. Here one finds 'linking adverbs', (e.g. 'therefore' (7b), (78), *tume* 'then' (11), (69a)) and 'sentence adverbs' (e.g. 'potentially', 'seemingly', 'luckily' (76)). Note that certain first position particles are specific to particular clause types, such as interrogative and command clause; see further below.

Second position particles are generally enclitics, which, like second position pronouns (§4.4, §7.1.1), directly follow the (last word of the) first constituent of the clause, whatever its nature (NP, postpositional phrase, first position pronoun, adverb, verb, coverb, subordinate clause, etc.). When second position particles and second position pronouns co-occur, the particles always precede the pronouns. Second position particles are the privileged mode of expression of the broad domain of epistemic modalities, as with the Cavineña reportive *=pa* in (96), Tacana dubitative *=jia* in (97) – see also (106) – and Cavineña mirative *=tukwe* in (127).

(96)	[*Tura=kamadya*	*ijeti*	*jipe-kware=tibu*]	***=pa***	*=tu*	*pude-da*.
	3SG.ERG=REST	sun	approach-REM.PST=REASON	**=RPT**	=3SG	red/brown-ASF

'Because he approached the sun, he is reportedly red/brown.'

CAVINEÑA (Guillaume 2008a: 574)

(97)	*Janana-ji*	***=jia***	*ani-ina*,	[*wipa*	*kakatara*].
	baby-PROP	=DUBIT	sit-HAB.PST	eagle	big.eagle.spec.

'There were cacatará eagles, probably with babies (to feed).'

TACANA (Guillaume 2016b)

Second position particles can also express various discourse-related functions, such as contrast / topic-switch, as with Cavineña *=bakwe* in (51b) and (84), or emphasis, as with *=taa* in Cavineña in (13a). Finally, some second position particles are also used to express speaker attitudes or emotions, in particular that of compassion, as with *=shana* in Cavineña (15) and *=chenu* in Reyesano (98).

(98)	*Bauda*	***=chenu***	*m-a-puti-a*	*te*	[*ki*	*te=dhu*].
	yesterday	=EMPH	1SG-PST-go-PST	BM	1SG.GEN	field=LOC

'Yesterday I went to my field, poor me.' REYESANO (Guillaume 2012a: 216)

Phrasal particles, which are also enclitics, attach to the last word of various types of clausal constituents (NP, postpositional phrase, first position pronoun, adverb, verb, coverb, subordinate clause, etc.), whatever their position in the clause (i.e., in first position or other positions). Phrasal particles are used to express a broad range of categories related to discourse / intensification / evaluation / contrast / reference identification, etc. Among these, one finds constituent focus markers, such as the highly frequent Cavineña *=dya* in (22a), (84), and Ese Ejja (likely cognate) *=ya* in (53a); (de)intensifiers, such as the Cavineña diminutive *=piji* in (22b) and (26b); reference restrictors, such as the Cavineña markers *=kamadya* (83) and the Tacana marker *=we* (28a), the Cavineña approximative marker *=dyane* (70); and additives, such as the Ese Ejja additives *=pi'ai* 'also' (64). Finally, in Cavineña, constituent negation is realized by way of such a particle, *=ama*, which is found negating a verb in (91a), a coverb in (79a), a first position pronoun in (99a) and a perlative oblique phrase in (99b).

(99) a. *Aama!* *Mi-ra=**ama*** *=ri* *a-wa.*
not.exist 2SG-ERG=NEG =3PROX.SG do-PRF
'No! (I don't believe you.) You are not the one who killed (lit. did) it.'
CAVINEÑA (Guillaume 2008a: 680)

b. *Iyakwa* *=mikwana* *e-wasi=eke=**ama*** *diru-ya.*
now =2PL NPF-foot=PERL=NEG go-IPFV
'Now you (pl) won't go on foot (but by plane, because it's too dangerous).'
CAVINEÑA (Guillaume 2008a: 681)

Lastly, there are **other particles** which do not clearly fit in any of the above categories. Among the most interesting are the standard negation markers *ma* in Reyesano (100a,b) and *aimue* or *mué=* in Tacana (101a,b), which occur more or less freely before the clause predicate – in Tacana, *aimue* can co-occur with a second negation (phrasal) particle, *=mawe*, encliticized to the verb (Guillaume 2016c; 2017d; Forthcoming).

(100) a. *Jiawe* ***ma*** *te* *m-a-kachi-ta(-a)…*
now NEG BM 1SG-PST-bite-3A-PST
'Now, (the viper) has not bitten me…'
REYESANO (mo022 - Guillaume texts and fieldnotes 2008-2008)

b. *A,* ***ma*** *te* *sirite,* *dhabana.*
INTERJ NEG BM stork jabiru
'Ah, it was not a stork, (but) a jabiru.'
REYESANO (cr012 - (mo022 - Guillaume texts and fieldnotes 2008-2008)

(101) a. *Jade,* [*ye=base=ja*] *=mu* ***aimue*** *sai-da* *y-a-ta-ani=**mawe**.*
let's.see this=DEPR=ERG =CONTR NEG well-ASF IPFV-do-3A-IPFV.SIT=NEG
'Let's see, this damned one doesn't do it well.'
TACANA (Guillaume Forthcoming)

b. ***Mué=**pa* *teje-ti-yu* *a-ta-idha* [*jida* *mesa* *ewane*] *beu.*
NEG=RPT find-GO-ITER do-3A-REM.PST that 3SG.GEN wife PTC
'He didn't find his wife.' TACANA (Guillaume Forthcoming)

Another interesting type of such particles consists of semantically basically empty 'boundary markers', used to indicate the syntactic boundaries between the clausal constituents, as with the omnipresent Reyesano morpheme *te* in (102) and (98) and (less frequent) Cavineña *amena* in (7).

(102) *Eishe* *beu* ***te*** *a-a-ta-a* ***te*** *iba* ***te*** *waka.*
let.go.of PTC BM PST-do-3A-PST BM jaguar BM cow(Sp)
'The jaguar had let go of the cow.' REYESANO (Guillaume 2012a: 219)

As a final point, it must be said that the precise meaning contribution or function of some particles can be very difficult to determine, as of, for instance, the omnipresent second position particle *=da* in Tacana (42b), (81), (24), (25a), (88b) or the no less frequent particle *be(u)* in

Reyesano (101b), (111), (128) and Tacana (33), (43a,b), (81), (101b).

7.2 Interrogative clauses

Interrogative clauses do not differ substantially from declarative clauses, whether they are used to question content or polarity. As noted for at least Cavineña (Guillaume 2008a: 100) and Araona (Emkow 2006: 196), neither appear to have any specific interrogative intonation, formal marking or constituent order.

In content questions, the question words always occur in the first position of the clause, as with Cavineña *ai* meaning 'who/what' in (103a) and (104a) (see also (83a)), but the same words can generally also be used in the same (or in a different) position with an indefinite meaning in declarative clauses (or in other clause types, such as command or subordinate), as with the same *ai*, meaning 'someone/something' in (103b) and (104b).

(103) a. ***Ai*** *=tu* *rewa* *nubi-wa*?
INDF =3SG here enter-PRF
'Who entered here?' CAVINEÑA (Tabo Mayo 1978: 58)

b. ***Ai****=dya* *tsuru-kara.*
INDF=FOC meet-DESID
'I wanted to meet someone.'
CAVINEÑA (sd060 - Guillaume texts and fieldnotes 1996-2003)

(104) a. ***Ai****=ra* *=mi* *karu-wa*? *Are* *=mi* *bakwa=ra* *a-wa=ama*?
INDF=ERG =2SG bite-PRF Q =2SG viper=ERG do-PRF=NEG
'What bit you? Isn't that a viper that bit (lit. did) you?'
CAVINEÑA (Guillaume 2008a: 633)

b. ***Ai****=ra=kwana* *=ekwana* *iye-kara* *a-ya.*
INDF=ERG=UNCERT =1PL kill-DESID do-IPFV
'Someone (or something I have no idea what) wants to kill (lit. do) us.'
CAVINEÑA (Guillaume 2008a: 694)

Polar questions can be marked by dedicated first positions particles/adverbs (§7.1.3), such as *are* in Cavineña (104a) (Guillaume 2008a: 633) and *a'a* in Ese Ejja (57) (Vuillermet 2012a: 279) but these never seem to be obligatory. In Araona, however, polar questions are formulated differently, through a light verb construction (§6). Here, as illustrated in (105), the verb root or stem is marked by a special prefix *ke-* which appears to turn it into a converb and an (optional) light verb is requested for carrying the inflection. In addition, an emphatic second position particle *=tso* is needed (although not specific to this construction); see also (132).

(105) *Jaeda* ***=tso*** ***ke****-pobea* ***pó****-ani* *joda*?
today =EMPH Q-venir IPFV.be-IPFV.SIT that
'Is he going to come today? ARAONA (Pitman 1980: 24)

For questioning (or referring to indefinite) entities, all the Takanan languages have a cognate morpheme similar to Cavineña *ai*, which behaves basically like an independent noun (§4.1). It

can more or less transparently take the same case/postpositional markers, such as the ergative enclitic in (104). And it can also be used juxtaposed to a noun in an NP, to question the type of entity that is being referred to by the head nominal, as in e.g. *ai bakani* 'what name' (23a) or to indicate that the head nominal is indefinite. Like most nouns in Takanan languages, *ai* can be used for both human and non-human referents, as illustrated in (103) and (104). In the three languages from the Takanik branch, a cognate suffix *-se* (Araona, Reyesano) or *-dhe* (Tacana) can be added to *ai* in order to make explicit that the requested or indefinite referent is human.

(106) ***Ai-dhe*** *=pa* *e-pu-siu*? ***Ai-dhe*** *=jia* *e-jaitiana*?
INDF-HUM =RPT IPFV-be-IPFV.COME INDF-HUM =DUBIT FUT-pass
'Who is coming? Who going to pass by?' TACANA (lp103 - Guillaume 2009-2003)

For questioning concepts other than entities, Takanan languages tend to make use of a different morpheme, such as the bound form *e(je)* in Cavineña locative *e-ju* [Q-LOC] 'where' in (78), general locative *eje-keja* [Q-LOC.GNL] 'where about', perlative *eje-eke* [Q-PERL] 'through where', *eje-tupu* [Q-UP.TO] 'up to where / until when', *eje-buchajuatsu* [Q-REASON] 'why', etc.; see Guillaume (2008a: chap. 14).

7.3 Command clauses

Command clauses involve a range of constructions (imperative, prohibitive, restricted hortative, extended hortative), the morphology of which has been discussed in the section on verbal morphology (§5.2). Depending on the constructions and the languages, the syntax of the different types of command clauses is more or less similar to that of declarative and interrogative clauses. A notable difference concerns the impossibility, in several of these constructions, to express core arguments by way of second position pronouns (§4.4 and §7.1.1), a property that they share with dependent clauses (§8). This is the case, for instance, in the Cavineña imperative, prohibitive and hortative clauses (Guillaume 2008a: 98–100). In (107a), for instance, it is not possible to express the 2SG subject by way of a second position pronoun *=mi*, which is otherwise possible in a declarative (or interrogative clause) such as (107b).

(107) a. *Bute-kwe!* ***Mi-ke*** *ikwene* *kueti-kwe!*
go.down-IMP 2SG-FM first pass-IMP
'You (sg) go down (from the motorcycle)! You (sg) pass (on the bridge) first!'
CAVINEÑA (Guillaume 2008a: 98)

b. ***Mike*** *=taa* ***=mi*** *diru-nuka-ya,* *Cipriano.*
2SG =EMPH =2SG go-ITER-IPFV Cipriano
'You will go back, Cipriano.' CAVINEÑA (Tavo Mayo 1977: 76)

In extended hortative clauses, however, expression of arguments by way of second position pronouns is allowed, as illustrated in (108).

(108) *Jeke-ya(=ke)=tupu* ***=tuna*** *pa-ara!*
fill.up-IPFV=REL=UP.TO =3PL HORT2-eat
'Let them (the ducks, the chicken and the pigs) eat it (the corn and the rice) until they are full (lit. filled up).'
CAVINEÑA (Camp & Liccardi 1989: 57; cited in Guillaume 2008a: 99)

(Note that in all these clauses, the overt expression of A, S and P by way of NPs or first position pronouns is possible and identical to that in declarative and interrogative clauses, with the ergative-absolutive case marking system; see examples in §5.2.)

Another particularity of some command clauses is that they may be marked by particles (in particular first position particles) which are not possible with other clause types. In Cavineña, for instance, the 'attention getter' particle *ita* is only found in imperative and hortative clauses (109).

(109) ***Ita*** [*jee=ke* *bicho*] *ba-na-kwe!*
ATT.GETTER here=REL beast(Sp) see-COME.TEMP-IMP
'Come and see that beast!' CAVINEÑA (Guillaume 2008a: 634)

8 Dependent clauses and complex sentences

All the Takanan languages have a range of dependent clauses, subsuming adverbial clauses and, for at least some of the languages, a distinct noun-modifying (relative) clause construction. There are no dedicated complement clause constructions. Adverbial clauses are presented in §8.1 and relative clauses in §8.2. For both types, information is provided on their (subordinated/embedded) syntax, marking, degrees of (verb) finiteness, argument marking and (switch-reference or other) referential constraints. The last section, §8.3, discusses the discourse phenomenon of tail-head linkage.

8.1 Adverbial clauses

8.1.1 Embeddedness

All the adverbial clauses are **subordinated/embedded** within a superordinate main/matrix clause. Two main arguments support their embedded status. First, when preceding the main clause and occurring in sentence-initial position, the adverbial clauses can host the main clause second position pronouns (§7.1.1) or second position particles (§7.1.3). In the Cavineña sentence in (110a), for instance, the second position pronoun sequence *=tu-ja =tu* directly follows the (last word of the) temporal adverbial clause marked by *-atsu*, indicating that the adverbial clause counts as the main clause first constituent; had it not been, the second position pronouns would have followed the main clause predicate, *tsuru-kware*. The same holds with the second position pronoun *=tu* in (110b), which attaches to the Cavineña temporal adverbial clause marked by *=ju*.

(110) a. [*Babi=ra* *kwa-**atsu***] ***=tu-ja*** ***=tu*** *tsuru-kware* [*peadya* *matuja*].
hunt=PURP.MOT go-TMP.SS =3SG-DAT =3SG meet-REM.PST one caiman
'When he$_i$ went hunting, he$_i$ met a caiman.' CAVINEÑA (Guillaume 2008a: 700)

b. [*Rasu* *tubu-wa**=ju***] *=tu* *dukweri* *putitana-**tsu*** *diru-kware*.
lasso(Sp) cut-PERF=TMP.DS =3SG deer jump-TMP.SS go-REM.PST
'When he cut the lasso, the deer jumped and went away.'
CAVINEÑA (Camp & Liccardi 1989: 93)

Note that adverbial clauses (like relative clauses) do not have their own second position pronouns or second position particles. In the two examples above, for instance, the 3SG subjects of both adverbial clauses cannot be expressed by the second position pronoun *=tu* (**babi=ra* ***=tu*** *kwa-atsu* and **rasu* ***=tu*** *tubu-wa=ju*), unlike the 3SG subjects of the main clause in the same examples.

A second argument that pleads in favor of the embedded status is that adverbial clauses can occur between other main clause constituents, as illustrated with the Cavineña temporal adverbial clause marked by *-(a)tsu* in (110b).

8.1.2 Adverbial clause markers

Adverbial clause are markered by **specific affixes, clitics** or **independent words** that attach to or immediately follow the adverbial clause predicate which must normally occur in **clause-final position**. Both properties can be observed in the above Cavineña examples, with the temporal adverbial clauses marked by *-atsu* (110a,b) and a purpose adverbial clause marked by *=ra*, embedded within the temporal DC in (110a). Reyesano is exceptional in having an adverbial clause type (purpose clause) for which the predicate must occur in clause-initial position (111); Reyesano relative clauses are also predicate initial (see §8.2).

(111) *M-a-kwasa(-a)=be* *te* *shita*
1SG-PST-cut-PST=PTC BM sugar.cane
[*m-e-teri=**puji*** *te* [*ki* *trapichi=dhu*]].
1SG-IPFV-grind=PURP BM 1SG.GEN sugar.cane.press(Sp)=LOC
'I cut the sugar cane in order to grind it in the sugar cane press.'
REYESANO (Guillaume 2012a: 222)

There is a fairly wide range of adverbial clause markers in most of the languages for expressing a large array of interclausal relations such as relative time, purpose, reason, condition, concession, similarity, etc.; Reyesano stands out for only having three markers, for purpose, reason and condition. Here, we will essentially comment on temporal and purpose adverbial clause markers, which are formally and semantically similar (or partly similar) across the different Takanan languages and, for at least some of the, historically related.

With the exception of Ese Ejja, all the language have a temporal adverbial clause marker resembling the Cavineña *-**atsu*** (110a,b) and reconstructible to **tsu* in Proto-Takanan: ***-tso*** in Araona (116) and *=pu**tsu*** in Tacana;[24] in Ese Ejja, the corresponding but unrelated marker is *-maxe* (125a). The adverbial clauses marked by this morpheme tend to be non-finite and have their subject co-referential with that of the main clause (see more on this in §8.1.5).

Another temporal adverbial clause marker formally and semantically similar across the languages (excepting Reyesano), and formally similar to the locative postposition in each of the languages, is ***=ju*** in Cavineña (110b), (26b), (27b), (47d), *-**ajo*** in Ese Ejja (125b), ***-(j)o***/*-ja**o***[25] in Araona (117), and ***=su*** in Tacana (118). In Proto-Takanan, these forms straightforwardly reconstruct to a morpheme ****su*** which is also the proto-form reconstructed for the locative postposition (cf. Cavineña *=ju*, Ese Ejja *=jo*, Araona *=(j)o*, Tacana *=su*, and Reyesano *=dhu*; see §7.1.2). The adverbial clauses marked by this morpheme tend to be more finite than those based on **tsu* and have their subject referent distinct from that of the main

[24] Note that Reyesano has a DC type marked by *=puchu*, evidently cognate to Tacana *=putsu*. In Reyesano, however, *=puchu* appears to be specialized in the expression of reason (see below).

[25] On the distribution of *-(j)o* and *-jao*, see footnote 27.

clause (see more on this in §8.1.5).

Cavineña, Ese Ejja and Tacana have two distinct purpose adverbial clauses which are also marked by formally similar markers (at least in some languages). The first type is a purpose of motion adverbial clause, expressed by =***ra*** in Cavineña (112), ***-a*** in Ese Ejja (121c) and ***-ja*** in Tacana, and reconstructible to **ra* in Proto-Takanan.

(112) *Tudya* *ike* [*tuke* *tupuju*] *tsajaja-aje-kware* [*tuke* *ina-dadi=**ra***].
then 1SG 3SG FOLLOWING run-GO.DISTR-REM.PST 3SG grab-GO(O)=PURP.MOT
'Then I ran behind her in order to grab her from behind.'
CAVINEÑA (Guillaume 2008a: 716)

The second type, which is also found Araona and Reyesano, is a general-purpose adverbial clause, i.e., not restricted to main clause motion verbs. The markers of general-purpose adverbial clauses have more heterogenous forms across the languages: =***ishu*** in Cavineña (113), ***(e-)…-xi*** in Ese Ejja (115), ***pa-… ezae*** 'SS' (124a) and ***pa-… pojo*** 'DS' in Araona (124b) and ***e-…***=***puji*** 'SS' (25b) and ***pa-…=puji*** 'DS' in Tacana and ***e-…***=***puji*** in Reyesano (111).

(113) *Amena* [*ekwe* *mama-chi*] *=bakwe,* *deka=bucha*
BM 1SG.GEN mother(Sp)-AFF =CONTR man=SIMILR
mere *ju-kware* [*ekwana* *jutu=**ishu***].
work be-REM.PST 1PL dress=PURP.GNL
'My mother worked like a man in order to dress us (i.e., to be able to buy clothes for us).
CAVINEÑA (nk026 - Guillaume texts and fieldnotes 1996-2003)

A third type of purpose adverbial clause is found in Ese Ejja for the expression of negative purpose ('avertive' or 'lest' clause); see (114) and Vuillermet (2012a: 587; 2018a).

(114) *Owaya* *e-sho'i=kyana* *tekwia-ka-ani*
3ERG NPF-child=PL reprimand-3A-PRS
[*sanino* *owa=**e**-sii-ka* ***pwanixe***].
watermelon(Sp) 3ERG=AVERT-steal-3A AVERT
'She reprimands the kids lest they steal watermelon (again).'
ESE EJJA (Vuillermet 2018a: 276)

In Cavineña and Ese Ejja, the general purpose clause displays a range of nominal / NP properties such as, in both languages, genitive (rather than ergative) case-marking for the A argument (see §8.1.4) and, in Ese Ejja, adverbial clause marking *(e-)...-xi* formally identical to deverbal instrumental nominalization marking *(e-...-xi)*. Thus compare the two related transitive purpose clauses in (115) with the two related deverbal instrumental nouns in (11); note that in both cases, the *e-* part of the marking is in complementary distribution with the overt expression of the P referent by an NP.

(115) *Fritado* *exawi* *a-anya,* [***e**-kemi-**xi***],
fried(Sp) plantain do-PRSA1/2 **PURP.GNL**-accompany-**PURP.GNL**
[***nawoo**-kemi-**xi***].
fish-accompany-**PURP.GNL**

'I do fried plantains to accompany (it), to accompany the fish.'
ESE EJJA (Vuillermet 2012a: 583)

For an illustration of two other types of adverbial clause markers, see Cavineña *=tibu* 'REASON' (96) and Ese Ejja *=ximawaa/=ximawa/=ximawajo* 'BEFORE' (126a,b,c).

8.1.3 Verb morphology

As already observed, the adverbial clause types can be more or less finite (i.e., more or less similar to main / independent clauses; §7). Here we look at the verb morphology of verbal adverbial clauses, before moving to other properties of clause structure in the following sections (argument marking, adverbs and particles).

Most adverbial clause types allow for the expression of non-inflectional categories in their verb structure, i.e., the use of the elements that go in slots -2, -1, +1, +2, +3 and +5 in the verb structure diagram in Table 5 (page 19). However, when it comes to the expression of inflectional categories (tense-aspect-mood and 3rd person indexation in slots -3, +4, +6), these are only allowed in some adverbial clauses. If we add that certain types of adverbial clauses only allow for the expression of 3rd person indexation (not tense-aspect-mood), one can set up three basic adverbial clause types on the basis of their degrees of verb finiteness: finite, partly finite and non-finite.

Non-finite verbal adverbial clauses only allow for the expression of non-inflectional categories in their verbal predicate. Among this type of clause one finds, among others, the temporal adverbial clauses marked (or partly marked) by reflexes of **tsu* in Cavineña, Araona and Tacana,[26] by *-maxe* in Ese Ejja, and certain purpose clauses. A common property of many of these adverbial clause types is that they require their subject referent to be coreferential with that of the main clause. For instance, the adverbial clause verb marked by *-(a)tsu* in Cavineña can express the non-inflectional category of associated motion (slot +3; §5.4), such as the marker *-ti* 'GO' in (136c). However it cannot express any of the tense-aspect-mood categories of slots -3 and +6, as can be seen in the same example and those in (110a,b). In Ese Ejja, Araona and Tacana, the verbs of the corresponding temporal adverbial clauses have the additional restriction that they cannot index 3rd person subject arguments (slot +4); note that this constraint is irrelevant in Cavineña since the language does not have 3rd person indexation, whether in main clauses or adverbial clauses. In (116), for instance, the Araona adverbial clause verb *lale* 'cook' marked by *-tso* does not take the 3rd person transitive subject marker *-ta* nor the recent past suffix *-iki*, unlike the main clause verb *jelo* 'eat up' of the sentence, which has the same 3rd person subject referent and same recent past temporal settings.

(116) [*Jae* *lale-**tso***] *jelo-ta-iki.*
fish cook-TMP.SS eat.up-3A-PRF
'Having cooked the fish, he ate it up.' ARAONA (Pitman 1980: 102)

Partly-finite adverbial clauses allow for the verbal indexation of 3rd person subjects in the languages that have them in the main clause verbs. They include, among others, the temporal clause type marked by reflexes of **su* in Araona and Ese Ejja, the temporal adverbial clause marked by *-ajo* in Ese Ejja and the purpose clauses which are not non-finite (see above). A common property of many of these adverbial clause types is that they require their subject

[26] Note that Tacana has two distinct temporal clauses marked by the formally identical reflex of **tsu* (=*putsu*). One of them is non-finite and similar in behavior to those of the other languages. The other, by contrast, is finite (see below).

referent to be non-coreferential with that of the main clause. For instance, the 3rd person A suffix *-ta* can be seen in the Araona partly-finite temporal adverbial clause marked by *-(j)o/-jao*[27] in (117). However, like in (116), the verb does not take any tense-aspect-mood marking from slots -3 or +6.

(117) [*Nio=ja*[28] *tsoi-**ta**-**o***] *todi=lipi* *a-pamo* *e-pa*.
perro=ERG bite-3A-TMP.DS child=DIM ASF-a.lot PST-cry
'When the dog bit the child, s/he cried.' ARAONA (Pitman 1981: 172)

Finally, **finite adverbial clauses** have their verbs marked basically like main clause verbs, with affixes filling all the inflectional slots. These include, among others, the temporal clause types marked by reflexes of **tsu* in Tacana (*=putsu*), **su* in Cavineña (*=su*) and the reason clauses in Cavineña and Ese Ejja. A common property of these adverbial clause types is that they either require their subject referent to be non-coreferential with that of the main clause or that they do not have any requirement. The following Tacana temporal adverbial clause marked by *=su* illustrates both 3rd person and tense-aspect-mood marking, which are identical to those of the main (on the transitive light verb).

(118) [*Daja* *jeutsu-**ta-idha=su***] *mesa* *kwara=ja* *jei* *a-**ta-idha**…*
thus respond-3A-REM.PST=TMP.DS 3SG.GEN mother=ERG say.yes do-3A-REM.PST
'When (the child$_i$) said this to her$_j$, his$_i$ mother$_j$ said yes to him$_i$…'
TACANA (Guillaume 2013a; texts and fieldnotes 2009-2013)

8.1.4 Argument marking

Depending on the languages and types of adverbial clauses, the marking of the arguments in adverbial clauses can be more or less similar to that in main clauses. A recurrent property is that the adverbial clause arguments co-referential with those of the main clause are generally left unexpressed outside of the verb; in the verb, 3rd person subjects can be marked (§8.1.3). When overtly expressed, NPs and pronouns are always preverbal; recall that adverbial clauses are predicate-final. (Recall also the exceptional status of the Reyesano purpose adverbial clause in which the predicate is clause-final; cf. (111).) In the languages with ergative (or split ergative) alignment, the same alignment is preserved, although it can be manifested by a formally distinct ergative case and distinct sets of pronouns. Also, remember that adverbial clauses do not have their own second position pronouns (or second position particles).

In Cavineña and Araona, argument marking in adverbial clauses displays very little difference from that in the main clause, realized by way of the same ergative case and first position pronouns. For instance, in the Araona above examples (119) and (117), the S NP 'fish' is unmarked (120) and the A NP 'perro' is marked by the same ergative case *=(j)a* used in the main clause (117). In Ese Ejja and Tacana, similarly to Cavineña and Araona, argument marking in adverbial clauses is identical to that in the main clause as long as the arguments are expressed by NPs. When it comes to their expression by way of pronouns, however, a distinct set of forms must be used, whatever the type of adverbial clauses. In Ese Ejja, compare, for instance, the independent form of the 1SG ergative pronoun *eya**ya*** in the main clause in (121a)

[27] The two suffixes *-(j)o* and *-jao* are in complementary distribution, conditioned by the person (3rd vs 1st/2nd) of the DC subject. The suffix *-(j)o* is used when the DC subject is a 3rd person, as in (118), and *-jao* when it is a 1st or a 2nd person.

[28] Note that following the vowel *o*, the expected form of the ergative marker should be *=a*, not *=ja* (§2).

with its corresponding proclitic form *eya=* in the adverbial clause in (121b) and the independent form of the 3rd person (singular or plural) absolutive pronoun ***oya*** in the main clause in (121a) with its corresponding proclitic form *o=* in (121c).

(121) a. *Majoya* ***eyaya*** ***oya*** *ba-naje.*
then 1SG.ERG 3ABS see-REC.PST
'Then I saw it (the viper).' ESE EJJA (Vuillermet 2012a: 579)

b. *Majoya* *na-kwaya-pajya-ki-naje* [***eya=****sopa* *kya-axe*].
then blood-go.out-STOP-GO.TO.DO-REC.PST 1SG.ERG=soup(Sp) give-TMP.OS
'Then (he) stopped spitting blood when I gave him soup.'
ESE EJJA (Vuillermet 2012a: 580)

c. *Y* *majoya* *eya* *poki-naje* [***o****=ba-****a***].
and(Sp) then 1SG.ABS go-REC.PST 3ABS=see-PURP.MOT
'And then I went to see him.' ESE EJJA (Vuillermet 2012a: 580)

(Note that in Tacana adverbial clauses, a distinct set of pronouns is only found with 2SG, 3SG and 3PL referents; see for instance the proclitic *mi=* '2SG' in (24b).)

Finally, as already mentioned, arguments in A function in general purpose clauses in (at least) Cavineña and Ese Ejja and 'before' clauses in Ejja are marked by way of genitive/dative (instead of ergative) case on NPs or genitive/dative pronouns.

(122) *Tuekedya* *=tu* *be-nuka-kware* *jae* *amena* [***yatse-ja*** *ara=****ishu***].
then =3SG bring-ITER-REM.PST fish BM 1DU-GEN eat=PURP.GNL
'(The Pacahuara woman) brought more fish for us to eat.'
CAVINEÑA (Guillaume 2008a: 700)

(123) *E-naese=a* *oja=bakwa* *me-shakwa-ka-ani,*
NPF-mother=ERG 3GEN=child hand-rinse-3A-PRS
[*oja=chii****=ja*** *bobi* *kya-****ximawajo***].
3GEN=father=GEN food give-BEFORE.NOTA/S
'The mother cleans the hands of her children before the father gives them food.'
ESE EJJA (Vuillermet 2012a: 580)

8.1.5 Referential constraints

Many adverbial clause types have referential restrictions imposed on the identity of their arguments which depend on the identity of the main clause arguments. Depending on the languages and the types of adverbial clauses, there are two main types of restrictions which instantiate two distinct phenomena: switch-reference and 'adjunct participant agreement'.

Switch-reference, found in temporal, reason, purposive, conditional and concessive adverbial clauses, targets the adverbial clause subject referent (S or A), which must be identical or different from that of the main clause (again, S or A). Cavineña, Araona and Tacana have simple (two-fold) switch-reference systems, contrasting only a same-subject (henceforth SS)

clause with a different-subject (henceforth DS) clause. Such systems are found in their **temporal** adverbial clauses marked by reflexes of Proto-Takanan **tsu* (for SS clauses) and **su* (for DS clauses). Compare, e.g., the SS (**tsu*) clauses in Cavineña (110a,b) and Araona (116) with the DS (**su*) clauses in Cavineña (110b) and Araona (117). In Araona and Tacana, but not in Cavineña, one also finds switch-reference in their **general purpose** adverbial clauses, as in Araona (124a,b). In Araona only, switch-reference is also found in **conditional** adverbial clauses and **concessive** adverbial clauses.

(124) a. *Pia* *a-pasipasi-odi,* [*diñelo* ***pa**-jemi* ***ezae***].
arrow do-CARELESSLY-ITER money(Sp) PURP-remove PURP.SS
'He is carefully making arrows in order to earn (lit. remove) money.'
ARAONA (Pitman 1980: 51)

b. *Meatsa* *iloa-ke* [***pa**-idyoi* ***pojo***].
hand.finger extend.hand-IMP PURP-treat PURP.DS
'Give me you hand so that I can treat it.' ARAONA (Pitman 1981: 114)

In Ese Ejja, switch-reference is a more complex (three-fold) phenomenon in which an SS clause constrasts with two DS clauses. This type of system is found in **prior/simultaneous temporal** adverbial clauses. Here, the SS marker *-maxe* (125a) constrasts with a first DS marker *-ajo* (125b), used similarly to the Cavineña and Araona DS temporal clauses, with the exception that the adverbial clause object cannot be coreferential with the main clause subject (S or A). For this specific configuration, a third (DS) clause marker *-axe* is used (125c).

(125) a. [*Ese Ejja* *ba-**maxe***] *oya* *kwabesa-ani.*
Ese Ejja see-TMP.SS 3ABS fly.off-PRS
'When they$_i$ see Ese Ejja (people), they$_i$ (partridges) fly off.'
ESE EJJA (Vuillermet 2012a: 596)

b. [*Inyawewa=a* *taxakaka* *ba-ka-**ajo***], *oya* *e-sho'i* *swa-ani.*
dog=ERG frog see-3A-TMP.DS 3ABS NPF-child smile-PRS
'When / while the dog is watching the frog, the child is smiling.'
ESE EJJA (Vuillermet 2012a: 595)

c. [*Michi* *sha-jya-ka-**axe***] *shepa-sawi-jya-naje.*
cat(Sp) throw.into.water-DEPR-3A-TMP.OS get.wet-thin.long-DEPR-REC.PST
'When they threw the cat into water he became thin from being wet.'
ESE EJJA (Vuillermet 2012a: 406)

'**Adjunct participant agreement**' (Valenzuela 2005) has been primarily documented in Ese Ejja, and only for three types of adverbial clauses: 'before' adverbial clause, reason adverbial clause and conditional adverbial clause. Here, there is a first (A-oriented) marker, such as *-ximawaa* (126a), for the situation where one of the arguments of the adverbial clause is coreferential with the A of the main clause (adverbial clause A/S/P = main clause A). Then, there is a second (S-oriented) marker, such as *-ximawa* (126b), for the situation where one of the arguments of the adverbial clause is coreferential with the S of the main clause (adverbial clause A/S/P = main clause S). And there is a third marker, such as *-ximawajo* (126c) for all the other configuations, i.e., when one of the arguments of the adverbial clause is coreferential with

the P of the main clause (adverbial clause A/S/P = main clause P) or if there is no coreferential arguments at all (adverbial clause A/S/P ≠ main clause A/S/P); see also this configuration with a reason adverbial clause in (53a).

(126) a. [*Ixya~ixya-**ximawaa***] *a'a* *bikyabikya* *ixya-xi!*
eat~ANTIP-BEFORE.A IMP.NEG candy eat-IMP.NEG
'Do not eat sweets before eating (a meal)!' ESE EJJA (Vuillermet 2012a: 593)

b [*Poki-**ximawa***], *eya* *kya-eno* *pwa-je.*
go-BEFORE.S 1SG.ABS APF-sad be-FUT
'Before leaving, I will be sad.' ESE EJJA (Vuillermet 2012a: 593)

c. [*E-sheki* *jaasowa-**ximawajo***], *eya* *neki-sowa-ani.*
NPF-sun go.up-BEFORE.NOTA/S 1SG.ABS stand-go.up-PRS
'Before the sun goes up, I get up.' ESE EJJA (Vuillermet 2012a: 590)

For a detailed study of referential constraints between adverbial clauses and main clauses in Ese Ejja, see Vuillermet (2014b).

8.2 Relative clauses

Relative clauses in Takanan languages are generally embedded within an NP and postposed to the NP head, but relative clauses preposed to the NP head are also attested; see an example of each in (23a,b). In terms of their internal structure, relative clause verbs are formally similar to those of finite adverbial clauses (and of main clauses), with affixes filling all the inflectional slots. In the Cavineña relative clause in (127), for instance, one can see the verb carrying the inflectional imperfective suffix *-ya* (and the non-inflectional associated motion suffix *-ti*).

(127) *Tume* *=tukwe* *ani-kware* [*bina* [***ike*** ***susu-ti-ya=ke***].
there =MIR sit-REM.PST bat 1SG suck-GO.TEMP-IPFV=REL
'There was a (vampire) bat that was going to suck me (during my sleep).'
CAVINEÑA (Guillaume 2008a: 499, 757)

In Cavineña, Ese Ejja, Araona and Tacana, relative clauses are predicate final. In Reyesano, by contrast, relative clauses are predicate initial (128).

(128) *Chasumasa=be* *te* *a-puayu-a=be* *te*
later=PTC BM PST-come-PST=PTC BM
[*ichu* *diani* [***e-turu-ta-dha*** ***te*** ***akurdiu***]].
that person IPFV-play-A.3-IPFV.LIE BM accordion(Sp)
'Later came the man who was playing accordion.'
REYESANO (Guillaume 2012a: 223)

In Cavineña, Araona and Ese Ejja, relative clauses are marked by a specific relative clause morpheme. In Cavineña and Araona, the relative clause marker is an enclitic to the (clause-final) predicate: *=ke* in Cavineña (127) and *=po* in Araona (129). In Ese Ejja, the relative clause marker is one of four independent words, *kwa*, *kyo* and the two demonstrative *jikyo* and *ma* (§4.3), that occurs at the beginning of the relative clause clause (130); the motivation for using

one or the other of the relative clause markers is unknown.

(129) [*Jaja=kana* [***e-olo-ani=po***]] *di-mane.*
fruit=PL IPFV-fall-IPFV=REL eat-HAB
'(The tortoise) eats fruits that have fallen down.' ARAONA (Emkow 2006: 680)

(130) *Kwama=tii=ya =pa* [***kwa*** *owa=kekwa-ka-je=kwana*]
there=EMPH=FOC =RPT **REL** 3ERG=hunt-3A-FUT=PL
jya-ka-na-'yo-ani-naje
leave-3A-DO&RETURN-TEL-IPFV-REC.PST
'There he used to leave behind **all that he had hunted** (before going home).'
ESE EJJA (Vuillermet 2012a: 293)

In Tacana and Reyesano, relativization is realized by simple juxtaposition of a finite clause next to the head of an NP, without any further marking, as in (128) and (131a,b), respectively.

(131) a. [*Jida aicha* [***duse-iti-iba***]] *jana a-ke*!
that meat fetch-PFV-REG cook do-IMP
'Cook that meat that I have fetched!'
TACANA (mu030 - Guillaume texts and fieldnotes 2009-2013)

b. [*Jida bakwa* [***dapia y-ani***]*=ja*] *mi=e-dia-ta=puji*…
that viper there IPFV-sit=ERG 2SG=PURP.GNL.SS[29]-eat-3A=PURP.GNL
'(He abandoned you) so that that viper **which is sitting there** would eat you.'
TACANA (ch092 - Guillaume texts and fieldnotes 2009-2013)

Relative Clause are frequently headless, as in Ese Ejja (130) and Araona (132). In Ese Ejja, actually, headless relative clauses appear to be the norm (Vuillermet 2012a: 293).

(132) ***Pisa-jao-ta=po*** *=tso* *ke-dia*?
hunt-COME-3A=REL =EMPH Q-eat
'Did he eat what he hunted here?' ARAONA (Pitman 1980: 49)

In (at least) Cavineña, it has been shown that relative clauses with an overt head can be either externally-headed – the head belongs to the main clause – or internally-headed – the head belongs to the relative clause (Guillaume 2008a: 756–764). In (127), for instance, the relative clause head *bina* 'bat' must belong to the main clause, as evidenced by its absolutive (zero) case marking, reflecting its S function within the main clause; had it belong to the relative clause, it should have received ergative marking (enclitic *=ra*), reflecting its A function within the relative clause. By contrast, in (133), the relative clause head, *encomienda* 'package' (a loan from Spanish), must belong to the relative clause, as evidenced by its position, in between two relative clause constituents, the ergative pronoun *metse-ra* and the relative clause predicate.

(133) [*Metse-ra* ***encomienda****=piji* *kwadisha-chine=ke*] *=ri-ke* *=Ø*
2DU-ERG package(Sp)=DIM send-REC.PST=REL =3PROX.SG-FM =1SG

[29] Note that this example is an exception to the same-subject constraint that normally holds between this type of adverbial clause and the main clause (see §8.1.2 and §8.1.5).

ina-tsa-chine.
grab-COME(O)-REC.PST
'I received the little package that you (du) sent me.'
CAVINEÑA (Camp & Liccardi 1989: 61; cited in Guillaume 2008a: 760)

Still (at least) in Cavineña, all grammatical functions (S, A, P and obliques) are accessible to relativization in externally-headed relative clauses. See e.g. relativization of A in (127a), S in (134a), P in (134b) and oblique (locative) in (134c).

(134) a. … [*beta wekaka*] *iwa-kware* [*camion=kwana* [***e-kueti-u=ke***]**]**.
two day wait.for-REM.PST truck(Sp)=PL POT-pass-POT=REL
'… we waited two days for trucks that could possibly pass.'
CAVINEÑA (Guillaume 2008a: 748)

b. *E-wane=ke=ra =pa udu-kware*
3-wife=3=ERG =RPT cook.on.rack-REM.PST
[*jae* [***tu-ra*** ***a-aje-ya=ke***]].
fish 3SG-ERG do-GO.DIST-IPFV=REL
'His$_i$ wife was cooking the fish that he$_i$ was catching (lit. doing).'
CAVINEÑA (Guillaume 2008a: 764)

c. *Ba-kware e-ra* [*kani=piji* [***bina=ra i-ke susu-wa=ke***]].
see-REM.PST 1SG-ERG hole=DIM bat=ERG 1SG-FM suck-PRF=REL
'(I looked at my hand and) I saw a little hole where the bat had sucked me.'
CAVINEÑA (Guillaume 2008a: 757)

In internally-headed clauses, however, only S/P arguments were found in the corpus (see more on this in Guillaume 2010: 113–114).

Cavineña relative clauses can have a restrictive or non-restrictive function. Non-restrictive relative clauses are frequently used as adverbial temporal clauses (135).

(135) [***Iji~iji=ra*** ***kwa-ya=ke***] *=tu matuja=ra isara-kware.*
drink~ANTIP=PURP.MOT go-IPFV=REL =3SG caiman=ERG talk.to-REM.PST
'As he (the ox$_i$) was going to drink, the caiman talked to him$_i$ (lit. the caiman talked to him$_i$, who$_i$ was going to drink).'
CAVINEÑA (Guillaume 2008a: 762–763)

8.3 Tail-head linkage

In Takanan languages, tail-head linkage (de Vries 2005; Guillaume 2011b) is a frequently used pattern in which the (complete or partial) repetition of the last or main clause of the preceding sentence is realized by way of their temporal adverbial clauses, typically involved in switch-reference marking. Such is the case in Cavineña, as illustrated in the two texts excepts in (136), with SS temporal clauses (marked by *-atsu*) and (137), with a DS temporal clause (marked by *=ju*); the repeated material is indicated in bold.

(136) a. … *e-bakwa=ke=ra* [*datse* *iwa-tsu*] ***sare-ti-kware***.
3-child=3=ERG FRUS wait.for-TMP.SS look.for-GO-REM.PST
'… his child, waiting in vain for him, went looking for him.'

b. ***Sare-ti-tsu*** *=tu* *e-tata=ke* *chamakama* ***dadi-kware***.
look.for-GO-TMP.SS =3SG 3-father=3 finally find-REM.PST
'Going looking for him, he finally found his father.'

c. ***Dadi-tsu*** *=tu* *e-bakwa=ke=ra* *beti-kware*.
find-TMP.SS =3SG 3-child=3=ERG bring-REM.PST
'Finding him, the child brought him back (home).'
CAVINEÑA (Guillaume 2011b: 118–119)

(137) a. *Tura* *=pa* *=tu* *amena* ***tirya-kware*** [***tuja*** ***e-rami***].
3SG.ERG =RPT =3SG BM finish-REM.PST 3SG.GEN NPF-flesh
'They (the giant mosquitoes) ate all (lit. finished) her flesh.'

b. [***E-rami*** ***tirya-wa=ju***] *=pa* *=tu* ***maju-kware***.
NPF-flesh finish-PRF=TMP.DS =RPT =3SG die-REM.PST
'After they finished her flesh, she died.'

c. ***Maju-wa=ju*** *wekaka-tsu* *y-awi=ke=ra* *ba-wekaka-kware*
die-PRF=TMP.DS be.at.dawn-TMP.SS 3-husband=3=ERG see-AT.DAWN-REM.PST
e-biti=kamadya *ju-jara-ya=ju*.
NPF-skin=REST be-LIE-IPFV=TMP.DS
'After she (the woman) had died, her husband woke up (lit. was at dawn) and all he could see (of his wife) was her skin lying (on the ground).'
CAVINEÑA (Guillaume 2008a: 798; Guillaume 2011b: 121–122)

A noteworthy aspect of tail-head linkage constructions is that they have the effect of carrying the same-subject vs. different-subject constraints of SS-temporal and DS-temporal clauses across sentence boundaries. This is a logical consequence of the fact that the subordinate clause verb is the same as the main verb of the preceding sentence and that it must have the same subject as the main verb of the sentence it belongs to.

For examples and discussion of tail-head linkage in other Takanan languages, see Emkow (2006: 683) for Araona and Vuillermet (2012a: 598–599) for Ese Ejja.

9 Conclusion

This chapter has provided a detailed overview of the phonological and morphosyntactic features of the five extant languages of the Takanan family on the basis of the extensive descriptive work that has been conducted on them during the past 20 years. Among the typologically most interesting and best studied properties found in one or more languages, one can mention, in the domain of **argument-marking**, a counter-universal pattern of split ergativity (Tacana), a genuine double-object construction (most languages), a 2nd ('Wackernagel') position where personal pronouns become grammaticalized (most languages) and a pattern of hierarchical indexation in transitive clauses (Reyesano). The **verb morphology and the predicate**

structure are also remarkable, with highly elaborated associated motion systems (most languages), distinct markers for 'regular' versus sociative causation (all languages), verb reduplication with antipassive function (most languages) and light verb constructions with a pair or intransitive versus transitive light verbs (all languages). Finally, the languages display noteworthy characteristics in the domains of **clause and sentence linkage**, with patterns of switch-reference (most languages), 'adjunct participant agreement' (Ese Ejja) and tail-head linkage (most languages). Other characteristics are also likely to attract the attention of typologists, but to date they still lack the proper characterization and data needed to understand their exact nature and potential for general linguistics. Among these, one can bring to the fore the **sound and prosodic systems**, with the presence of a number of typologically rare segments (voiceless implosives in Ese Ejja, voiced-and-voiceless dental in Tacana) and unusually complex accentual systems (all languages).

List of non-standard abbreviations

( )	morpheme that does not appear on the surface (in morpheme line)
[ ]	multiple-word constituent
ABIL	abilitative
APPROX	approximative
APRH	apprehensive
ASF	adjective suffix
ASSC	associative
ATT.GETTER	attention getter
AVERT	avertive
BM	boundary marker
CAUS.INVLT	causative of involvement
COMPAS	compassion
CONTR	contrastive
DEPR	depreciative
DESID	desiderative
DISC	discourse
DS	different subject
DUBIT	dubitative
EXS	existential
FM	formative
HUM	human
INTERJ	interjection
LOC.GNL	general locative
MID	middle
MIR	mirative
NPF	noun prefix
NSG	non-singular
OS	object to subject co-reference
PERL	perlative
PERM	permanently
POT	potential
PROP	proprietive
PURP.GNL	general purpose
PURP.MOT	purpose of motion
RC	relative clause
REM.PST	remote past
SIMLR	similarity
Sp	Spanish (borrowing)
spec.	species
SS	same subject
TDM	temporal distance marker
TEMP	temporarily
TIM	timitive
TMP	temporal adverbial clause
UNCERT	uncertain

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