Mojeño Trinitario classifiers:
a multilocus and multifunctional system

by

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List of abbreviations

ACT	active		MID	middle
ADD	additive		MOT.PRES	motion presentational
APPL	applicative		MULT	multiplicative
APPROX	approximative		NAE	non-assertion of existence
ART	article		NPOSD	non-possession
CAUS	causative		NEG	negation
CLF	classifier		NH	nonhuman
COL	collective		NVIS	non-visual evidence
COMPAR	comparative		NZ	nominalizer
CONC.MOT	concomitant motion		ORD	ordinal
D	discourse marker		PASS	passive
DEM	demonstrative		PFV	perfective
DESP	despective		PH	placeholder
DIM	diminutive		PL	plural
DIST	distal		PL.KIN	plural for kinship terms
DISTR	distributive		PLURACT	pluractional
DUB	dubitative		POSD	possessed form of the N
EMP	empathy		POT.LOC	potential location
EV.NZ	event nominalizer		PREP	preposition
EXIST	existential		PRIV	privative
F	feminine (singular)		PROG.GRAD	progressive gradual
FRUSTR	frustrative		PROX	proximal
FUT	future		PST	past
GNR	generic		RECP	reciprocal
GNR.P.NZ	general patient nominalizer		RED	reduplication
GPN	generic possessive noun		RED2	double reduplication
H	human		REP	repetitive
HAB.A.NZ	habitual agent nominalizer		RES	resumptive
HAB.P.NZ	habitual patient nominalizer		RESTR	restrictive
INDT	indeterminate		RPT	reportative
INTENS	intensive		SG	singular
INTER	interrogative		sp.	species
INV	inversive		Sp	Spanish word
IPFV	imperfective		SP.P.NZ	specific patient nominalizer
IRR	irrealis		SUB	subordinator
IRR.NEG	negative irrealis		TAG	tag question
M	masculine (human singular)		VZ	verbalizer
MED	medial			

1
Introduction

This book presents a comprehensive analysis of a typologically notable type of classifier system: a multilocus and multifunctional system, where the same set of classifiers occurs in different morphosyntactic environments and has diverse functions. This system is that of Mojeño Trinitario, a language of the Arawak family, spoken in lowland Bolivia. The Arawak family, spread over a large part of South and Central America, is well-known for its classifiers. Only three publications deal with classifiers at the family level (Aikhenvald 1994a; Miranda 2020; Dunn & Rose to appear); all others target individual languages or a subset of the languages of the family (Aikhenvald 1994b, 2019, 2007; Aikhenvald & Green 1998; Brandão 2015; Marcus 1994; Mihas 2019; Seifart 2011, 2012; Terhart 2016; Reis 2023; Rose & Van linden 2022). Within the wealth of publications on classifiers in individual Arawak languages, the present work stands out for both its wide coverage (form, semantics, distribution, and function of the classifiers) and the degree of detail of the analysis.

The investigation of Mojeño Trinitario classifiers presented in this book is corpus-based. It builds on a large corpus of spontaneous discourse, and quantitative investigation is used to support the analysis. As a first example of this, a basic count tells us that among the text corpus (described in Section 1.3), 889 occurrences of classifiers are attested. This means that classifiers are found in 3.43% of the words in spontaneous speech, and more strikingly, that a quarter of the utterances feature a classifier. This clearly makes classifiers a central part of the grammar of Mojeño Trinitario. In this book, I describe and analyze this major grammatical device of Mojeño Trinitario, which had been only very briefly sketched before.

1.1 Goals of the book

This book offers a comprehensive description of the Mojeño Trinitario classifiers in synchrony, including form, semantics, distribution, and function, and elaborates on the typological characterization of the system. Research questions have been informed by existing cross-linguistic research on classifiers and developed as my understanding of the language progressed across now more than two decades.

The main research questions are as follows:

– What criteria define classifiers?
– What is the inventory of classifiers?
– What are their formal characteristics?
– What are the semantics of each individual classifier and the semantic parameters present in the system as a whole?
– What are their morphosyntactic environments and how do classifiers interact with them?
– What are their functions, at both clausal and discourse levels?
– Are particular classifiers cognate to classifiers reconstructed to Proto-Arawak or mid-level proto-languages?
– Can we identify historical sources for particular classifiers?
– Can we identify source constructions facilitating the grammaticalization of classifiers?

Given the scope of this volume, a number of topics had to be left out, in particular detailed contributions to:

– theoretical reflections on nominal categorization systems;
– the cross-linguistic typology of classifiers;
– historical comparison and reconstruction.

The analyses and discussions presented here nevertheless shed some light upon these questions. In particular, it is worthwhile mentioning that the Mojeño Trinitario classifier system is strikingly similar to the classifier systems of other Arawak languages, and not just those of the neighboring languages, in

terms of the distribution, functions, and semantics of its classifiers (Dunn and Rose to appear). Additionally, some of the Mojeño Trinitario classifiers are cognate with classifiers of other Arawak languages. The systematic comparison of the Mojeño Trinitario classifier system with that of other Arawak languages deserves a study of its own, for which the present work would provide ample data.

1.2 Methodology

The present work relies upon foundational literature on classifiers and a systematic investigation of a Mojeño Trinitario corpus, which will be presented in the next section.

First, the analysis was guided by key works in the typological investigation of classifiers (Aikhenvald 2000; Grinevald 2002; Krasnoukhova 2012, among so many others). This will be discussed again at the end of this book (Chapter 7), where this literature will help us position the Mojeño Trinitario system within existing typologies. Also, previous publications on classifiers in the Mojeño languages (summarized in Chapter 3) has proved helpful in identifying less common classifiers, as well as in the description of the semantics of individual classifiers.

Second, this work is corpus-based, and is grounded in the systematic investigation of all occurrences of classifiers in the corpus, which is described in Section 1.3. Not only does this work provide the full inventory of the classifiers found in the corpus (Table 10), but each token of a classifier found in the texts has been examined, with the aim of developing a detailed semantic analysis of each classifier that goes far beyond a mere one-word label (Table 13). Furthermore, two datasets, described in Section 1.4, have been developed to facilitate the systematic and fine-grained exploration of the text corpus.

1.3 Corpus

The empirical basis of this work is the 2022 version of a corpus of texts that I collected in the town of Trinidad and the small village of San Lorenzo de Moxos, both located in the Beni department of Bolivia, during 12 months of fieldwork divided between six field trips from September 2005 to July 2022. Over the years, I have collaborated on data collection and analysis with about 30 consultants. Among those, Eulogio Ibañez Noza played a crucial role at the start of the project, and three other speakers played a major role throughout the years: Florencia Cariri Tamo, Natividada Tamo Noza, and the late Leonardo Jou Ichu.

The text corpus consists of 48 texts produced by 25 speakers. It includes about 6 hours of speech, 3,544 utterances, and 26,158 words. The texts comprise narratives (historical, biographies, traditional narratives, and fiction), conversations (including staged dialogues and negotiations), and monologues. Most are unplanned and spontaneous, i.e., not based on stimuli. Stimuli employed include the Frog Story (Mayer 1969), the Family Problem Solving Task (San Roque et al. 2012), and a Spanish version of the tale of the North Wind and the Sun that was translated and read for a phonetic illustration of Mojeño Trinitario in the *Journal of IPA* (Rose 2021).

The wider corpus additionally comprises elicited sentences. Some of these sentences have been elicited through stimuli targeting specific semantic domains. Three speakers worked on the Trajectoire stimulus (Ishibashi et al. 2006, also referred as the Path stimulus), three on the Topological Relation Picture Series stimulus (Bowerman & Pederson 1992; labeled Loc in my dataset) and two on the Kids' Cut & Break (Bowerman & Majid 2003, abbreviated in C&B in this book), totaling 2 hours of recordings and 601 sentences. In addition, the corpus also comprises about 5,000 utterances (usually sentences, sometimes phrases or words) elicited through different means: translation from Spanish, utterances in Mojeño Trinitario that I have crafted myself (to test either the form or its meaning), or modification of a sentence attested in a text.

The entire corpus is morphologically segmented in FieldWorks Language Explorer, aka FLEx (SIL FieldWorks 2022), and translated into both Spanish and English. In the FLEx lexicon, each of the 32 classifiers was given a gloss of the structure CLF:characteristics or CLF:prototype, such as CLF:mass or

CLF:plank (see Section 4.1).[1] Additionally, the entry for each classifier was split into several 'senses', according to the part of speech of the root or stem they attach to. This enables a rapid search for the use of a particular classifier in a particular morphosyntactic environment.[2] The 48 texts and the eight series of sentences elicited through stimuli have been audio (and sometimes video) recorded. For all these recordings, the transcriptions has been aligned with the media file in ELAN (ELAN 2022).

The first 36 texts are freely accessible on the Ortolang platform (Rose 2018a) in audio format, accompanied by a document offering their transcription and Spanish translation aligned together, sentence by sentence. Ten of these texts (7,792 words in total) are also freely accessible on the DoReCo platform (Rose 2022), where their phonological transcription and morphological segmentation is aligned with the audio.

1.4 Datasets

The quantitative analyses in this book are based on two datasets, built on the corpus described above.

The first dataset, given in Table 18, includes token counts of all 32 classifiers, for each of the four morphosyntactic environments that they occur in. These counts were extracted from the FLEx concordance search. From these basic counts, several measures of the frequency of classifiers in the corpus have been extracted.

Figure 6 summarizes the relative frequency of classifiers in general in the four syntactic environments morphosyntactic, while Figure 5 shows the relative frequency of each classifier in comparison with the others within the corpus. Figure 8 to Figure 11 gives a focused picture on the relative frequency of the 32 classifiers in each of their four morphosyntactic environments.

The second dataset, shared in the Appendix, offers a finer-grained coding than is possible in FLEx. This facilitates the study of classifiers distributions and functions by allowing the investigation of the morphosyntactic and discourse environments in which classifiers appear in natural speech. The dataset codes a number of characteristics for each of the 168 occurrences of classifiers in a subsample of seven texts totaling 520 sentences.[3] These texts were produced by ten speakers, and comprise two expository texts, two narrations, and three conversations. The information coded for each occurrence of a classifier is the following:

- – a unique identifier;
- – text and sentence number;
- – form (see Section 3.1);
- – part of speech of the host (see Chapter 5);
- – function of classifier (see Chapter 6);
- – information on the associated referent/NP: presence of PRO, DET, N, function of this participant, humanness, animacy;
- – referential distance and topic persistence (see Section 6.5 for more details).

This dataset enabled a number of assessments on the use of classifiers. For instance, Table 23 details the functions of the classifiers within the seven-text sample, and Table 24 is a summary table on the discourse functions of classifiers on verbs in this subsample, in terms of referential distance and topic persistence.

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[1] Note that the organisation of the software FLEx is not very powerful for complex concordance search of bound morphology. The systematic use of CLF within the gloss of classifiers did not permit to do specific searches on all classifiers, because the entire gloss is needed for complex concordance search. This limited the automatic investigation of the paradigm as a whole.

[2] A drawback of this organization is that the total number of occurrences of a specific classifier must be computed by adding their occurrence in each of the possible environments (given the use of variants, a particular classifier cannot be searched thoroughly by its main form).

[3] One caveat is that 26 occurrences of the -na classifier on the root 'po 'other' are not listed in that dataset. At the time of filling the dataset, the word 'pona 'other' was not analyzed as comprising a classifier. This is not problematic, since the aim of this dataset is not to investigate the frequency of classifiers on different hosts. This task was better done on the entire text corpus (see Figure 6).

1.5 Overview of the book

This book starts with two introductory chapters: Chapter 2 provides basic information on the Mojeño Trinitario language, and Chapter 3 summarizes the state of the art on Mojeño classifiers. The analysis proper of Mojeño Trinitario classifiers is distributed over a number of sections. Section 3.1 focuses on identifying the classifiers, describing some of their formal characteristics and, by doing so, distinguishing them from nouns. Chapter Classifier semantics presents a detailed description of the semantic extension of classifiers, both at the level of each individual classifier as well as at the level of the system as a whole. Chapter 5 then describes the morphological distribution of classifiers with respect to hosts of different parts of speech. Chapter 6 examines the functions of Mojeño Trinitario classifiers, as well as those they lack. Finally, Chapter 7 situates the Mojeño Trinitario system within the wider typology of classification systems. It argues that the system as a whole can be characterized as a multilocus and multifunctional classifier system, which is compared to the other noun categorization device of the language, namely, gender and number in person markers.

1.6 Main results and highlights

Mojeño Trinitario features a set of 32 classifiers, which are suffixes and most often exhibit a -*CV* shape. Semantically, most of them express physical properties of the referent they classify, especially shape. They are found on numerals, nouns, adjectives, and verbs. On verbs, they categorize either the subject, the object, or a peripheral participant. Their main functions include qualification, derivation, and discourse functions such as foregrounding, backgrounding, and reference tracking. They have also developed an applicative function. This last point excepted, the Mojeño Trinitario classifier system is a good representative of classifier systems in Arawak languages (Dunn & Rose to appear).

Three crucial aspects of the system are that (i) the same set of classifiers is used on different types of hosts, namely, numerals, nouns, adjectives, and verbs, (ii) they are obligatory on numerals only, and (iii) several different classifiers can be associated with the same noun, and even the same referent in the same environment. Interestingly, the morphosyntactic environments in which classifiers occur are also available to full nouns in compounding processes. These nouns then function as 'repeaters'.

1.7 Presentation of the examples

This book illustrates the analysis of Mojeño Trinitario classifiers with more than 400 examples. Their presentation follows the organization of (1).

> (1)   nsipjirikpo to 'chopemuugira
> *n-sip-**ji**-ri-k=po*   *to*   *'chope-muu-gira*
> 1SG-wash-**CLF:amorph**-PLURACT-ACT=PFV   ART.NH   big-CLF:group-DIM
> 'I wash a small quantity.' [T38.140]

Examples are numbered consecutively throughout the book, regardless of section. They are systematically referred to in the text.

The first line gives the orthographic transcription of a full utterance, or sometimes part of an utterance that can stand on its own. I usually give full sentences as examples, but phrases or isolated words are in some rare cases provided for illustrative purposes. If some part of the original production has been left out, this is noted with a space between square brackets.

The second line gives the morphological segmentation of the first line. Morphemes are presented with the form with which they are realized in the utterance, rather than with their underlying form. I have opted for this presentation because the surface realization of a Mojeño Trinitario morpheme can be strikingly different from its underlying form, making its identification within the word difficult. This is the result of pervasive rhythmic syncope and rich morphophonology (see Sections 2.3 and 2.4). Rather rarely, and when necessary, elided parts of morphemes are added in parentheses in the second line to help with morpheme identification.

The third line provides morphemes glosses, generally following the Leipzig Glossing Rules, supplemented by numerous additional glosses, which are included in the list of abbreviations.

The fourth line gives a free translation in English, which itself results from the translation of the Mojeño Trinitario original utterance with the help of the Spanish translations suggested by the consultants. It is followed by a code referring to the corpus, in square brackets. Three types of codes are used. The first type is used in example (1), where T refers to a "text", 38 to the identification number assigned to the text, and 140 to the utterance number within the text. The second type, of which *Path.C.018* is an example, reads as follows: the data has been elicited with the help of stimulus Path, Loc, or C&B (see Section 1.3 about the stimuli), followed by a capital letter for the speaker, and then the number of the utterance. The third type of code is the plain word "elicited", which refers to the fact that the example has been produced within an elicitation session. In some cases, a literal translation is provided, enclosed in parentheses and preceded by "lit.". In other cases, a context is provided in square brackets, before the free translation.

Boldface is systematically used to draw the attention of the reader to relevant parts of examples discussed in the text. For instance, the classifier to which the reader is intended to attend in example (1) is -*ji* CLF:amorph rather than -*muri* CLF:group.

2
Preliminary information on Mojeño Trinitario

Mojeño is a language complex of lowland Bolivia (Rose 2015), including a historical variety that I call Old Mojeño and four modern varieties: Trinitario, Ignaciano, Loretano, and Javeriano. These languages belong to the Arawak family, and more specifically to the South Arawak branch, which also includes neighboring languages of Bolivia and Brazil (Aikhenvald 1999:67). General sociolinguistic information on the language complex is given in Section 2.1.

The Mojeño Trinitario variety is an agglutinating language leaning towards polysynthesis, with a large number of suffix or enclitic slots and a small number of prefix slots.[4] Lexical and grammatical morphemes display several surface forms, due to a pervasive process of rhythmic syncope and a rich system of morphophonemic rules. The following grammatical sketch (Section 2.2 to 2.12) is meant to cover the fundamentals of the language and give necessary information on linguistic features that are relevant to the topic of the present volume.

2.1 Mojeño Trinitario and other Mojeño languages

This section aims at situating Mojeño Trinitario in the Arawak language family as a whole, among Mojeño languages in particular, and in the broader linguistic landscape of lowland Bolivia. It also summarizes existing literature on the Mojeño languages.

The Mojeño language complex belongs to the Arawak family, which is the largest language family in South America in terms of the number of extant languages (40 living ones), and is spoken in 12 countries across Central and South America (Aikhenvald 1999). The Arawak family was initially identified by comparing data from Mojeño and Maipure, which is spoken in the Orinoco basin (Gilij 1780). The various proposals for the internal classification of the family have recently converged in positing that Mojeño is most closely related to Baure, Paunaka, and Terena.[5] Several names have been given to proposed subgroups including this set of languages, which sometimes include additional members.

Aikhenvald (1999:67), for example, includes this set of languages in her South Arawak branch, in which she also includes Enawenê-Nawê. Jolkesky (2016) calls a similar grouping the Guaporé-Mamoré subgroup, in which he includes Paikonéka, but excludes Terena. Ramirez and França (2019) call this set of languages the Bolivian subgroup, while Carvalho (2017, 2018a, 2018b) includes them in his Bolivia–Paraná subgroup, which also includes Paikonéka and Terena, and suggests the internal subgrouping, given in Figure 1. In this classification, Mojeño, Paunaka, and Terena form the Achane branch.

Bolivia-Parana subgroup
    Baure-Paikoneka branch
        Baure (Baure, Old Baure, Joaquiniano)
        Paikoneka
    Achane branch
        Paunaka
        Mojeño (Old Mojeño, Ignaciano, Trinitario, Javeriano, Loretano)
        Terena (Guaná, Chané, Kinikinau, Layana)

Figure 1. The Bolivia–Paraná subgroup (Carvalho 2018a)

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[4] Out of the 35 languages with morphological segmentation in the DoReCo dataset, Mojeño Trinitario shows the highest synthesis index of all, with 3.34 morphemes per word token in average (Stave 2022).

[5] The languages of this subgroup have been relatively well described and documented. Baure and Paunaka have been extensively investigated by Danielsen and Terhart. Grammars (Danielsen 2007; Terhart 2024) and numerous other works have been published for each language, and extensive corpora are also available for them (Admiraal et al. 2010; Danielsen et al. 2015). Terena shows a more fragmented literature, with the most comprehensive works being an older description (Bendor-Samuel 1961), a pedagogical grammar (Butler & Ekdahl 2012, 2014) and a grammatical description (Oliveira 2021). As for Paikonéka, data is scarce (Cardús 1886; d'Orbigny 1879).

The Mojeño (also: Moxo) languages, as well as the related languages Baure and Paunaka, are among the 20 indigenous languages still spoken in Amazonian Bolivia (Crevels 2002). Old Mojeño, which historically preceded the modern Mojeño varieties, was the most widely spoken language in the Moxos region at the time of colonization. It was used as a *lingua franca* ('lengua general') in the Jesuit missions of the area,[6] which were active from the 1670s to the 1760s (Saito 2009), and was therefore spoken by a variety of peoples living in the missions: Spaniards, Mojeños, and other indigenous peoples.

Two observations are worth making with respect to this historical fact. First, since Old Mojeño was actively used in a multilingual setting, both by nonnative speakers and by speakers of the 'Pampa Mojeño' dialect, language contact may have played a role in the subsequent development of language features unexpected for an Arawak language. Second, the present-day Mojeño varieties do not necessarily derive in any straightforward fashion from Old Mojeño, since other varieties may have been maintained along with the 'official' language of the missions, and these may have contributed to the modern varieties.

The current Mojeño population exceeds 32,000 individuals, and consists of 4 groups: Trinitario, Ignaciano, Loretano, and Javierano. These communities and their respective language varieties are named after the four missions of the region: Trinidad, San Ignacio, Loreto, and San Javier. Today, the Trinitario and Ignaciano varieties are endangered, with around 3,220 speakers together (Crevels and Muysken 2009). Javierano is moribund (Rose 2010), with about five (semi-)speakers, and Loretano is extinct. The Trinitario variety is exclusively spoken in the Beni department, in the *Territorio Indígena Parque Nacional Isiboro-Secure* (TIPNIS), in the *Territorio Indígena Multiétnico* (TIM), along the Mamoré river, and in and around the towns of Trinidad, San Lorenzo, and San Francisco de Moxos.

There is a long history of documentation and description of these languages. As far as Old Mojeño is concerned, the Jesuit Javier Iraisos collected an (unpublished) vocabulary that was used by Gilij (1780) for his pioneering study of the Arawak family. More remarkably, the Jesuit missionary Marbán published a work in 1702 that included a 193-page *Arte*, or grammar, two dictionaries (a 244-page Spanish–Mojeño dictionary, and a 303-page Mojeño–Spanish dictionary), and a 203-page bilingual catechism (Marbán 1702). There is no record of spontaneous indigenous speech from that era.

As for the present-day varieties, materials on Ignaciano include dictionaries (Instituto de Lengua y Cultura Mojeño Ignaciano "Salvador Chappy Muibar" 2022; Ott & Ott 1983), grammatical sketches (Jordá 2014; Ott & Ott 1967), and a comprehensive grammar (Olza Zubiri et al. 2002). The grammar is of high quality, and offers many pages of non-segmented and unglossed examples, which can be challenging for non-experts to understand. Works on Trinitario include an earlier grammar and a dictionary (Gill 1957, 1993 [1970]). Gill's (1957) grammar was designed as a pedagogical handbook with a short vocabulary and grammar lessons built around made-up conversations, questions and answers, and exercises. This pioneering work was later followed by a two-volume grammar prepared by a group of speakers and teachers (Ibáñez Noza et al. 2007; Ibáñez Noza et al. 2009). This work is exceptional in being bilingual: each paragraph is written both in Spanish and Trinitario itself.

More recently, several typologically informed descriptive papers on Trinitario have been published. Rose (2014a) is a general presentation of the language structure. More specific papers focus on person indexing in verbs (Rose 2011b), the genderlect system (Rose 2013a), negation and irrealis (Rose 2014a), nominalization and subordination (Rose 2016), nonverbal predication (Rose 2018b), phonetics (Gordon et al. 2018; Gordon & Rose 2019; Rose 2021), rhythmic syncope (Rose 2019a), reflexive (Rose 2023a), and possession (Rose 2023b). Importantly for this volume, two published papers already approached the topic of Mojeño Trinitario classifiers, one on the applicative function of classifiers (Rose 2019b), and the other on their derivational function (Rose & Van linden 2022).

Finally, data on the Javeriano and Loretano languages is limited to the rich comparative vocabulary list in Becerra Casanovas (1980). The summary of the present state of the art of the linguistic description of the Mojeño languages provided here is complemented by the overview of documentation of these languages offered by Rose & Obenaus (2023), and by the specific state of the art on the topic of classifiers in Mojeño languages sketched in Chapter 3. It is noteworthy that Ignaciano and Trinitario are, in general, very similar except for the pervasive vowel deletion process affecting Trinitario only (Carvalho & Rose 2018; Rose 2019a).

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[6] For each mission, the Jesuits selected a *lengua general* ('general language') among the local languages to serve as an official *lingua franca* within the mission.

Diachronic studies on the Mojeño languages are still in their infancy. While Becerra Casanovas (1980) provides an interesting parallel vocabulary list of the five Mojeño varieties, it does not provide any cognacy judgements, and does not offer any reconstructions. This lexical comparative work is done in Carvalho & Rose (2018), which provides a reconstructed Proto-Mojeño form for 191 lexical items and reconstructs the phonological and stress system of Proto-Mojeño. Other publications focus on particular features of these languages across the centuries, including phonological features like velar coronalization (Carvalho 2019), vowel shift (Carvalho 2023), exceptional sound change (Carvalho 2020), and morphological features such as those found in the genderlect system (Rose 2013a), the pronominal system (Rose 2015), and in diminutives (Rose 2018c).

2.2 Phonological inventory

Mojeño Trinitario has an inventory of 28 consonants, listed in Table 1. It consists of 16 simple consonants using six manners of articulation and six places of articulation, and 12 consonants with secondary articulations. Voicing is not contrastive. Note that the IPA is used in sections 2.2 to 2.4, sometimes alongside orthographical transcriptions in the practical writing system described in 2.5 that will be used thereafter in the remainder of the book.

	bilabial			alveolar		palatal	velar		glottal		
plosive	p	p^w	p^j	t		c	k	k^j	ʔ	$ʔ^j$	
nasal	m	m^w	m^j	n		ɲ					
fricative				s	s^j	ç			h	h^j	h^w
affricate				t͡s	t͡s^j	t͡ʃ					
tap				ɾ	$ɾ^j$						
approximant	w		$β^j$			j					

Table 1. Consonant inventory

The vowel inventory, given in Table 2, consists of 12 vowels, with six vowel qualities and a length contrast.

	front vowels	central vowels	back vowels
high	i, iː		u, uː
mid	e, eː	ə͡e, ə͡eː	o, oː
low		a, aː	

Table 2. Vowel inventory

The phonetic characterization of some of these phonemes is discussed in Rose (2021), and the diachronic development of these inventories in Carvalho & Rose (2018).[7]

2.3 Prosody: stress and rhythmic syncope

The Mojeño Trinitario phonological/prosodic word is defined as the domain of stress, rhythmic syncope, and phonotactic constraints.

The surface syllable structure of Mojeño Trinitario is the following: (C(C))V(ː/C). The onset is optional and can be complex, but onsetless syllables and complex onsets are found word-initially only. The rhyme can be either light or heavy, and a heavy rhyme is either a long vowel, or a short vowel followed by a coda. Therefore, there are no vowel sequences within a word, but word-internal heterosyllabic consonant sequences are frequent and diverse.

Primary stress falls on the rightmost foot. The default parse is an iambic rhythmic pattern that applies to the underlying form of words, which is made up of open syllables only, before rhythmic syncope

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[7] Note that the analysis of the inventory of phonologically contrastive segments in Mojeño Trinitario has changed between Carvalho & Rose's (2018) study and the presentation in Rose (2021), reproduced in Table 1.

applies. Words are parsed from left to right by binary iambs, and the last syllable is extrametrical. Examples are given in Table 3. The language shows a minor trochaic metrical parse, found exclusively with disyllabic roots (and a handful of exceptional trisyllabic roots), and only when these do not carry prefixes. This trochaic parse applies also from left to right, and the last syllable is not extrametrical. Examples are given in Table 4.

A major manifestation of the stress patterns is a pervasive process of rhythmic syncope. Vowels in foot-internal non-head position, as well as unfooted moras, are targets for syncope. About half of the vowels that are targets for syncope are actually deleted, while others are regularly maintained.[8] The word-final syllable, extrametrical in the iambic parse, is not eligible as a target for syncope. Parentheses indicate the foot parse in the underlying form, with the syncopated vowels underlined.

IPA surface form	IPA underlying form	orthography	gloss	translation
ˈnhu.ma	(nu̲-ˈhu)ma	njuma	1SG-illness	'my illness'
ˈtkoh.ma	(ti̲-ˈko)-hu̲ma	tkojma	3-VZ-illness	's/he is sick'
wo tkuk.ˈhu.ma	wo (ti̲-ku-)(ko̲-ˈhu)ma	wo tkukjuma	NEG 3-IRR.NEG-VZ-illness	'may you not be sick'

Table 3. Iambic parsing

IPA surface form	IPA underlying form	orthography	gloss	translation
ˈep.ɾe	(ˈepV̲)ɾe	epre	creeper	'creeper'
pak.ˈçi.ɾa	(paku̲)(-ˈçiɾa)	pakgira	dog-DIM	'small dog'
et.naj.ˈɾep.ka	(eto̲)(-na=jo̲)(ˈɾe=pu̲)ka	etnayrepka	one-CLF=FUT=SPEC	'it could be that it will be one'

Table 4. Trochaic parsing

The stress patterns and rhythmic syncope are described in greater details in Rose (2019a), and the acoustic correlates of word-level stress are investigated in Gordon & Rose (2019).

2.4 Morphophonology

Mojeño Trinitario displays a rich and complex morphophonology. In the following subsections, the morphophonological rules are only briefly described; see Rose (2019a) for more information on their ordering and interaction with syncope. In the following sections, an example of each process is given, in which the relevant units are highlighted in boldface.

2.4.1 Hiatus resolution

Hiatuses formed through affixation and cliticization are resolved through five processes of hiatus resolution, listed in Table 5. Note that "deletion" here is used for a hiatus resolution process that is distinct from rhythmic syncope as described in the preceding section.

coalescence	a + u → o	(2)
monophthongization	{low central V}{frontV} → $\widehat{əe}$	(3)
labialization	{labial C}{non-front V}{front V} → {labial C}w{$\widehat{ae}$,i}	(4)
palatalization[9]	{C$_{-palatal}$}{front V}{non-front V} → {Cj, C$_{+palatal}$}{non-front V}	(5)
deletion	deletion of one of the two vowels	(6)

Table 5. Hiatus resolution processes

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[8] Vowel quality plays a statistical role in the (under)application of syncope.

[9] An interesting aspect of palatalization is that it can be realized either through a secondary articulation (as [pʲ] or [βʲ]) or through a more robust change (/t/ → [c], /n/ → [ɲ]).

(2)   /**ta-u**çi-ʔa/   *(t̯au)çi̯ʔa*   [toçʔa]
       3NH-eye-CLF:ovoid
       'its eye'

(3)   /**na-e**no/   *(na̯e)no*   [nə͡eno]
       3PL-mother
       'their mother'

(4)   /**mu-i**to/   *(mu̯i)to*   [mʷito]
       PRIV-finish
       'interminable'

(5)   /**ti-a**nu-ku-ʔo/   *(ti̯a)(nu̯ku)ʔo*   [canˈkuʔo]
       3-pass-CLF:path-ACT
       'He/she/it is crossing the path.'

(6)   /ʔVt͡ʃan**e=i**ni/[10]   *(ʔV̱t͡ʃa)(ne̯i)ni*   [ʔt͡ʃaˈneni]
       person=PST
       'late people'

2.4.2 Consonant sequence repairs

A direct consequence of syncope is the creation of consonant sequences. Various types of consonant sequence repairs take place in Mojeño Trinitario. They are listed in Table 6, and exemplified further below. Importantly, the process of compensatory lengthening occurs after resyllabification, and is triggered by the fact that consonants like /ɾ/ are not allowed as codas. It creates long vowels on the surface.

assimilation of place in nasals	$n \rightarrow m$ / _{p, m} $n \rightarrow ɲ$ / _ç	(7)
nasalization of approximants	$j \rightarrow ɲ$ / {n, m}_ $w \rightarrow m$ / m_	(8)
dissimilation of place in /p/	$p \rightarrow h$ / _{p, m, w}	(9)
defricativization	$t͡ʃ \rightarrow t$ / _{t͡ʃ, s, t͡s, ç} $t͡s \rightarrow t$ / _t͡s	(10)
deletion and compensatory lengthening	$ɾ \rightarrow :Ø$ / _.C $w \rightarrow :Ø$ / _.{labial C} $j \rightarrow :Ø$ / _.{j, ɾ}	(11)

Table 6. Consonant sequence repairs

(7)   /**n**u-pokuɾe/   [**m**pokre]
       1SG-canoe
       'my canoe'

(8)   /nV-**j**ono=**j**oɾe/   [nɲonɲoɾe]
       1SG-go=FUT
       'I will go'

(9)   /**p**i-pokuɾe/   [**h**pokɾe]
       2SG-canoe
       'your canoe'

---

[10] V stands for a vowel postulated in the underlying form and whose quality is not identifiable.

(10)   /nu̱-e-ʔo̱-βi=jo̱ɾe=t͡ʃit͡ʃa/   [neʔβijret͡tʃa]
        1SG-hit-2SG=FUT=EMP'
        'I am going to hit you poor thing.'

(11)   /nu̱-si̱wi̱wi/   [nsi:βi]
        1SG-flute
        'my flute'

2.4.3 Vowel harmony and consonant change due to adjacent vowel

The process of vowel harmony is very limited. It most commonly involves an /a/ trigger and an /o/ target as in (12),[11] and occurs in very restricted environments: in the verb root *jono* 'to go' and the associated motion clitic *=poɾiʔi* when adjacent to the irrealis suffix *-a*, and in the copula *-ojo* after an /a/-final pronoun. The lenition of /k/ is the only phonological process affecting consonants due to adjacent vowels: the velar stop is fricativized and palatalized as /ç/ between a front vowel and an /a/ as in (12), and sibilantized as /s/ between a front vowel and an /i/.

(12)   /pi-ni-ko-**a**=po̱ɾiʔi/   (pi̱ni)(**ç**a**p**a)ɾiʔi   [pniç.ˈpa:.ʔi]
        2SG-eat-ACT-IRR=CONC.MOT.IPFV
        'eat while you go'

   A consequence of rhythmic syncope and morphonological rules in Mojeño Trinitario is that most roots and affixes or clitics are liable to have at least two allomorphs, often three or more, depending on which vowel is deleted, and additional changes. For example, the plural suffix *-woko* is realized as /-woko/, /-wok/, /-wko/, or /-mok/ in the corpus, depending on whether and how syncope and nasalization of approximants apply. Example (13) offers examples of root allomorphy, and example (14) presents the forms of the imperfective clitic *=riʔi*, which is realized as *=:ʔi* with lengthening of the preceding vowel, whatever vowel it is, when its first syllable is in a weak prosodic position. Unfortunately, given the export constraints of the morphological annotation in FLEx from which the examples are extracted, the line of morphological segmentation does not show the underlying form of variants but only their surface form. To keep track of the identity of a morpheme through the examples, the gloss is therefore essential. This general allomorphy makes the morphological segmentation and the identification of morphemes of Mojeño Trinitario words a challenging task for linguists. Consequently, even after more than two decades of practice of this exercise, some doubts may remain in my analysis of certain examples.

(13)   *pkuɾe ~ pokɾe, ésane ~ san, pitrihi ~ ptu:hi, anu ~ am*
        'canoe', 'field', 'to be coward', 'to cross'

(14)   *te͡tʃhikonriʔi, te͡tʃhiknu:ʔi, te͡tʃhikwi:ʔi*
        'they were speaking', '(s)he was speaking to me', '(s)he was speaking to you'

2.5 Writing system

An official alphabet for Mojeño Trinitario was proposed in a 1995 workshop directed by Pilar Valenzuela, as part of a series of *Workshops on alphabets for Eastern languages* (i.e., languages of Eastern Bolivia), coordinated by Colette Grinevald (Université Lyon 2), with the support of UNICEF, the Bolivian Deputy Secretary of Ethnic Issues (SAE), the Secretary of National Education (SNE), the Indigenous Confederation of Eastern Bolivia (CIDOB), and the Central of Indigenous People of Beni (CPIB). The final report of the workshop resulted in the publication of a first alphabet booklet (Fabricano Noé et al. 2003).

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[11] In this example, the /a/ trigger (the irrealis suffix) of the two processes actually does not surface, due to rhythmic syncope. The irrealis category is therefore detectable only through the [-ç] allomorph of the active suffix and the [=pa:ʔi] allomorph of the associated motion clitic.

In 2012, the government created the *Multinational Institute of Studies of Languages and Cultures* (IPELC). Its main goal is the promotion of the diversity of languages and cultures of Bolivia, among others through the development of linguistic and cultural research, and pedagogical curricula and materials. This work is implemented through institutes specific for the relevant peoples. The *Institute of Language and Culture* (ILC) specific to Mojeño Trinitario was created in 2014. Among its activities, the ILC has made some modifications to the alphabet proposed in 2016. Table 7 shows the correspondences of the official alphabet with the IPA, as well as the very few modifications I use for my transcriptions of Mojeño Trinitario in most of my publications. Hereafter, it is that practical writing system that is used throughout the book.

IPA	official alphabet	Rose's publications
Vː (aː, oː…)	VV (aa, oo…)	VV (aa, oo…)
a͡e	ae	ae
ɨ	aei	ae
c	ty	ty
tj	ti ~ t'y	ty
k	k	k
ʔ	'	'
ɲ	ñ	ñ
h	j	j
β ~ v	v	v
w	w (#_, V_V, V_C)	w (#_, V_V, V_C)
	u (C_V)	u (C_V)
ç	g (_i, C)	g (_i, C)
	gi (_e, a, o, u)	gi (_e, a, o, u)
t͡s	ts	ts
ts	ts ~ t's	ts
t͡ʃ	ch	ch
ɾ	r	r
j	y (V_V, V_C)	y (#_, V_V, V_C)
	i ~ y (C_V)	i (C_V)
' (before the stressed syllable)	´ (on the vowel of the stressed syllable, if other than penultimate)	´ (on the vowel of the stressed syllable, if antepenultimate)

Table 7. Alphabet correspondences

2.6 Parts of speech

This section briefly describes the main parts of speech of the Mojeño Trinitario language. There is a lot of functional flexibility in that language: nouns, verbs, adjectives, and numerals can be used as NP heads, modifiers, or predicates.

In Mojeño Trinitario, nouns and verbs share a lot of morphology, most notably person prefixes and suffixes, plural, diminutives, and TAM markers. Yet they are rather easy to distinguish based on their morphological combinatorics (detailed respectively in 2.6 and 2.8). Nouns are defined as the lexical class that can combine with both person prefixes (for possessors, as in (15)), and person suffixes (for the sole arguments of nonverbal predicates, as in (16)). Transitive verbs are defined as the lexical class that combines with both person prefixes (for A) and person suffixes (for O), but furthermore takes the active suffix *-ko ~ -cho ~ -'o*, as illustrated with (17). Intransitive verbs combine with person prefixes only, and among them, active verbs like (18), but not stative verbs like (19), take the active suffix. Person indexation and the active suffix will be described in Section 2.9.

(15)   to nousa
        *to   **n**-ousa*
        ART.SG   **1SG**-village
        'my village'

(16)   'jironupo
        *'jiro-**nu**=po*
        man-**1SG**=PFV
        'I was a man then.'

(17)   nechjiko'e
        n-*echji-**ko**-'e*
        1SG-talk.to-**ACT**-2PL
        'I am talking to you.'

(18)   nutekpo
        n-*ute-**k**=po*
        1SG-come-**ACT**=PFV
        'I just came.'

(19)   nuuna
        n-*uuna*
        1SG-be.good
        'I am good.'

Nominal and verbal roots can both be used rather flexibly as predicates (see (20) and (21)), arguments (see (22) and (23)), or noun modifiers (see (24) and (25)), even without derivational morphology.

(20)   kasikiyenoyoo'ijiro
        kasiki-yeno=yore=ri'i=iji=ro
        cacique-wife=FUT=IPFV=RPT=UNQ
        'They say that she is going to be a cacique's wife.' [T29.066]

(21)   vimora'iyree'ijiro.
        vi-imora'i=yore=ri'i=iji=ro
        1PL-watch=FUT=IPFV=RPT=UNQ
        'They say that we are going to be watching.' [T29.021]

(22)   timkatara'ono te to vemtoniono
        *t-imkata-ra'-ono   te   **to**   v-emtoni-ono*
        3-help-HAB.A.NZ-PL   PREP.NH   **ART.NH**   **1PL-work-PL**
        'They are helps for our works.' [T09.049]

(23)   wo nawro'o to tsiopano eno tkomeriono.
        *wo   na-(a)-wro'o=ri'i   **to**   t-siop-a-no   eno   tkomeriono*
        NEG   3PL-IRR-want=IPFV   **ART.NH**   **3-enter-IRR-PL**   **3PL**   **non-indigenous**
        'They did not want the non-indigenous people to enter'
        (lit. 'They did not want the they enter the non-indigenous people.') [T22.003]

(24)   ñi 'chane 'jiro tnokpo ñiye'e chompa.
        *ñi   'chane   **'jiro**   t-nok=po   ñi-ye'e   chompa*
        ART.M   person   **man**   3-put=PFV   3M-GPN   sweater
        'The man put on his sweater.' [Path.S.069]

(25) api'e, mopo'epuka to wnoka to penisilina vyumtuka, ene? to kwoyu tkojma.
      api-'e   *mopo-'e=puka*   *to*   *w-nok-a*   *to*   *penisilina*
      two-MULT   three-MULT=DUB   ART.NH   1PL-put-IRR   ART.NH   penicillin(Sp)

      v-yumtu-k-a   *ene*   *to*   *kwoyu*   **t-ko-jma**
      1PL-sting-ACT-IRR   TAG   ART.NH   horse   **3-VZ-disease**
      'We give penicillin two or three times — we inject it, right? — to the sick horse.'
      (lit. 'the horse it is sick') [T13.023]

Adjectives in Mojeño Trinitario express size, age, value, or emotion. They are few and rather rarely used in speech, as in example (26). Only 416 tokens of adjectives are found out of 26158 words within the text corpus. Native numerals are only three: *eto* 'one', *api* 'two', and *mopo* 'three'. They must take a classifier in almost all contexts, and they generally take the default human classifier *-na* as in (27). This will be discussed in Section 5.1. For higher numbers, loanwords from Spanish are used. Adjectives and numerals usually modify a following head noun as in (26) and (27), but both parts of speech can also be used as NP heads as in (28) and (29) or as predicates as in (30) and (31). Adjectives and numerals may also form compounds with a nominal root, as in (32) and (33). Numeral-Noun compounds are not well known from a cross-linguistic perspective, but are attested in other Arawak languages (Ramirez 2001:283 on Baniwa; Mihas 2019:39 on Kampan languages).

(26) nnosyore te pjoka 'chope wkugi
      n-nos=yore   *te*   *p-jo-ka*   **'chope**   *wkugi*
      1SG-stay=FUT   PREP.NH   DEM-NH.SG-PROX   **big**   tree
      'I am going to stay in this big tree.' [T19.056]

(27) apinaeji semana sjichyore.
      api-*na=eji*   *semana*   *s-jich=yore*
      two-CLF:GNR=RPT   week   3F-make=FUT
      'She will be staying two weeks.' [T26.026]

(28) wich'o naema no 'chosiono.
      wi=ch'o   *na-a-ema*   **no**   **'chosi-ono**
      NEG=still   3PL-IRR-be_stingy   **ART.PL**   **old-PL**
      'The ancient people were not stingy yet, the ancient people all had cattle.' [T27.017]

(29) ene nanospuiji no apínano
      ene   *na-nos=pu=iji*   **no**   **apí-na-no**
      and   3PL-stay=PFV=RPT   **ART.PL**   **two-CLF:GNR-PL**
      'So they remained only two (men).' [T19.044]

(30) powreripo to pjoka 'resia
      powre=ripo   *to*   *p-jo-ka*   *'resia*
      poor=PFV   ART.NH   DEM-NH.SG-PROX   church
      'The church here is poor.' [T16.006]

(31) juiti kuatrunawokovi, viti senono, viti.
      juiti   **kuatru-na-wokovi**   *viti*   *seno-no*   *viti*
      now   **four-CLF:GNR-1PL**   1PL   woman-PL   PRO1PL
      'Now we are four women, us.' [T33.015]

(32) ema 'chopetupara'o.
      ema   **'chope-tupara'o**
      3M   **big-charge**
      'He is the highest authority.' [T24.006]

(33)   'chope eto to 'rove. apipewo'u
       'chope   *eto*   *to*   *'rove*   **api-pewo'u**
       big   3NH   ART.NH   adobe   **two-span**
      'The adobe is big. It is two spans long.' [T24.080]

Adverbs modify a constituent other than a noun, in either clause-initial (34) or post-verbal position. Also, there is a single simple preposition in Mojeño Trinitario, which shows multiple meanings such as 'with', 'in', 'on', 'for', and 'from'. It obligatorily takes a person prefix indexing its complement. Its full root form is *ye'e*, used with most person prefixes, but its most frequent form is *te*, reduced from the form with the nonhuman prefix *ta-ye'e*, as found in example (35).

(34)   juiti vnaekchovyorepo pjoka semtone.
       juiti   *v-naekcho-v=yore=po*   *p-jo-ka*   *s-emtone*
       today   1PL-start-MID=FUT=PFV   DEM-NH-PROX   3F-work
      'Today we are going to start her work.' [T04.001]

(35)   tjunopopo te to smeno.
       t-junopo=po **te**   *to*   *smeno*
       3-run=PFV   **PREP.NH** ART.NH   woods
      'S/he ran **to/in/from** the woods.' [T11.018]

Finally, there are three parts of speech that exhibit the same person paradigm distinctions — presented in the next section: personal pronouns, demonstratives, and articles. There is a single set of free personal pronouns (see fourth column of Table 8) and nine sets of demonstratives made of one of the pronominal roots given in the fifth column of Table 8, preceded by *p-* and followed by one of the demonstrative suffixes expressing different spatial and epistemic configurations, as in *p-jo-ka* DEM-NH.SG-PROX in (30). These demonstratives can be used pronominally, adnominally, and as part of existential/locative copulas. Aditionally, three other very common demonstratives are *ene* and *oni*, which have both spatial (proximal and distal respectively) and manner meanings, and *onogi* 'there'. Articles, listed in the last column of Table 8, are used before specific heads of NP phrases and do not specify definiteness. They are therefore extremely common in speech. The nonhuman article, in particular, is very often used because it can refer to abstractions such as events, as in (23).

Word-class changing derivation, besides the use of classifiers for that purpose (see Section 6.4), comprise 9 nominalizers, two verbalizers, one adjectivizer (the privative *mu-* found on verbs and nouns) and a multiplicative adverbalizer found on numerals, illustrated in (36). The verbalizer *ko-* used on nominal roots is very frequent. The resulting semantics is often possessive (*ko-chicha* VZ-child 'have children'), sometimes comitative (*ko-muisi* VZ-cap 'wear a cap'), and sometimes active (*k-emtone* VZ-work 'work', *ko-metsi* VZ-pot 'cook'). Syntactically, the resulting verbal stems are often intransitive, but some are transitive.

(36)   eto'e vniko eto? wo'i? piti?
       eto-'e   *v-ni-ko*   *eto*   *wo'i*   *piti*
       one-MULT 1PL-eat-ACT 3NH   no   2SG
      'Have we eaten some once? No? And you?' [T27.069]

The four parts of speech that will be mostly addressed in this book are nouns, verbs, adjectives, and numerals, because they can host classifiers (Chapter 5).

2.7 The person paradigm

The person paradigm, shared by the sets of person prefixes and suffixes, the pronouns and demonstrative roots, and the articles, is given in Table 8. It shows a categorization into first- and second-person forms with a simple singular/plural number distinction, and five shared categories for third person.

Within third person, the nonhuman category neutralizes number (except in the demonstrative set) and covers inanimates entities and animals. The plural category, consequently restricted to humans,

neutralizes gender. Gender is therefore only relevant for human singular referents, and contrasts femi-nine and masculine. There are two forms for (human singular) masculine, depending on the gender of the speaker, following the language's genderlect system (Rose 2015).

	prefixes (Poss, A, Sa, So)	suffixes (O, argument of nonverbal predicate)	pronouns	demonstrative formatives	articles
1SG	*n-*	*-nu*	*nuti*	—	—
2SG	*p(i)-*	*-vi*	*piti*	—	—
1PL	*v(i)-*	*-(wok)ovi*	*viti*	—	—
2PL	*a- ~ j-*	*-'e*	*eti*	—	—
3M(SG.H) speaker♂	*ma- (~ mu-, m-)*	—	*ema*	*-ma-*	*ma*
3M(SG.H) speaker♀	*ñi- (~ ñ-)*	—	*eñi*	*-ñi-*	*ñi*
3F(SG.H)	*s-*	—	*esu*	*-su-*	*su*
3PL(H)	*na- (~ n-)*	*-woko*	*eno*	*-no-*	*no*
3NH(SG/PL)	*ta- (~ t-)*		*eto*	*-jo-* (SG), *-ma-* (PL)	*to*
3	*ty- (~ t-)* in verbs				

Table 8. Mojeño Trinitario person paradigms

2.8 Noun morphology and NP syntax

The noun morphology of Mojeño Trinitario, summarized in Figure 2, is much less complex than the verb morphology. The one rich domain is possession, presented in Section 2.8.1. Note that instead of a simple root, the nominal stem can also consist of a compound. N-N compounds will be described in Section 2.8.2.

1/2/3.POSS-**root**-CLF-POSS-PL.KIN-EVAL-PL-IRR[12]

Figure 2. Noun affix template

The noun phrase is generally relatively simple as shown in Figure 3, but rather unexpectedly for an Amazonian language, it almost always shows a determiner. Modifiers other than possessors are rather rare in discourse.

DET (MOD) N (DET N$_{POSSESSOR}$)

Figure 3. The noun phrase

The slot of the determiner can be filled by demonstratives, numerals or most often articles, used when the head of the noun phrase is specific, as exemplified in (37). Personal pronouns are sometimes used instead of determiners, as in (60) where the noun phrase *eto powre sórare* is made up of a third person nonhuman pronoun, an adjective, and a head noun. Personal pronouns can also be used in addition to determiners within a noun phrase, as in (37) where the third person pronoun *esu* precedes the demonstrative determiner *psuka,* or (33) where the third person pronoun *eto* precedes the article *to*. The sequence pronoun + determiner + noun forms a single prosodic phrase in Mojeño Trinitario.

(37)   esuripo psuka yporape tkowsa te to Franse.
        esu-ripo **p-su-ka**   **y-porape**   *t-k-owsa*   *te*   **to**   **Franse**
        3F-ADD **DEM-F-PROX** **1PL-older_sibling** 3-VZ-village PREP.NH **ART.NH** **Franse**
        'She, this sister, she lives in France.' [T02.032]

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[12] The POSS suffix slot hosts POSD and NPOSD suffixes, to be described below, and the EVAL slot hosts evaluative morphology, such as diminutive DIM, despective DESP, and empathy EMP.

2.8.1 Possession

Possessive phrases follow the order POSSESSEE POSSESSOR. In the basic adnominal possessive construction, a possessive prefix agreeing with the possessor attaches to the noun for the possessee, as in (38) on *kunara'i*. In the indirect adnominal possessive construction, the possessive prefix is added to a generic possessive noun (GPN) *ye'e*, as in (39).

(38)   to takunara'i to koje
       to   *ta-kunara'i*   *to*   *koje*
       ART.NH   3NH-image   ART.NH   moon
       'the reflection of the moon' [T06.017]

(39)   ene matankopo to maye'e pakgira
       ene   *ma-tan-ko=po*   *to*   *ma-ye'e* *pak-gira*
       and   3M-search-ACT=PFV   ART.NH   3M-GPN   dog-DIM
       'And he searched for his little dog.' [T11.026]

Mojeño Trinitario nouns belong to different possessive classes. This impacts which nouns are used in compounds and noun incorporation, which are potential source constructions for classifiers. This also partly determines whether they must, can, or cannot participate in possessive construction, and if so, in precisely which one, and whether they require additional derivation to do so (see Rose 2023b for more details). Obligatorily prefixed nominal roots normally participate in the basic possessive construction but some like *mu'i* 'dress' in (40) can be derived into unprefixable stems, for example by means of a NPOSD suffix such as *-re*. Optionally prefixed nominal roots may participate in one of the two possessive constructions or remain unpossessed, as illustrated by the two occurrences of *metsi* 'pot' in (41). Finally, unprefixable nominal roots can only participate in the indirect possessive construction when bare, but some, like *krutsu* 'cross' (from Spanish *cruz*), can be derived with a POSD suffix into prefixable nominal stems, and thus participate in the basic possessive construction, as in (42).[13]

(40)   sakmu'ipo to mu'ire
       s-a-k-mu'i=po   *to*   *mu'i-re*
       3F-IRR-VZ-dress=PFV   ART.NH   dress-NPOSD
       'She will put a dress on.' [T29.057]

(41)   timagi eto ymetsi, wyukjomrikpo eto to taemoropi eto to metsi.
       t-imagi   *eto*   *y-metsi*   *w-yukjo-mri-k=po*   *eto*
       3-boil   3NH   1PL-pot   1PL-pierce-CLF:group-ACT=PFV   3NH

       to   *taemoropi*   *eto*   *to*   *metsi*
       ART.NH   strap   3NH   ART.NH   pot
       'Our pots were boiling, we would pass a stick through their handle.' [T38.086]

(42)   to makuutsura ma viya
       to   *ma-kuutsu-ra*   *ma*   *v-iya*
       DET   3M-cross-POSD   ART.M   1PL-father
       'the cross of our father' [T25.129]

2.8.2 Noun+Noun compounds

Nouns may combine with other nouns to create new nominal stems. These binominal compounds are described and discussed in more detail in Rose & Van linden (2022).

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[13] Note that prefixable nominal stems that are derived from unprefixable nominal roots are generally analyzed as optionally possessed nouns in most descriptions of Arawak languages. For a justification of the present analysis, see Rose (2023b).

The great majority of binominal compounds are made of a sequence of an unprefixable noun in N1 position, and an obligatorily prefixed noun in N2 position. Exceptionally, when compounding, the obligatorily prefixed noun in N2 position carries neither a person prefix nor a non-specified possessor suffix. N2 is generally the semantic head, and is qualified by the first noun, as in (43). More rarely, the result is an exophoric compound, as in (44).

(43)   to smatupeno
        to   *smatu-peno*
        ART.NH   spider-house
        'spiderweb' [elicited]

(44)   kwoysumu
        kwoyu-sumu
        horse-snout
        'mountable ox' (Sp. buey caballo) [elicited]

Compounds with N2 being a unprefixable noun are much rarer. Example (45) shows that in that case, N1 can be the semantic head. Another example show that such compounds can be exophoric; the meaning of the compound in (46) is based on a metaphor. N1 is a unprefixable noun in (45), and an optionally prefixed noun in (46).

(45)   to 'nuukumari
        to   *'nuuku-mari*
        ART.NH   hole-stone
        'the cave' [Path.M.004]

(46)   to taejruupape'i
        to   *ta-ijruupa-pe'i*
        ART.NH   3NH-spindle-agouti
        'fern' (lit. 'the spindle of the agouti') [elicited]

The corpus also exhibits examples of compounds with both N1 and N2 being obligatorily prefixed, with N1 as the semantic head, as in (47).

(47)   swotonepigi
        s-wotone-pigi
        3F-button-ankle
        'her malleolus' [Loc.L.035]

2.9 Verb morphology

The Mojeño Trinitario verb morphology, summarized in Figure 4, is extremely rich, with at least three prefix slots, eleven suffix slots, and four enclitic slots. The numerous clitics are morphemes which are part of the phonological and prosodic word, but can appear on a variety of hosts other than the verb. They encode TAME, degree, or discourse functions, and will not be described in this sketch, as they are not relevant for the analysis of classifiers. The verbal stem is delimited by square brackets in Figure 4.

   In this section, I discuss only a subset of verbal morphology, given in bold in the template. I will focus mainly on certain aspects of stem-internal morphology (Section 2.9.2), namely reduplication, the pluractional suffix, the active suffix, and noun incorporation, since they are in slots adjacent to the classifier slot. Noun incorporation is described separately in Section 2.9.3: because it is a likely source construction for classifiers, it is particularly interesting for the topic of the present work. I will also start this section with a description of person indexation (Section 2.9.1), which is external to the stem, but crucial to understanding verbal argument structure.

S/A-IRR-[CAUS/MID-**root**-RED-CLF/APPL/**N-PLURACT-ACT**/RECP-APPL/PASS]-IRR-MID/**O**-COMPAR-

EVAL-PL=TAME=DEGREE=TAME=DM

Figure 4. Verb template[14]

2.9.1 Person indexation

Starting with person indexation, subjects are indexed by means of prefixes on the verb, and objects by means of suffixes, as in (48). More precisely, first- and second-person objects are indexed by means of a suffix on the verb, while third-person objects are not overtly marked on the verb, but instead trigger semantically specific co-argument indexation of third-person subjects, if present, as in (49). The semantically specific third-person subject prefixes (*ma-* M♂, *ñi-* M♀, *s-* F, *na-* PL, *ta-* NH) used in this circumstance contrast with the nonspecific third person subject prefix *t-*, that is found both on intransitive verbs as in (50) and on transitive verbs with first- or second-person objects, as in (51). The selection of a third-person subject prefix is a marker of transitivity that does not solely depend on the number of the arguments and the person of the co-argument, but is also sensitive to various transitivity criteria, such as aspect, mood, and information structure (Rose 2011). Mojeño Trinitario shows A-preserving lability, also called agentive ambitransitivity: the same root can be used without any formal change either intransitively with only an S participant, or transitively with both A and O, as observable in (52).

(48)   wo pkupikonu
       wo   ***p**-ku-piko-**nu***
       NEG   **2SG**-IRR.NEG-be_scared-**1SG**
       'Don't be scared by me.' [T08.028]

(49)   ema mapiko to paku
       ema   ***ma**-piko*   *to*   *paku*
       3M   **3M**-be_scared   ART.NH   dog
       'He is scared of the dog.' [elicited]

(50)   ma 'chane tpikojicha mraka
       ma   *'chane*   ***t**-piko=jicha*   *mraka*
       ART.M   person   **3**-be_scared=INTENS   strong
       'The man […] got really scared.' [T08.025-026]

(51)   tpikonu
       *t-piko-**nu***
       3-be_scared-**1SG**
       'S/he is scared by me.' [elicited]

(52)   ene teukompo, naeukopo to arusu.
       ene   *t-eu-ko-m=po*   ***na**-eu-ko-po*   *to*   *arusu*
       and   3-sow-ACT-PL=PFV   **3PL**-sow-ACT-PFV   ART.NH   rice
       'And they start to sow, they sow rice.' [T21.038]

2.9.2 Aspects of stem-internal morphology

This section presents stem-intern morphology that occurs in slots adjacent to the classifier slot, i.e., reduplication, the pluractional suffix, and the active suffix. Mojeño Trinitario reduplication copies the last syllable of the verbal root. The single or double copy attaches immediately after the root, sometimes

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[14] The EVAL slot hosts evaluative morphology, such as diminutive DIM, despective DESP, and empathy EMP; the TAME slots host a good number of tense, aspect, mood, evidentiality, and associated motion clitics; the DEGREE slot host various intensifying (INTENS), restrictive (RESTR), and distributive (DISTR) clitics; and the DM discourse markers slot hosts the contrastive clitic =*tse* 'CONTR' (often translated as 'but') and the unquestionable clitic *-ro* 'UNQ' (often translated into Spanish as *pues*).

triggering rhythmic syncope on the root, so that the base ends up with a different surface form than its copy (Rose 2014b, 2019a). Reduplication may attenuate the meaning of the verb, with either a de-intensifying or approximative reading, as in (53), or express repetition, as in (54) (Rose 2014b).

(53) tijrereji
      ti-ijre-re-ji
      3-be.hot-RED-INTENS
      'It is warm (medium hot).'

(54) nayus'titijiko
      na-yusti-ti-ji-ko
      3PL-cut-RED-INTENS-ACT
      'They chopped it.'

Trinitario exhibits a pluractional suffix expressing event plurality, sometimes implying plurality of participants: compare (55) with (56). It is very frequent in speech, being present in about 11% of the sentences of the text corpus. Its most common form is *-ri*, but sometimes its vowel harmonizes with the preceding vowel, and other times, due to rhythmic syncope, the morpheme surfaces as vowel lengthening.

(55) ene wipka takjuma o tkojmapka siprujchopo su mayeno
      *ene   wi=pka   t-a-k-juma   o   ty-ko-jma=pka   s-**ipruj**-cho=po*
      and   NEG=DUB   3-IRR-VZ-sickness or   3-VZ-sickness=DUB   3F-**cure**-ACT=PFV

      su   ma-yeno
      ART.F   3M-wife
      'And whether he is sick or not, his wife cures him.' [T21.090]

(56) nuti nitkopo to niprujriko
      *nuti   n-it-ko=po   to   n-**ipruj**-**ri**-ko*
      1SG   1SG-learn-ACT=PFV   ART.NH   1SG-**cure**-**PLURACT**-ACT
      'I learnt how to cure.' [T12.021]

Mojeño Trinitario verbal roots are either active (i.e., dynamic) or stative, and activity is overtly marked at the end of the stem with the active suffix (*-ko ~ -cho ~ -'o*)[15]. Stative roots such as *itve* 'be sweet' do not normally take the active suffix, but when they do, an active (transitive) verb stem is derived, such as *itve-cho* 'sweeten'. Conversely, the active suffix is omitted from constructions that stativize active roots, like the patient nominalization in (67).

There are two inflectional classes of active stems. The two rows of Table 9 illustrate the behavior of the active suffix with respect to these two classes. Most active verbs always carry the active suffix. This is illustrated with *jaño-ko* in the first row, where the active suffix is present even in the absence of other suffixes. A smaller number of active verbs (all with root-final /o/) obligatorily take the active suffix in some contexts only: basically, when bearing stem-internal suffixes (the pluractional *-ri,* a classifier, or the reduplicant). Otherwise, when carrying no suffix, or only stem-external suffixes (such as *-nu*, first singular object), this class of active verbs does not bear the active suffix. This is illustrated in the second row with the verb *jikpo*, which does not exhibit the active suffix in the first two columns but does so in the third one.

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[15] The allomorphs are selected depending on the preceding vowel, which are often not visible due to the rhythmic syncope process.

only active	with most stem-external suffixes	with all stem-internal suffixes
n-jaño-ko	*ty-jaño-k(o)-nu*	*ty-jaño-ri-ko*
1SG-watch-ACT	3-watch-ACT-1SG	3-watch-PLURACT-ACT
'I watch'	'he/she/it watches me'	'he/she/it always watches'
n-jikpo	*ty-jikpo-nu*	*ty-jikpo-ri-ko*
1SG-answer	3-answer-ACT-1SG	3-answer-PLURACT-ACT
'I answer'	'he/she/it answers me'	'he/she/it always answers'

Table 9. The active suffix on the two classes of active stems

2.9.3 Noun incorporation

Nouns can be incorporated into verb stems in Mojeño Trinitario, in the same zone as classifiers (see verb template in Figure 4). Incorporated nouns (in boldface throughout this section) are almost always obligatorily prefixed nouns,[16] and can be incorporated into verb stems built around a stative intransitive verb root, an active intransitive verb root, or a transitive verb root.

Importantly, once incorporated, the noun does not function as a core argument of the clause and is not even referential (i.e., it cannot be modified, quantified, or determined). In fact, incorporation is used to background the denotee of the noun, which is generally never referred to in the surrounding text. Instead, the incorporated noun qualifies the verb root it co-occurs with.

Incorporation thus always has an effect on the semantic and/or syntactic valency of the verb: it systematically implies manipulation of case in Mojeño Trinitario, which corresponds to Type II of noun incorporation according to Mithun (1984). The noun phrase occupying the argument position normally occupied by the incorporated noun may be filled with another noun, such as *'chane* in (58) or *sorare* in (60).

Most often, incorporation of nouns into intransitive verbs involves a stative verb and an obligatorily prefixed nominal root, as in (57), typically a body part, as in (58). This construction is very productive. Outside of the incorporating construction, the participant expressed by the incorporated noun is typically expressed as the subject of the stative verb involved.

(57) pnoni te pjoka tyuupenonri'i.
p-no-ni   *te*   *p-jo-ka*   *ty-uu-**peno**-n=ri'i*
DEM-H.PL-PROX   PREP.NH   DEM-NH.SG-PROX   3-be_good-**house**.POSD-PL=IPFV
'These here have a nice house.' (lit. 'These here are good in terms of housing.')
[T46.005]

(58) tyupajiimama jmaka 'chane.
*ty-u-pa-**jiimama***   *j-ma-ka*   *'chane*
3-tall-CLF:mass-**beard**   DEM-M-PROX   person
'This man has a long beard.' [T40.043]

Nevertheless, there are some examples of noun incorporation involving active intransitive verb roots, specifically motion verbs, where the incorporated noun is an obligatorily prefixed noun denoting a location, as in (59). In such cases, the intransitive verb root is transitivized by the incorporation, in a process similar to applicativization. Its object expresses a peripheral participant normally encoded as an oblique.

(59) ñipotchuscho pjo kjokre
*ñi-po-**chuchusi**-ko*   *p-jo*   *kjokre*
3M-go-**bank**-ACT   DEM-NH.SG   river
'He is going along the bank of the river.' (lit. 'He is bank-going the river.')
[Path.C.013]

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[16] There is only one text example of the incorporation of a noun that is not an obligatorily prefixed noun. This case involves a transitive verb.

Finally, obligatorily prefixed nouns can also be incorporated into transitive verbs. These nouns would otherwise be encoded as the O argument of the verb, with a patient role. Such incorporated nouns usually express body parts, as in (60), or other kinds of parts in part-whole relations, such as nouns denoting 'image', 'fruit', or 'seed'. The resulting verb stem remains transitive, as evidenced by the use of specific third person prefixes like *na-* in (60) (see Section 2.9.1).

(60)   naechkutechopo eto powre sórare
        *na-ech-**kute**-cho=po*   *eto*   *powre*   *sorare*
        3PL-cut-**hindshank**-ACT=PFV   3NH   poor(Sp)   animal
        'They cut the hindshank of the poor animal (alive).' [T27.005]

2.10 Clause syntax

This section briefly introduces the syntax of the simple clause in Mojeño Trinitario. Arguments are optional and show no case marking. Most transitive clauses do not show two noun phrases, but in those that do, the basic order is SVO, as in (61). Intransitive clauses generally show VS order, as in (62).

(61)   ene takepo ma tsiso 'chane […] mampo ma 'chane.
        ene   *takepo* *ma*   *t-siso*   *'chane* *ma-m=po*   *ma*   *'chane*
        and   then   ART.M 3-be.black person   3M-take=PFV ART.M person
        'And then the black man took the man.' [T08.045]

(62)   ene tjunopopo eto to paku
        ene   *t-junopo=po* *eto* *to*   *paku*
        and   3-run=PFV   3NH   ART.NH   dog
        'And the dog ran.' [T18.017]

Obliques (i.e., adjuncts or peripheral arguments) almost always occur with a preposition, and are also distinguished from objects by not being indexed on the verb, as in (63).

(63)   pñi 'chane tepajipueko te pjo muiigira
        p-ñi   *'chane* *t-epaji-pue-ko*   ***te***   *p-jo*   *muii-gira*
        DEM-M   person   3-lie_down-CLF:ground-ACT **PREP.NH** DEM-NH.SG   grass-DIM
        'The man lies down on the grass.' [Path.S.015]

Valency changing mechanisms include noun incorporation, described in Section 2.9.3, six valency-increasing affixes (three causatives and three applicatives), four valency-decreasing ones (two middles, one reciprocal, and one passive), and the applicative function of classifiers, described in Section 6.6. Because of this functional similarity of classifiers and applicatives, the three dedicated applicative morphemes of Mojeño Trinitario are exemplified below: *-(i)no* introduces a beneficiary, as in (64), *-'u* a goal, as in (65), and *-i'o ~ -iyo* a fronted participant expressing instrumental, location, cause, or manner roles, as in (66).

(64)   nwachririsno su meme
        *n-wachri-ri-s-**no***   *su*   *meme*
        1SG-buy-PLURACT-ACT-**APPL**   ART.F   1SG.mother
        'I went shopping for my mother.' [elicited]

(65)   Calixta siso'ucho to 'santi to sukriono
        Calixta   *s-iso-'**u**-cho*   *to*   *'santi* *to*   *sukri-ono*
        Calixta   3F-weed-**APPL**-ACT   ART.NH field   ART.NH   plant-PL
        'Calixta weeded the field for the plants.' [elicited]

(66) pjoka kaecha nisiyo pjo nésane
      p-jo-ka   *kaecha*   *n-is-**iyo***   *p-jo*   *n-ésane*
      DEM-NH.SG-PROX   shovel   1SG-weed-**APPL**   DEM-NH.SG   1SG-field
      'With this shovel, I weed my field.' [elicited]

2.11 Nominalization

There are three structurally distinct types of nominalizations in Mojeño Trinitario.

   In the first type, the verb takes one of 9 nominalizers, which encode the semantic type of nominalization (i.e., eventive, agentive, patientive, or oblique) and TAM. Each of these include the sequence NZ in their glosses, as in the case of the two nominalizers illustrated in (67).

(67) tyuuna to yponreru to vyosiosra ma viya.
      ty-uuna   **to**   *y-ponre-**ru***   **to**   *v-yosio-s-ra*   **ma**   *viya*
      3-be_good ART.NH 1PL-think-**SP.P.NZ** ART.NH 1PL-ask-ACT-**EV.NZ** ART.M God
      'It is good to think of asking God.' (lit. 'Our thought of our questioning God is good.')
      [T24.060]

   The second structural type of nominalization simply consists of a finite clause in a position that can otherwise be occupied by a nominal, as in (68). When such a clause appears in the position of the head of an NP, it is usually preceded by an article, as in (23).

(68) ene tyutekpuiji ema ma viya tekierikri'i.
      ene *ty-ute-k=pu=iji*   *ema* *ma*   *viya* **t-ekie-ri-k=ri'i***
      and 3-come-ACT=PFV=RPT   M   ART.M man   3-transform-PLURACT-ACT=IPFV
      'Then came the man who transforms people.' [T06.003]

   The third nominalizing construction is much rarer. It is a lexical construction, and is therefore not used for subordination. It involves a classifier and often a semantically empty nominalizer of the form *-rV* (with the *V* harmonizing with the preceding vowel), and derives nominal stems from verbs, as in (69), nouns, as in (70), adjectives, as in (71), and demonstratives, as in (72) (see more on the derivational function of classifiers in Section 6.4). In examples (67) to (72), the nominalized constituent is given in boldface in the first line, and the nominalizing morphology in boldface in the gloss line.

(69) to tajiikóropi tyamo
      to   ***ta-jii-kó-ro-pi***   *ty-amo*
      ART.NH   3NH-swallow-ACT-**NZ**-**CLF:fili**   3-swell
      'Its larynx is swelling.' [T13.012]

(70) je'e, titowopo pjoka 'chosioropi rusrupaya
      je'e   *t-ito-wo=po*   *p-jo-ka*   ***'chosi-o-ro-pi***   *rusrupaya*
      VALD 3-finish-MID=PFV   DEM-NH.SG-PROX old-?-**NZ**-**CLF:fili**   thank_you
      'All right, the old story is over, thank you.' [T39.011]

(71) eto pjuena sachere'yore
      eto   *p-ju-ena*   ***sache-re-'=yore***
      3NH   DEM-NH.SG-DIST   sun-**NZ**-**CLF:atmo**=FUT
      'This is the dry season.' [T14.021]

(72) tajpukayo pjokroropii'i?
      taj=puka=yo   ***p-jo-kro-ro-pi=i'i?***
      NH.INDT=DUB=FUT   DEM-NH.SG-POT.LOC-**NZ**-**CLF:fili**=IPFV
      'What is it going to be about now?' [T20.070]

2.12 Subordination

Subordination is not directly relevant to the description and analysis of classifiers, but it is helpful to provide a discussion of this phenomenon, as it frequently appears in the examples presented in this work, and can be difficult to process.

There are a variety of structural types of subordinate constructions, independent of their function as relative, complement, or adverbial clauses.

In terms of their structure, one variable is the presence of a subordinator, of which there are only a few in the language. The most common one is *te*, homonymous with the preposition, and serves in all kinds of subordination: temporal, conditional, purpose, cause, etc. Other subordinators include *tachim-roko* 'until', *tajicho* 'because' and *puejchu* 'in order to'.

The other two variables contribute to the finiteness of the dependent clause. One is whether the dependent verb is marked as nominalized or not (see the first two types of grammatical nominalizations in 2.11). The other one is whether a determiner introduces the dependent clause (note that if *te* is used, it can then still be analyzed as a preposition). Subordinate clauses exhibit a cline of finiteness, from fully finite subordinate clauses like that in (73), to fully nonfinite ones like that in (74). Examples (75) and (76) are additional examples of finite and non-finite subordinate clauses respectively, less marked than the preceding examples. In this series of examples, the subordinate clause is in boldface in the example and translation lines, and the subordinating morphology in boldface in the gloss line.

(73)   te pitekpapo, piimuigia.
         te   ***p-itekp-a=po***   *p-iimui-gi-a*
         SUB   2SG-arrive-IRR=PFV   2SG-dance-ACT-IRR
         '**When you arrive**, you will have to dance.' [T08.041]

(74)   jmaniono nim'ognionri'i te' to nitorisra.
         j-ma-ni-ono   *n-im-'o-gni-on=ri'i*   ***te'***   ***to***   *n-itori-s-ra*
         DEM-NH.PL-PL 1SG-see-ACT-GEN.P.NZ-PL=IPFV **PREP.NH ART.NH** 1SG-live-ACT-**EV.NZ**
         'This is what I have seen **in my life**.' (lit. '**during my living**') [T25.150]

(75)   jmani nakomnúsare no vennoviono to tkojmano.
         j-ma-ni   *na-komnú-sare*   *no*   *ven-noviono* ***to***   ***t-ko-jma-no***
         DEM-NH.PL-PROX 3PL-need-HAB.P.NZ ART.PL lady-PL.KIN **ART.NH** 3-VZ-sickness-PL
         'These are the needs of the ladies **when they are sick**.' [T12.021]

(76)   tyotkira taa pniko?
         t-yotk-ira   *taa*   *p-ni-ko*
         3-be.morning-**EV.NZ**   NH.INDET   2SG-arrive-ACT
         '**What did you eat this morning**?' (lit. '**being the morning**') [T26.019]

3
Mojeño classifiers: The state of the art

This section summarizes the existing literature on the classifiers of Mojeño (Trinitario, Ignaciano, and Old Mojeño).[17] This literature is informative in terms of classifier inventory and the core semantics of each category, and for this reason has been very helpful at the earliest stages of the present analysis. The inventories comprise between 17 and 23 forms (while the present study lists 32 classifiers, some with several allomorphs). The description of the morphosyntactic distribution of classifiers in this previous literature is quite elementary, and the distinction between classifiers and nouns is only addressed briefly. The functions of the classifier system, its general semantic organization, and its diachrony are not discussed. Furthermore, because none of these works are based on analyses of corpora of natural speech, the frequency and usage of classifiers in discourse are not investigated.

The handbook of Mojeño Trinitario by Gill (1957) describes what the author calls "object classifiers of nouns". These are defined in Lesson 5: "Trinitario makes a fine distinction in form and shape of objects by certain short forms added to verbs or adjectives which allow us to know what the object is even without the addition of the noun itself" (Gill 1957:18). Particular classifiers are introduced little by little in different lessons (Gill 1957:19, 37, 76, 84, 91, 149, 155, 176, 205–206, 231–232). Only two or three lines are devoted to each classifier, listing potential referents and nouns often associated with it, and, when relevant, the allomorphs of classifers. In total, Gill lists 17 classifiers, all of which are also considered in the present book. Very little general discussion is devoted to classifiers: only a few paragraphs on the definition of the category and its morphosyntactic distribution, on vowel deletion in classifiers, on the similarities with the morphosyntactic distribution of body-part nouns, and on salient abstract semantic extensions (Gill 1957:18–19, 84, 213, 231–232). No lesson in the handbook addresses numerals, and the presence of classifiers with numeral roots is not discussed elsewhere.

The two-volume grammar written by native speaker experts (Ibáñez Noza et al. 2007; Ibáñez Noza et al. 2009) does not mention classifiers. Classifiers often appear in examples, without being analyzed as such. In particular, a half-page in the grammar that addresses derived nouns provides a few examples of nominal stems derived from a root with the help of a classifier, but it does not offer an analysis of the derivational processes (Ibáñez Noza et al. 2007:109).

It is difficult to make sense of Ott & Ott's analysis of Mojeño Ignaciano classifiers in their tagmemic grammar (Ott & Ott 1967). The term 'classifier' is not used,[18] but some obvious cognates of Mojeño Trinitario classifiers are found with the gloss "stem formative", others with "Form"; it is stated that nouns can occur in verbs in the Form slot (Ott & Ott 1967:122, 123, 108–109). I have not used this work in developing my analysis.

The same authors present a clearer discussion of classifiers in the gramatical introduction to their later Mojeño Ignaciano dictionnary, where fewer than three pages are devoted to so-called "linked nominal roots" (Ott & Ott 1983:40–43).[19] These are defined as suffixes appearing on verbs to express their complement or instrument, and on nouns to "classify the main quality of the noun itself" (Ott & Ott 1983:40). Elsewhere in these gramatical notes, Ott & Ott (1983:31) mention that these roots are found on adjectives and numerals as well. The inventory of these suffixes includes 23 forms (Ott & Ott 1983:41–43), and is followed by a note that many other nominal roots, especially those for body parts, can function as linked nominal roots in compounds. These 23 suffixes correspond almost entirely in form and meaning to the Mojeño Trinitario classifiers discussed in this book, except for three forms: *-paique* 'leg' and *-pavaqui* 'arm', whose cognates in Trinitario I analyze as nouns, and *-hu* 'voice', that I do not know to have a cognate in Trinitario. Furthermore, I recognize additional cognates to Mojeño Trinitario classifiers in the "adverbial suffixes" listed in this work, where these suffixes are charactized as being used on verbs to express quantity, direction, or place of action (Ott & Ott 1983:39–40).

In the previous literature, the best description of Mojeño Ignaciano classifiers by far is found in a 128-page chapter in the Mojeño Ignaciano reference grammar by Olza Zubiri et al. (2002, chapter 19).

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[17] For a state of the art on classifiers in Arawak languages, see Dunn & Rose (to appear).

[18] Beware that the term "classificatory stem formative" used by Ott & Ott (1967:110) corresponds to the three allomorphs of what is called "active suffix" in the present work. It is not related to the classifier issue.

[19] I understand "linked" as meaning "compounded".

It starts by defining classifiers as participating in a system of agreement on verbs and adjectives, as well as sometimes appearing on nouns (some of these having been lexicalized as parts of nouns). When classifiers occur on adjectives, they are said to mark agreement with the noun that the adjective modifies. When classifiers occur on verbs, the agreement follows an ergative pattern, i.e., the classifier agrees with the subject of intransitive verbs and the object of transitive verbs. At the end of the chapter, some efforts are made to distinguish classifiers (which are suffixes) from "linked" (i.e., incorporated or compounded) nominal roots called *raíces ligadas*.[20] While "linked roots" keep their original function when compounded with nouns, adjectives, verbs, and numerals, classifiers have a more general and abstract meaning. The rest of the chapter is devoted to the inventory of 19 classifiers, each with a rather short description of their semantics and morphological combinatorics, but exemplified by a very large number of examples. These examples are largely not analyzed in the text, and, unfortunately, are not glossed, making them difficult to interpret and understand by those who are not specialists in the language. The 19 classifiers listed in the Mojeño Ignaciano grammar are cognate with those described in the present book, with the caveat that the authors consider *-e* and *-ama* to be two different liquid classifiers in Mojeño Ignaciano, while I consider their cognates, *-e* and *-omo,* to be two allomorphs of the same classifier, in complementary distribution, and conditioned by their host (see 3.4 and 4.1.14). Several parts of chapter 30 of that grammar (Olza Zubiri et al. 2002:567–574) emphasize that classifiers and "linked roots" exhibit the same morphosyntactic distributions on numerals, nouns, verbs, and adjectives, exhibit the same morphological behavior, and have the same referential function.

The classifiers of Old Mojeño are mentioned in the *Arte* (Marbán 1702) in two different locations. First, two pages of chapter XII on *Diminutives and numerals* are dedicated to 17 so-called 'particles' that combine with numerals. The particles are listed (without a gloss) and some are illustrated with an example on a numeral. They are presented as functioning similarly to agreement in gender with nouns. The author also mentions that these same particles (our classifiers) are also found on the interrogative words for 'how many' and 'which', as well as on verbs and adjectives. Second, two pages of chapter XVIII on possession and derivation (*Explanations and usage of some nouns and rules to build other nouns*) describe some of these 'particles' in a discussion of derivational suffixes that were used to derive nouns from nouns. All of these items listed in the *Arte* have cognates in Mojeño Trinitario, with the caveat that the form *-e* meaning 'times' is analyzed in the present study as a multiplicative adverbializer (see Sections 2.6 and 5.1) rather than a classifier, as it combines with numerals only and creates adverbial expressions.

3.1 Definition of the classifiers and formal characteristics

This section discusses how classifiers are defined, how they are distinguished from nouns, what their phonological properties are, and what their position is within the word. The central idea is that classifiers, in contrast to nouns, cannot be used as the head of an NP. Yet classifiers and nouns otherwise appear in the same environments, and are sometimes formally or semantically related: this is because classifiers have grammaticalized from nouns. As a result, their form is generally more reduced phonologically than that of nouns, and their semantics is usually more general than that of nouns (Chapter Classifier semantics).

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[20] This category of nouns is orthogonal to the morphological classification of nouns in the given work as "always prefixed", "prefixable", and "not prefixable", depending on their behavior with respect to possessive morphology (Olza Zubiri et al. 2002:36–51).

3.2 Inventory

Table 10 gives the complete list of Mojeño Trinitario classifiers that have been identified at the point this work was written: a total of 32. It is of course possible that additional rarer classifiers will be identified at a later point.[21]

form	gloss
-cho ~ -che	CLF:plank
-gi ~ -gie	CLF:cyl
-ji	CLF:amorph
-giwu	CLF:digit
-ju'e ~ -je	CLF:interior
-ku	CLF:path
-mo ~ -me	CLF:fabric
-miro	CLF:face
-muri	CLF:group
-mu'i	CLF:setting
-na	CLF:H
	CLF:GNR
-no ~ -ne	CLF:back
-ño ~ -ñe	CLF:tube
-omo ~ -e	CLF:liquid
-pa	CLF:mass
-pa	CLF:needle
-pa	CLF:manioc
-pa'i ~ -pue	CLF:ground
-pe	CLF:blade
-pewo	CLF:foot
-pewo'u	CLF:hand
-pi	CLF:fili
-pu'i	CLF:island
-si	CLF:sphere
-ugi	CLF:face
-ve	CLF:pointed
-'a	CLF:ovoid
-'e	CLF:convex
-'i	CLF:atmo
-'i	CLF:fruit
-'o	CLF:body
-'ugi	CLF:eye

Table 10. Inventory of 32 Mojeño Trinitario classifiers with glosses

Of the 32 classifiers, there is a pair of homonyms *-'i* CLF:fruit 'round with protrusion' and CLF:atmo 'atmospheric', and a triplet of homonyms *-pa* CLF:mass 'mass', CLF:needle 'long, thin and pointed' and CLF:manioc 'manioc'. Because there is no obvious relationship between these different meanings, they have been considered different classifiers. Two other classifiers differ only by the presence of a glottal stop and have very similar semantics: *-ugi* CLF:face and *-'ugi* CLF:eye.

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[21] For example, the form *-ise* is found in the two nominal terms *powise* 'feather' and *jorise* 'feather headdress of machetero dancer', where one can recognize the roots *powo* 'wing' and maybe *josi* 'hat' (possibly comprising the classifier *-si* for sphere; *-ri* could be the nominalizer found in derivation with classifiers, see 6.4). The element *-ise* adds the meaning of 'feather', but is not found in other environments. It could correspond to the classifier *-se* in Old Mojeño. Marbán (1702:108) indeed gives the following description: "With this particle *se* postposed to names of birds, one builds nouns that denote their feathers: *varayu* 'hen', *varayuse* 'hen feather'". Within the examples of classifiers (called particles) on numerals (Marbán 1702:88), he also lists *eto-se* 'one feather'.

3.3 Classifiers vs. nouns

Classifiers are found in exactly the same environments as one sub-class of nouns, i.e., obligatorily prefixed nouns: on nouns, numerals, adjectives and verbs (see Chapter 5). The pairs of examples (77) to (84) show a noun and a classifier in the same environments: on a N (in a derivational function), on a numeral, on an adjective, and attached to a verb stem, where it happens to classify the S argument of the verb. The distribution of nouns and classifiers in these environments is identical, and generally substitutive: either a classifier or a noun may be used. Therefore the "obligatoriness of classifiers on numerals" actually means that classifiers are obligatory on numerals in absence of obligatorily prefixed nouns; thus, numerals never appear bare and must bear either an incorporated nominal, as in (79), or a classifier, as in (80).

(77) to mankachpu   **N-N**
     to   *manka-**chpu***
     ART.NH   mango-**trunk**
     'the mango tree trunk' [elicited]

(78) pjo yukpi   **N-CLF**
     pjo   *yuk-**pi***
     DEM.NH   fire-**CLF:fili**
     'a candle' [Loc.C.004]

(79) apipgienu   **NUM-N**
     *api-**pgienu***
     two-**neck**
     'two necks' [elicited]

(80) pno apinano   **NUM-CLF**
     pno   *api-**na**-no*
     DEM.PL   two-**CLF:GNR-PL**
     'the two persons' [T46.034]

(81) ema 'chopetupara'o   **ADJ(PRED)-N**
     ema   *'chope-**tupara'o***
     3M   big-**charge**
     'He has the biggest responsability' [T24.006]

(82) pnokro 'chañono te mpeno 'chopemuriono   **ADJ(PRED)-CLF**
     p-no-kro   *'chañ-ono*   *te*   *m-peno*   *'chope-**muri**-ono*
     DEM-PL-POT.LOC   person-PL   PREP.NH   1SG-house   big-**CLF:group-PL**
     'The people in my house are numerous' [T19.007]

(83) titomuig'e   **V-N(S)**
     *t-ito-**muig'e***
     3-be_bare-**back**
     'His/her/its back is bare.' [elicited]

(84) titoji   **V-CLF(S)**
     *t-ito-**ji***
     3-be_bare-**CLF:amorph**
     'It is bare (e.g., a tree without fruits).' [elicited]

The crucial difference in distribution between classifiers and nouns is that classifiers, in contrast to nouns, cannot by themselves serve as the head of a noun phrase. While all nouns can be used as noun phrase heads, usually preceded by a determiner, classifiers cannot head a noun phrase, even with a determiner, without attaching to another root. Example (85) illustrates that elements which I consider to

be nouns, such as *-ch(u)pu* 'trunk' (or *-p(i)gienu* 'neck' and *-muig'e* 'back'), can serve as the head of an NP by themselves. In contrast, elements which I consider to be classifiers, such *-pi* 'CLF:filiform', *-na* 'CLF:human', or *-ji* 'CLF:amorphous', cannot serve as the head of a noun phrase, as illustrated in (86). Combinability with a determiner is the easiest test for the ability to serve as the head of an NP: nouns usually combine with a determiner to form a referential and specific NP, and they take a person prefix for their possessor (remember that the nouns that are used in compounds are usually obligatorily prefixed nouns). Classifiers cannot occupy this position in a noun phrase: they are necessarily suffixed to a root.

(85)   to tachupu
       to   *ta-chupu*
       ART.NH   3NH-trunk
       'the trunk'

(86)   *to pi, *to tapi
       to   *pi,*   *to*   *ta-pi*
       ART.NH   CLF:fili   ART.NH   3NH-CLF:fili
       intended meaning: 'the filiform thing, or property'

The inability of classifiers to head a noun phrase is the main criterion that distinguishes them from nouns. Note that this distributional criterion does not always easily distinguish classifiers from nouns. This is because distinct elements may have the same or similar form, with one of them having the general distribution of a noun, including being able to serve as head of a noun phrase, while both can appear in classifier position, where they exhibit either different semantics or a slightly different form. In these cases, I consider that there are two homonymous elements, a noun and a classifier.

Semantic differences serve to distinguish nouns and classifiers when the given form is found with two possible meanings in all the environments in which nouns and classifiers overlap, but with the more restricted meaning only in NP head position. In this case, I consider that there are two homonyms: both a noun, and a classifier that has a more general meaning, due to semantic bleaching from grammaticalization (see Section 4.4). A case in point is the noun *miro* 'face' illustrated in (87), and the classifier *-miro* 'CLF:face' that can also take meanings such as 'in front of', as in (88) (see Section 4.4).

(87)   ene ñipikori'iji tajicho to ñim'oo'iji to tamiro to paku
       ene   *ñi-piko=ri'i=ji*   *tajicho*   *to*   *ñ-im-'o=o'i=ji*
       and   3M-be_scared=IPFV=RPT   because_of ART.NH   3M-watch-ACT=IPFV=RPT

       to   *ta-**miro***   *to*   *paku*
       ART.NH   3NH-**face**   ART.NH   dog
       'And he got scared because he saw the head of a dog [about people with dog's heads].' [T19.071]

(88)   tochmiruchworepuiji to Ú'arii'i
       *t-och-**mir**-u-ch=wore=pu=iji*   *to*   *Ú'ari=i'i*
       3NH-exit-**CLF:face**-APPL3-ACT=once_again=PFV=RPT   ART.NH   Jucumari=IPFV
       'The Jucumari appeared in front of them.' [T19.171]

Formal differences serve to distinguish nouns and classifiers when very similar surface forms appear in environments where nouns and classifiers overlap; however, careful inspection shows that only one of the forms, the N form, appears in head NP position. In this case again, I consider that there are two homonyms: a noun and a classifier. A case in point is the noun *-ju'e* 'stomach, interior', illustrated in (89), and the classifier *-je* ~ *-ju'e* 'CLF:interior', which has a long and a short form, illustrated in (90) and (91), where the latter form differs phonologically from the noun (see next section regarding the phonological shape of classifiers).

(89)   ene etjoo'i to 'chepi te to taju'echichano, ene?

ene	*et-jo=o'i*	*to*	*'chepi*	*te*	*to*	*ta-**ju'e**-chicha-no*	*ene*
and	3NH-EXIST=IPFV	ART.NH	earthworm	PREP.NH	ART.NH	3NH-**belly**-EMP-PL	TAG

'and there are worms in their bellies, right?' [T10.018]

(90)   ene te to tajukpuiji to naye'e paku eto to sórare towju'e to smeno […]

ene	*te*	*to*	*ta-ju-k=pu=iji*	*to*	*na-ye'e*	*paku*
and	PREP.NH	ART.NH	3NH-smell-ACT=PFV=RPT	ART.NH	3PL-GPN	dog

eto	*to*	*sorare*	*t-ow-**ju'e***	*to*	*smeno*
3NH	ART.NH	animal	3NH-be_at-**CLF:interior**	ART.NH	forest

'And when their dogs smelled the animal that was in the woods, …' [T19.010]

(91)   ene tyompo te smeno masiopjechpo

ene	*t-yom=po*	*te*	*smeno*	*ma-siop-**je**-ch=po*
and	3-go=PFV	PREP.NH	forest	3M-enter-**CLF:interior**-ACT=PFV

'And he went within the forest, he entered deep into it.' [T08.011]

To summarize, the criteria that I propose distinguish classifiers from nouns are the following:

– If the element in question appears in the environments in which nouns and classifiers overlap, and cannot appear in NP head position, then it is a classifier.
– If the element in question appears in the environments in which nouns and classifiers overlap, and can also appear in NP head position, then it is a noun.
– If the element in question appears in the environments in which nouns and classifiers overlap, and can also serve as an NP head, but with only of the forms and/or meanings, then I consider there are two different elements, a noun and a classifier.
– If the element in question provides information about a referent that is expressed by an NP in the same clause, then this element is a classifier.
– If an element attached to an adjective or a noun has a modifying function, then it is a classifier.

Chapter 6 will highlight two other distinctions between nouns and classifiers. First, when obligatorily prefixed nouns appear bound to other nouns or adjectives, they exhibit derivational functions only, not modifying functions like classifiers. Second, classifiers, but not nouns, may categorize a constituent within the clause: while classifiers in verbs can be associated with a noun phrase within the clause, incorporated/compounded nouns do not have an associated (coreferential) NP within the clause.

As a final note on the distinction between classifiers and nouns, nouns that are compounded or incorporated in the same position as classifiers could, in a certain sense be considered 'repeaters', i.e., a morpheme that serves as its own classifier (Grinevald 2015:817; van der Voort 2018:204). However, note again that these compounded nouns do not associate with an external noun in Mojeño Trinitario: they do not actually repeat the noun. This is why I do not consider them as part of the classifier system.

3.4 Phonological shape

Classifiers are affixes. This is evident in the fact that they are part of the domain to which stress, syncope and phonological rules apply, i.e., the phonological/prosodic word (see Sections 2.3 and 2.4). Examples (92) and (93) shows that classifiers are part of the word domain within which stress placement is computed. Example (94) shows that classifiers themselves can be stressed. Example (95) shows that classifiers are part of the word domain within which syncope applies, and both (95) and (96) show that classifiers are part of the word domain within which phonological rules apply (here respectively assimilation of place for nasals and labialization of labial consonants, see Section 2.4.2 and 2.4.1).

(92) tyuuna   /ˈcuːna/
      ty-uuna
      3-be.beautiful
      'It is beautiful.'

(93) tyuunápa'i   /cuːˈnapaʔi/
      *t-uuna-**pa'i***
      3-be.beautiful-**CLF:ground**
      'The ground is clean.'

(94) nyuwaméko   /njuwaˈmeko/
      *n-yuwa-**me**-ko*
      1-grind-**CLF:flat.hard**-ACT
      'I grind slices of dry meat.'

(95) nchumpako   /nt͡ʃumˈpako/
      *n-chu**m**-pa-ko*   < *chunu* 'parboil'
      1-parboil-CLF:manioc-ACT
      'I cook manioc.'

(96) nsiopueko   /nsioˈpʷeko/
      *n-siop**u**-e-ko*   < *siopo* 'enter'
      1-enter-CLF:liquid-ACT
      'I dive into water.'

Most classifiers have the form *CV*. Table 11 summarizes the distribution of classifiers according to their form. Longer forms clearly have a nominal origin (see Chapter 7): they have very likely been grammaticalized recently and their phonological form has not yet eroded.

classifier shape	quantity
CV (including CʷV)	20
(C)V ~ (C)VCV	3
CVCV(CV)	9

Table 11. Form of the classifiers

Six classifiers have two allomorphs, depending on the position within the word: *-cho ~ -che*, *-mo ~ -me*, *-no ~ -ne*, *-ño ~ -ñe*, *-pa'i ~ -pue*, and *-omo ~ -e*. The second allomorph is only found stem-internally in verb stems that contain the active suffix *-ko ~ -cho ~ -'o* as in (97).[22] The first allomorph is stem-final: it is found in all environments lacking the active suffix, whatever the position within the word, and regardless of the part of speech of the host, as illustrated in (98) to (100).[23] Note that the stem-internal allomorphs always end in /e/, and for three pairs they consist of one syllable rather than two: *-pa'i ~ -pue*,[24] *-ju'e ~ -je*, and *-omo ~ -e*. This shows that the stem-internal environment favors phonological change and reduction.

(97) muestanekoyre
      *mu-esta-**ne**-ko=yre*
      3M-whip-CLF:back-ACT=FUT
      'He was going to whip her.' [T20.047]

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[22] Figure 4 delimits the verb stem within square brackets.

[23] This distribution applies in a less systematic way for the following two pairs of allomorphs: *-gi ~ -gie* and *-ju'e ~ -je*.

[24] The allomorph *-pue* can be considered a reduced form of *-pa'i* (after glottal stop elision, monophthongization, and labialization, see Section 2.4 on morphophonology).

(98) nkestano
      *n-k-esta-**no***
      1SG-MID-whip-CLF:back
      'I got whipped on the back.' [elicited]

(99) tmopkumori'ini
      *t-mopku-**mo**=ri'i=ni*
      3-be_dark-CLF:fabric=IPFV=FRUST
      'The sky was dark in vain (it was not raining).' [T19.053]

(100) mojomono
      *mojo-**mo**-no*
      mangy-CLF:fabric-PL
      'They have scabies.' [T10.016]

The vowels of some classifiers are immune to rhythmic syncope (see Section 2.3), but many classifiers lose vowels under this process. In Table 12, underlined vowels of classifiers in the first column are those that are attested to drop under rhythmic deletion. Some inconsistencies are observed regarding whether vowels are syncopated, and if so, which vowels, when a given root is combined with different classifiers of the same phonological shape. For instance, no syncope is seen in the root *anu* 'pass over' or the classifier in (101a); in (101b), syncope affects the root but not the classifier; and in (101c), it affects the classifier but not the root. My observations suggest that the most frequent and/or lexicalized combinations of roots and classifiers are subject to syncope.[25]

(101) a. sanujiko
          s-anu-ji-ko
          3F-pass_over-CLF:amorph-ACT
          'She passes marshes.'

      b. sanku'o
          s-an-ku-'o
          3F-pass_over-CLF:path-ACT
          'She crosses a river, a street.'

      c. sanusko
          s-anu-s-ko
          3F-pass_over-CLF:sphere-ACT
          'She passes over something round (like a round stone).' [elicited]

As a consequence of rhythmic syncope and the diverse morphonological rules presented in Sections 2.3 and 2.4, each classifier may have multiple surface forms. The allormophs of the classifiers found in the corpus are listed in Table 12.[26] In the last column of this table, a sign "+" introduces a segment following the classifier that conditions a specific allomorph of that classifier. Note that once all allomorphs are taken into account, there is more homonymy among classifiers than that described in Section 3.2. Most notably, several classifiers can be reduced to a single consonant, which makes their identification a subtle matter.

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[25] A pair of elicited examples also hints to meaning variation for identical root-classifier combinations that differ in their syncope patterns: *nejak'o to pkure* 'I sit in a canoe'; *nejaku'o* 'I sit in the woman's genitals', with both verb forms segmented and glossed as *nu-eja-ku-ko* 1SG-sit-CLF.path-ACT.

[26] They are more cases of vowel elision in the third column of Table 12 than of syncopatable vowels (underscored) in the first column: this is because some cases of vowel elision are not due to rhythmic syncope but rather to processes of vowel hiatus resolution.

form	gloss	other allomorphs
-cho ~ -che	CLF:plank	
-gi̱ ~ -gie	CLF:cyl	*-g*
-ji̱	CLF:amorph	*-j*
-giwu	CLF:digit	
-ju̱'e ~ -je̱	CLF:interior	*-j, -j'e, -ju'*
-ku̱	CLF:path	*-k*
-mo̱ ~ -me̱	CLF:fabric	*-mue, -m*
-mi̱ro	CLF:face	*-mro, -mir, -mr*
-mu̱ri	CLF:group	*-mri, -muu*
-mu̱'i	CLF:setting	*-m'i, -mu', -m'*
-na	CLF:H	*-n*
	CLF:GNR	
-no ~ -ne	CLF:back	
-ño ~ -ñe	CLF:tube	
-o̱mo ~ -e	CLF:liquid	*-om, -mo, -m*
-pa	CLF:mass	*-pu+e*
-pa	CLF:needle	*-pu+e*
-pa	CLF:manioc	*-pu+e*
-pa'i̱ ~ -pue	CLF:ground	*-pa'*
-pe	CLF:blade	
-pewo̱	CLF:foot	*-pew*
-pe̱wo̱'u	CLF:hand	*-pewo', -jwo'u, -jwo', -pew'u, -pewu*
-pi̱	CLF:fili	*-p*
-pu'i	CLF:island	*-pu'*
-si̱	CLF:sphere	*-s*
-ugi̱	CLF:face	*-ug*
-ve	CLF:pointed	
-'a	CLF:ovoid	
-'e	CLF:convex	
-'i̱	CLF:atmo	*-'*
-'i̱	CLF:fruit	*-'*
-'o̱	CLF:body	*-'*
-'ugi̱	CLF:eye	*-'ug*

Table 12. All attested surface forms of each classifier in the corpus

3.5 Position and behavior within the morphological word

Classifiers generally attach directly to the right edge of host roots whatever their parts of speech, except when a copy, due to reduplication, is inserted between the verb root and the classifier (see the verb template in Figure 4).

(102)   mamuire muettutupiko to vechjiriiwo
         *ma-muire   mu-etu~tutu-**pi**-ko   to   v-echjiriiwo*
         3M-too   3M-know~RED-**CLF:**fili-ACT   ART.NH   1PL-language
         'He too knows a bit our language.' [T20.058]

On most parts of speech, classifiers are stem-final, except on active verb stems. On active verb stems, classifiers may be followed by the pluractional, and the sheer presence of a classifier makes the active suffix obligatory on all active verbs (see example (103)).[27] Classifiers thus act like other stem-internal morphology, such as the pluractional suffix and the copy due to reduplication (see Section 2.9.2). When active roots participate in non-active constructions, such as in some middle constructions

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[27] This is visible on active stems that do not take the active suffix in absence of stem-internal affixes, like *omo* 'carry'.

(see (98) above) or a patientive nominalization (see (106) below), the active suffix is omitted and the stem-final allomorph of the classifier is then used (Rose 2023a).

(103) a. nomo
           n-omo
           1SG-carry
           'I am carrying it.'

       b. nomjiko
           *n-om-ji-**ko***
           1SG-carry-CLF:amorph-**ACT**
           'I am carrying it (vegetal, clothing…).'

Note that the three allomorphs of the active suffix, *-ko*, *-cho*, and *-'o,* are lexically conditioned by the morpheme that immediately precedes them.[28] When classifiers fills this slot, they condition this allomorphy, as exemplified in (104). If the pluractional suffix is inserted between the classifier and the active suffix, the *-ko* allomorph is conditioned (see Section 2.9).

(104) a. tuprijecho
           *tupri-je-**cho***
           be_in_middle-CLF:interior-**ACT**
           'in the middle of the woods'

       b. tuprisko
           *tupri-s-**ko***
           be_in_middle-CLF:sphere-**ACT**
           'within a pot'

       c. tuprik'o
           *tupri-k-**'o***
           be_in_middle-CLF:path-**ACT**
           'in the middle of a room'

Coming back to the position of the classifiers, on nominalized verb forms, classifiers may either precede or follow a nominalizer, depending on particular nominalizers. Classifiers precede *-giene ~ -gne*, *-ra'i*, *-wo*, *-ru*, and *-kore*, as exemplified in (105) for *-giene ~ -gne* 'GEN.PAT.NZ', and they follow *-ru ~ -V*, *-eru*, and *-ira*, as exemplified in in (106) for *-ru ~ -V* 'PNCT.PAT.NZ'.

(105) to takoyempignee'i
       to   *ta-koyem-**pi-gne**=e'i*
       ART.NH   3NH-occur-**CLF:fili-GEN.PAT.NZ**=IPFV
       'the story (what happened)' [T06.110]

(106) te pjo ñepajiimo
       te   *p-jo*   *ñ-epaji-**i-mo***
       PREP.NH   DEM-NH.SG   3M-lay-**PNCT.PAT.NZ-CLF:fabric**
       'in a blanket' [Path.C.005]

Finally, sequences of two classifiers are rarely attested: only two textual examples show adjacent classifiers in a verb. In example (107), the first classifier refers to the location and the second to O. In example (108), the first classifier refers to the location (*-ku* indicates a volume within a bounded space) and the second to S.

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[28] The distribution of the allomorphs of the active suffix is originally phonologically determined by the preceding phoneme. However, the triggering phoneme may have syncopated and be non-retrievable in synchrony. Consequently, the distribution of the allomorphs of the active suffix is now in practice lexically determined.

(107)   ñoktayejkoo'i
        *ñ-oktay-**e**-**j**-ko=o'i*
        3M-step-CLF:liquid-CLF:amorph-ACT=IPFV
        'He walks on stones in the water.' [Path.S.042]

(108)   'nuuji eto taewkujecho
        *'nuuji   eto   ta-ew-**ku**-**je**-ko*
        immediately   NH   3NH-beat-CLF:path-CLF:interior-ACT
        'Immediately it (the stomach) beat inside' [T12.016]

A number of sequences of classifier and incorporated noun are attested. Both orders are attested: N-CLF, as in (109), and CLF-N, as in (110) and (111). The reason for the differences in the order of CLF and N is for now unknown. In all these examples, the classifier and the incorporated noun associate with the same referent: O in (109), S in (110), and a location in (111).

(109)   tyukpannechwoo'i
        *t-yuk-**pan**-**ne**-ch-wo=o'i*
        3-throw-**jaw**-**CLF:back**-ACT-MID=IPFV
        'He presses his cheeks.' [T45.066]

(110)   tyumomu'ri'i
        *ti-u-**mo**-**mu'**=ri'i*
        3-be_big-**CLF:fabric**-**robe**=IPFV
        'His/her robe was large.' [T25.099]

(111)   ñepchakeenochpo pñi 'pona
        *ñi-epcha-**k**-**eeno**-ko=po   p-ñi   'po-na*
        3M-punch-**CLF:path**-**throat**-ACT=PFV   DEM-M   other-CLF:GNR
        'He punched the other one in the throat.' [T40.090]

4
Classifier semantics

This section describes the varied meanings of Mojeño Trinitario classifiers. It starts with a detailed description of the intension and extension of each category that goes far beyond giving impressionistic labels to the categories (Section 4.1). It goes on to analyze some of the semantic parameters relevant at the level of the classifer system (Section 4.2), yielding a proposal to organize classifiers into five semantic sets (Section 4.3). It then presents a number of observations regarding some of the semantic shifts that have affected particular classifiers (Section 4.4), as well as a discussion of the frequency of each category in discourse, based on the corpus used in this study (Section 4.5).

4.1 Semantics of individual classifiers

Table 13 recapitulates for each classifier its gloss, its definition, and provides a list of core category members and some peripheral members. Note that glosses are provided for purposes of convenience, and are merely intended to facilitate the identification of classifier categories in glossed examples. They are based either on a core semantic component or on a prototypical member. The gloss should never be understood as a cover term that applies transparently to all possible referents with which the classifier can associate. The definition is devised to distinguish each classifier from the others. Core members of the category are those that are most frequent in the textual data and/or most often given as possible translations in elicitation sessions. The prototype member (in boldface among the core members) is the one that is most often given in out-of-the-blue elicitation contexts, and in other information-poor contexts. Peripheral members are less frequent than core members in texts and require a specific context to be offered as translations in elicitation contexts. The difference between core and peripheral members is a distinction purely based on synchronic facts, although it possibly reflects diachronic semantic extensions.

The definition and extension of each classifier (in orthographical order) is discussed separately in the remainder of the section. At least one example is given for each category. More examples are given for some categories, especially for abstract meanings, in the section on semantic shifts (Section 4.4).

form	gloss	definition	core members[29]	peripheral members
-cho *-che*	CLF:plank	2D, flat, rigid, and bounded	**plank**, bench, wall, door, roof	brim of hat, wheel of ox cart
-gi *-gie*	CLF:cyl	1D, cylindrical	**trunk**, trees, stick, bone, broom handle	grain of rice, coffee bean, corn kernel, fruit, hammock, saddle, back of a mounted animal
-giwu	CLF:digit	digits	**finger**, toe	
-je *-ju'e*	CLF:interior	interior of a bounded entity	**stomach**, inside of the forest, interior of a house or a room	in a village, inside a tube, in an oven
-ji	CLF:amorph	amorphous, non-dimensional, mass of undistinguishable elements	**area with vegetation**, forest, clothes, fields, leaves, grass	mud, wax, boiled food, marsh, thicket, meat, curd, mattress, nest, limb, branch, flour, house, hair

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[29] The prototypes are in boldface.

form	gloss	definition	core members	peripheral members
-ku	CLF:path	space enclosed by parallel boundaries	**well**, hole, interior of a house, creek, river, path	street, doorway, hammock, vagina, from inside mud, inside of a pot, vehicle (canoe, cart, plane), under a contract, in a class, in a job, in military service, sun, moon, night
-miro	CLF:face	face	**face**, front side	in front of
-mo *-me*	CLF:fabric	2D, flat, large and generally flexible	**fabric**, blanket, paper, clouds, folder, sky, skin	jerky, table, bench, back (of a skinny body), dogs (lying on the ground), flat fish, any flattened object or person
-muri	CLF:group	group	**group of people**, group of animate beings	group of inanimate individuals, kinds, large quantity of mass
-mu'i	CLF:setting	space and time, visual experience	**appearances**, scenery, view, temporal extension (time, holiday, season)	atmosphere, appearance, color, size, personality, experience
-na	CLF:H CLF:GNR	human	**person**	any referent (on numerals)
-no *-ne*	CLF:back	curved and elongated	**back**, banana, plantain	torso, stick, bamboo, penis, horse, cow, tapir, jaguar, deer, caiman
-ño *-ñe*	CLF:tube	tubular	**tube**, barrel, flute	
-omo *-e*	CLF:liquid	liquid	**water**, river, lake	maternal milk, manioc beer, tobacco juice
-pa	CLF:mass	mass	**soil**, flour, sand, rice, seeds, corn	dough, paste, minced meat
-pa	CLF:needle	1D, long, thin and pointed	**needle**, skewer	nail, wire, grill, thin tools, hammer, palm, rib, body hair, head hair, tail, beard, eyelash
-pa	CLF:manioc	manioc	**manioc root**	
-pa'i *-pue*	CLF:ground	2D, bare ground	**ground**, territory, earth, lawn, floor, pampa	square, bottom of body of water, house, beach
-pe	CLF:blade	2D, flat, rigid with sharp boundaries	**blade**, knife, machete, plate, fish	pot lid, board, saw, shallow dish, flame
-pewo	CLF:foot	foot	**foot**	
-pewo'u	CLF:hand	hand	**hand**	

form	gloss	definition	core members	peripheral members
-pi	CLF:fili	1D, narrow, long, thin and flexible, filiform	**rope**, snake, belt, lasso, thread, necklace	inga fruit, candle, speech, word, song, language, music, feeling, event
-pu'i	CLF:island	3D, round	**pocket of forest** (called an "island"), hill	testicles
-si	CLF:sphere	3D, sphere	**head**, onion, ball, pot, stone, garlic, gourd	branches of a tree, hair (on head), turtle, glass, bud, corn, knob of a handle, hole, insects
-ugi	CLF:face	face	**face**	appearances
-ve	CLF:pointed	thin and pointed, hard		comb, thorn, palm
-'a	CLF:ovoid	oval	**egg**, eye	testicles
-'e	CLF:convex	exterior of a rounded element	**belly**, drum, balloon, skillet, bell, something inflated	sweet potato, bread
-'i	CLF:atmo	atmosphere, intangible	**weather**, wind, sky	smoke, atmosphere (figurative), time, experience
-'i	CLF:fruit	3D, sphere with protrusion	**fruits**, birds, bottle, pot, cup, udders	can, barrel, coconut, tank (container), house, bowl made in calabash with beak, pitcher, male genitals
-'o	CLF:body	body	**body of a person**, body of an animal (bull, dog, cat, fish)	motorcycle seat, bundle (of firewood, cane or manioc sticks)
-'ugi	CLF:eye	eye	**eye**	patches of color

Table 13. Semantics of individual classifiers

4.1.1 *-cho ~ -che* CLF:plank

This classifier denotes entities that are flat, rigid, and bounded, such as the flat rock in (112). It does not entail any orientation, e.g., vertical or horizontal. Core members of this class tend to be rectangular, but non-core members can have different shapes.

(112) tjúnopo tetéreko te pjo máricho
t-junopo   t-etére-ko   te   p-jo   mari-cho
3-run   3-jump-ACT PREP.NH   DEM-NH.SG stone-**CLF:plank**
'He runs and jumps on the (flat) rock.' [Path.C.052]

4.1.2 *-gi ~ -gie* CLF:cyl

This class includes prototypically cylindrical objects, such as the large tree in (113). Peripheral members of this class have shapes that are not purely cylindrical, but are three-dimensional, and longer than they are wide. The ends of the entity in question can be less wide than the middle point of the "cylinder", as in the cases of beans, hammocks, or the backs of mounted animals.

(113)   pñi 'chane ñetereg'o pjo 'chopegie wkugi
        p-ñi   *'chane*   *ñ-etere-g-'o*   *p-jo*   *'chope-**gie***   *wkugi*
        DEM-M   person   3M-jump-CLF:cyl-ACT   DEM-NH.SG   big-**CLF:cyl**   tree
        'The man jumps over the large tree.' [Path.S.026]

4.1.3   *-giwu* CLF:digit

There is only one textual example of this classifier, denoting fingers, given in (114). In an elicited example, it associates with toes. Note that the classifier differs in form with both the noun *-wugi* 'finger' and the noun *-iwgi* 'toe'.

(114)   ñi 'pona timogiwuchwo, tajpuka pjoko ñisamri'i te pjo ñiwugi
        ñi   *'po-na*   *t-imo-**giwu**-ch-wo*   *taj=puka*
        ART.M   other-CLF:GNR   3-watch-**CLF:digit**-ACT-MID   NH.INDT=DUB

        p-jo-ko   *ñi-sam=ri'i*   *te*   *p-jo*   *ñi-wugi?*
        DEM-NH.SG-NAE   3M-feel=IPFV   PREP.NH   DEM-NH.SG   3M-finger
        'The other one watches his fingers, what could it be that he feels in his fingers?'
        [T44.226]

4.1.4   *-je ~ -ju'e* CLF:interior

This classifier denotes the interior volume of an entity that does not have straightforwardly Euclidean geometrical boundaries, prototypically the interior of a belly, a forest or a house. In (115), the combination of the root *mari* 'stone' and the classifier *-ju'e* is interpeted as 'cave'.[30]

(115)   ma 'chane tyuchko te to mariju'e ene tsiopo te to 'pochkoyo mariju'e
        ma   *'chane*   *ty-uch-ko*   *te*   *to*   *mari-**ju'e***
        ART.M   person   3-exit-ACT   PREP.NH   ART.NH   stone-**CLF:interior**

        ene   *t-siopo*   *te*   *to*   *'po-chkoyo*   *mari-**ju'e***
        and   3-enter   PREP.NH   ART.NH   other-side   stone-**CLF:interior**
        'The man goes out of the cave and enters beside the cave.' [Path.M.043]

An element *jeku* 'interior' is also sometimes found in compounds, and could be considered a complex classifier made up of *-je* and *-ku*. However, this *jeku* element shows the same form and meaning as the obligatorily prefixed noun *jeku* 'interior', and is thus considered a noun.

4.1.5   *-ji* CLF:amorph

The semantics of the class *-ji* is difficult to define. It often denotes areas with vegetation, plants, or clothes, but also associates with a multitude of different other entities, such as mud and meat. Gill (1957:84) offers the following definition: "-*ji* denotes usually bulky soft objects (grass, leaves, small branches, fresh meat, any cloth material, pillow; also mud, garbage; also clouds)". It often denotes entities involved in a 'heap' but can more generally be described as 'shapeless' or 'amorphous'. More peripheral members are limbs, branches, flour, house, hair.

(116)   nsuujiko
        *n-suu-**ji**-ko*
        1SG-fry-**CLF:amorph**-ACT
        'I fry (fresh meat).' (Gill 1957:84)

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[30] This is not a conventionalized term, as there are no rocks, and hence no caves in the environment of the Mojeños Trinitarios. This term was produced, among others, to refer to a cave in the context of the Path stiumulus (Ishibashi et al. 2006).

(117)   nkochaji
        *n-kocha-**ji***
        1SG-be_dirty-**CLF:amorph**
        'I am dirty (my clothes).' (Gill 1957:84)

The definition and identification of this class suffers from possible confusion with two homonyms,[31] as highlighted by Terhart (2024) for the very same situation in Paunaka. This closely related Arawak language shows a cognate classifier *-ji* used for 'soft masses, dough' (Terhart 2024:140), which is in practical terms not always easy to distinguish from its two homonyms, a collective marker and an intensive Aktionsart suffix (Terhart 2024:261–265, 313–314).[32] The two cognate homonyms of the *-ji* 'amorphous' classifier in Mojeño Trinitario are described below.

The *-ji* 'intensive' suffix is a degree marker found on adjectives (118) and verbs, both stative (119) and active (120). It is notably frequently used with reduplication, as in (120),[33] as well as with another degree marker glossed as APPROX ('approximative'), illustrated in (118), whose meaning is not always clear. In all cases, the suffix *-ji* seems to add 'intensity' (however vague this term is) to the event. More specifically, on reduplicated items, it may add intensity to the pluractional meaning of reduplication (see Section 2.9.2).

(118)   ewiréreji
        *ewire-rV-**ji***
        far-APPROX-**INTENS**
        'It is not really far.' (Spanish: 'Es medio lejos.') [elicited]

(119)   wo tooji
        *wo   t-a-uu-**ji***
        NEG   3-IRR-be_good-**INTENS**
        'He is not doing really well.' [T42.076]

(120)   muestatajiko to wije
        *mu-esta~ta-**ji**-ko   to   wije*
        3M-whip~RED-**INTENS**-ACT   ART.NH   ox
        'He often hits the ox.' (Gill 1957:18)

In the examples (118) to (120), there is no argument in favor of an analysis of *-ji* as a classifier: it is difficult to find a referent that could be categorized as 'amorphous'. In other cases, I see no practical way to disambiguate the two analyses. In (121), the *-ji* suffix can be analyzed as a classifier referring to the grass, or as an intensifier of the meaning of the stative verb.

(121)   pjo muiji, tyjoreji.
        *p-jo   muiji   ty-jore-**ji***
        DEM-NH.SG   grass   3-be_impenetrable-**CLF:amorph**
        'This scrubland (lit. grass), it is pretty bad.' [T07.007]

The *-ji* 'collective' suffix is found on nouns, verbs, adjectives and numerals, just like classifiers. On nouns, it denotes either a group of people, as in (122), or a large group of the inanimate element referred

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[31] There is actually a fourth *-ji* suffix in Mojeño Trinitario: an intensifier found on pronouns only. Because of its morphological distribution, it is easily distinguishable from the classifier.

[32] Despite this analytical challenge, Terhart's analysis motivated me to identify an intensive suffix for *-ji* tokens that I had primarily glossed as a classifier, without having clearly identified a referent that it could categorize. It also encouraged me to reconsider the scope of what I had coined the 'abundance' suffix *-ji*, primarily seen as a derivational morpheme on nominal roots to derive another noun denoting a place with an abundance of the element referred to by the nominal root. It is now glossed as a collective marker. After I applied the new analysis, the number of tokens of the classifier *-ji* in the 48 texts dropped from 156 to 70, the strongest drop being on verbs, from 108 to 45 tokens. I must admit that my analysis of a good number of occurrences of *-ji* in my corpus is still debatable. Note that in the original analysis with all three meanings seen as carried over by the classifier, its description was extremely vague and leaning towards a default classifier.

[33] In the 48 texts in the corpus, it is found in 25 of the 90 cases of reduplication with a single copy, and in none of the six cases of a double copy.

to by the nominal root, often a plant, as in (123). This use, where it is often translated as 'field', is actually the only meaning and distribution described in the grammar written by native speakers (Ibáñez Noza et al. 2007:106–108).

(122) norikochicha pno namrijono, ene?
na-ori-ko-chicha   *p-no*   *n-amri-**j**-ono*   *ene*
3PL-be_good-ACT-EMP   DEM-H.PL   1SG-grandchild-**COL**-PL   TAG
'My grandchildren like him, right?' [T49.108]

(123) ykoskureri'i to narasaji
y-ko-skure=ri'i   *to*   *narasa-**ji***
1PL-VZ-crops=IPFV   ART.NH   orange-**COL**
'We planted an orange field.' [T38.207]

The *-ji* collective suffix is also found on adjectives and stative (124) or active (125) verbs, where it associates with an argument made of a large number of elements, whether animate or inanimate. Finally, example (126) is an elicited example of a numeral with *-ji*, where it is interpretable as being the collective suffix, as it is used for entities coming in pairs. Given that the distribution and position of the collective suffix is very similar to those of classifiers, the next step in the analysis should be to investigate whether the collective suffix could actually be considered a classifier.[34]

(124) wipo toojono no nayenokokono
wi=po   *t-a-uu-**j**-ono*   *no*   *na-yeno-koko-no*
NEG=PFV   3-IRR-be_good-**COL**-PL   ART.PL   3PL-wife-RECP-PL
'There are not well together, the spouses.' [T42.056]

(125) tirejíriko jma to'i
*t-ire-**jí**-ri-ko*   *j-ma*   *t-o'i*
3-collect-**COL**-PLURACT-ACT   DEM-NH.PL   3NH-fruit
'He is collecting the fruits.' [Path.C.018]

(126) étoji
*éto-**ji***
one-**COL**
'one person, animal or bird (of those who normally come in pairs)' [elicited]

Regarding the examples (122) to (126), there is no referent that could be categorized as 'amorphous', but in other cases, it is difficult to disambiguate the two analyses. For example, in (127), *-ji* could be seen as expressing either the amorphous shape of laundry, or the collectiveness of the laundry.

(127) nsipjirikpo to 'chopemuugira
*n-sip-**ji**-ri-k=po*   *to*   *'chope-muu-gira*
1SG-wash-**CLF:amorph**-PLURACT-ACT=PFV   ART.NH   big-CLF:group-DIM
'I wash a small quantity.' [T38.140]

In cases of doubt, I have generally maintained the analysis of *-ji* as a classifier. Note, however, that this might have some effect on the definition of the category itself, blurring the lines more than needed. It could be the case that some peripheral members of the amorphous category that I have defined, and even more central ones, such as the forest, limbs, and hair, should be seen as 'collective' entities. I have not, however, followed that line of analysis because of the singular number of some referents associated with *-ji* in particular examples. At this point of the investigation, I cannot say whether the fuzzy situation

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[34] Lena Terhart (p. c.) is reluctant about applying this analysis to Paunaka because the collective suffix can follow a classifier in the same word. Note that the 'number' meaning of the collective suffix is not a drawback for an analysis as a classifier: the classifier *-muri* 'group' does contribute to the expression of number in Mojeño Trinitario.

between the three *-ji* suffixes is due to a deficient analysis or to historical divergence or convergence between the meanings of amorphous, collective, and intensive, which are in some degree overlapping.

4.1.6 *-ku* CLF:path

The classifier *-ku* denotes the interior of an entity but is distinct from *-je* in that it typically refers to a hollow space with parallel boundaries, such as a well, a house, a river, or path. In (128), it indicates the 'hole' dug to plant the banana trunks. It extends to members that are less clearly conceived as hollow, like a street, or a doorway, and to members with less clearly parallel boundaries like within the mud, vagina, or hammock. It also applies to both half-open vehicles, such as canoes and carts, and to closed vehicles, such as cars and planes.

> (128) nasekku'o tow'oyre eto to keenochpono.
> *na-sek-**ku**-'o*   *t-ow-'o=yre*   *eto*   *to*   *keeno*   *chp-ono*
> 3PL-dig-**CLF:path**-ACT   3-live-ACT=FUT   3NH   ART.NH   plantain   trunk-PL
> 'They dig it where the banana plants are going to be.' [T21.022]

   Metaphorically, it also indicates commitment to scheduled or institutional activities, like a course, military service, a work, a contract. The metaphorical extensions are discussed and exemplified in Section 4.4. Finally, it is unexpectedly (at least for me) used for the sun, the moon, and the night. It is unclear to me whether these are conceived as hollow elements, or as paths.
   Incidentally, its meaning has bleached when used on the active verb root *tupri* 'be in the middle' that takes a classifier and the active suffix. When *-ku* combines with this verb root, it associates with a number of items that are not normally associated with it, such as a chain, a candle, a lake, or a group of people.

4.1.7 *-miro* CLF:face

This category generally refers to the face of a person, as in (129), but by extension can be used for the front side of an entity, and used in verbs to express the locative meaning 'in front of'.

> (129) kotipuka pjokro so'e tajpukagiene, su 'pona tkootomrochwoo'i
> *koti=puka*   *p-jo-kro*   *s-o'e*   *taj=puka=giene*
> hurt=DUB   DEM-NH.SG-POT.LOC   3F-tooth   NH.INDT=DUB=INTENS
>
> *su*   *'po-na*   *t-kooto-**mro**-ch-wo=o'i*
> ART.F   other-CLF:GNR   3-grab-**CLF:face**-ACT-MID=IPFV
> 'It could be that her tooth is hurting or something like that, this woman is holding her face.' [T44.074]

4.1.8 *-mo* ~ *-me* CLF:fabric

This category denotes rather thin, broad, and generally flexible entities. Its prototype is any type of fabric, as in (130), or fabric-made items, such as blankets. It includes as core members paper, skin or leather, cardboard, but also clouds and the sky. Peripheral members include entities that are less thin, or not thin and flexible, such as jerky, a bench, or a table. This category actually includes animals, such as flat fish, or skinny animals or humans. It may actually be used for any object that has been flattened.

> (130) chamarote tjítumo tyuumuípa'e.
> *chamarote*   *t-jítu-**mo***   *ty-uu*   *muípa'e*
> fabric_type(Sp)   3-be_thick-**CLF:fabric**   3-be_good   pants
> '*Chamarote* is thick, it is good for making pants.' [T25.086]

4.1.9 *-muri* **CLF:group**

This classifier denotes a group or a mass. The prototype is a group of humans.[35] Core members usually include groups of any kind of animate entities, such as the toads exemplified in (131). Peripheral members include groups of countable inanimate entities, but may also denote mutiple kinds of entities (e.g., types of fabric), or mass entities occuring in large quantities (e.g., money).

> (131) ene muech'opo to pomri, pomri sapgirano
> *ene   mu-ech-'o=po   to   po-**mri***
> and   3M-call-ACT=PFV   ART.NH   other-**CLF:group**
>
> *po-**mri***   *sap-gira-no*
> other-**CLF:group**   toad(Sp)-DIM-PL
> 'And he called the other toads.' [T11.043]

4.1.10 *-mu'i* **CLF:setting**

The *-mu'i* class is difficult to define because it comprises intangible entities, typically general elements of the natural environment, such as the weather, scenery, as in (132), and the spatial environment, as in (133). These meanings are very similar to those of the classifiers *-'i*. Still despite the formal resemblance, there is no evidence of *-mu'i* being synchronically complex.

> (132) nimom'iko
> *n-imo-**m'i**-ko*
> 1SG-watch-**CLF:setting**-ACT
> 'I am watching the scenery.' [elicited]

> (133) tmopkum'i
> *t-mopku-**m'i***
> 3-be_dark-**CLF:setting**
> 'The night is dark.' [elicited]

Additionally, *-mu'i* in nominal compounds also denotes time periods like seasons and holidays. In (134), suffixed to the noun for 'name', it creates a stem for 'birthday'. A vaguer denotation of *-mu'i* is that of appearance, as in (135), which is sometimes interpreted as color.

> (134) naejarem'ipka pnoñono
> *na-ejare-**m'i**=pka*   *p-no-ñ-ono*
> 3PL-name-**CLF:setting**=DUB   DEM-H.PL-PROX-PL
> 'It could be their birthday, of these.' [T44.128]

> (135) nwoo'o to nimom'ikyoo'i oypuka takoyemri'i oyim'ipka
> *n-woo-'o*   *to*   *n-imo-**m'i**-k=yo=o'i*
> 1SG-want-ACT   ART.NH   1SG-watch-**CLF:setting**-ACT=FUT=IPFV
>
> *oy=puka*   *ta-koyem=ri'i*   *oy-im'i=pka*
> INTER=DUB   3NH-happen_to=IPFV   INTER-property=DUB
> 'I want to see how ugly they are, what they are going to be like, what could they look like.' [T29.030]

Interestingly, many occurrences of *-mu'i* are found on the root denoting similarity, *kuti* 'be like' (Rose 2019c), where it reinforces the epistemic meaning 'look like', as in (136). There is also some

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[35] In the seven-text sample, there are 13 attestations of the *-muri* classifier, ten associate with a human referent, and the other three associate with a nonhuman referent.

evidence that it can be used without *kuti* 'be like' to express doubt. In (137), the classifier is added to a pronoun that functions as an equative nonverbal predicate. The classifier does not qualify the human referent indicated at by the pronoun, but rather expresses that the speaker is not certain of having properly identified the character (in the Family Problem Solving task). It is interpreted here as a dubitative marker.

(136) tetereko kutim'i tajóracho te to masiri.
      t-etere-ko   *kuti-**m'i***   *ta-jóra-cho*   *te*   *to*   *ma-siri*
      3-jump-ACT   it_seems-**CLF:setting** 3NH-wound-VZ   PREP.NH ART.NH   3M-nose
      'It (a rat) jumped, it looks like it hurt (the boy) in the nose.' [T18.025]

(137) eñim'i pñigia, ñijrokri'i pjo ñiye'e chinela pñi 'pona 'chane
      *eñi-**m'i***   *p-ñi-gia*   *ñ-ijro-k=ri'i*   *p-jo*   *ñi-ye'e*
      3M-**CLF:setting**   DEM-M-PROX   3M-give-ACT=IPFV   DEM-NH.SG   3M-GPN

      chinela   *p-ñi*   *'po-na*   *'chane*
      flip_flop(Sp)   DEM-M   other-CLF:GNR   person
      'I think that it is him, he gave his flip-flop to the other man.' [T44.037]

4.1.11 *-na* CLF:H/CLF:GNR

The classifier *-na* has two peculiarities: first, it does not show the full morphosyntactic distribution of classifiers, being absent on active verbs (see Section 5.4), and second, its semantic extensions differ depending on the part of speech of its host.

Indeed, the classifier *-na* has two possible meanings: either the specific 'human' meaning, or a generic meaning. On stative intransitive predicates, as in (138), and in its derivational uses on nominals, as in (139), it simply indicates the humanness of a participant. On numerals and numeral-like quantifiers (see Section 5.1), its meaning has bleached so that it can be associated with all kinds of human or nonhuman referents. Therefore, *-na* is now the default classifier on numerals (Section 5.1). This is evident in (140), where it is suffixed to a numeral and associates with 'day', a nonhuman referent.

(138) tyjopunaa'i
      *ty-jopu-**na**=a'i*
      3-be_white-**CLF:H**=IPFV
      'She is... really white.' [T29.061]

(139) eti 'wosareenano te pjoka
      eti   *'wo-sa-re-V-**na**-no*   *te*   *p-jo-ka*
      2PL   live-HAB.P.NZ-NPOSD-NZ-**CLF:H**-PL   PREP.NH   DEM-NH.SG-PROX
      'Y'all townmen from here' [T01.009]

(140) moponagiene sache, tkótsipo to seesa.
      *mopo-**na**-giene*   *sache*   *t-kótsi=po*   *to*   *s-eesa*
      three-**CLF:GNR**-ORD   day   3-be_bitter=PFV ART.NH   3F-beer
      'On the third day, the beer was bitter.' [T35.016]

In the seven-text sample, there are 34 attestations of the *-na* classifier, 33 of which are on numerals and one on a verb. The latter instance, and 14 of the occurrences on numerals associate with a human referent, and the other 19 tokens associate with a nonhuman referent.

4.1.12 *-no ~ -ne* CLF:back

The classifier *-no ~ -ne* prototypically indicates the 'back' part of a human being, as in (141), and bananas. Less frequently, it also categorizes the abdomen, bamboo, cane, and large animals. A possible core

meaning could be 'curved', or 'concave', but it does not seem to be an indispensable property of the referent of the noun.

(141)   aa! ñepchineko!
        *aa   ñ-epchi-**ne**-ko*
        INTJ   3M-hit_stick-**CLF:back**-ACT
        'Oh! He hit him on the back with a club!' [T40.156]

4.1.13 *-ño ~ -ñe* CLF:tube

I have elicited the classifier *-ño ~ -ñe* on intransitive and transitive verbs after having read of it in Gill's (1957:206) Mojeño Trinitario grammar.[36] An example on an intransitive verb is given in (142), and on a transitive verb in (143). In elicitation, speakers associate this classifier with a rather thin empty tube, like a flute or the barrel of a shotgun. An additional comment is that two native nouns end in *ño* in my lexicon: *-giño* 'inner ear' and *-jipño* 'nail'. They may have once been analyzable synchronically with this classifier.

(142)   tsisoño
        *t-siso-**ño***
        3-be_black-**CLF:tube**
        'The flute / thin tube / barrel of a weapon is black.' [elicited]

(143)   mpajañeko
        *m-paja-**ñe**-ko*
        1SG-dry-**CLF:tube**-ACT
        'I am cleaning (the barrel of the shotgun).' [elicited]

4.1.14 *-omo ~ -e* CLF:liquid

This classifier categorizes liquids, most commonly, but not exclusively, water. When used derivationally, it can denote any type of natural or man-made liquid. Example (144) illustrates how it associates with corn beer. When used for a location, it can refer to any large body of water, like a lake or a river.

(144)   stankoo'i to sijaruromyore esu to sponi.
        *s-tan-ko=o'i   to   s-ijaru-ru-**om**=yore   esu   to   sponi*
        3F-look_for-ACT=IPFV   ART.NH   3F-name-NZ-**CLF:liquid**=FUT   3F   ART.NH corn
        'She was looking for corn (to make) her birthday beer.' (lit. 'She was looking for corn (for) the future birthday drink.') [T35.005]

4.1.15 *-pa₁* CLF:mass

There are three classifiers with the form *-pa* with different core meanings that are difficult to merge under a single super-category.[37] The first has a core meaning that associates with granular masses: core members are powder-like elements, i.e., collections of tiny individual elements, such as soil, as in (145),

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[36] The aim of this elicitation task was only to check the existence of this classifier in present-day Mojeño Trinitario, rather than to evaluate its productivity over various parts of speech, a question that I approach through a corpus study in Sections 4.3 and 5.

[37] A quick look at the closely related Arawak languages Baure (Danielsen 2007) and Paunaka (Terhart 2024) shows that in these languages manioc does not fall under the cognate classifiers, respectively *-po* and *-pa* (thanks to Anita Obenaus for this investigation). A very likely explanation for the present homonymy in Mojeño Trinitario would be that the 'powder' class was often used in Pre-Mojeño for manioc flour, a central ingredient in Amazonian cooking, and extended by metonymy to the manioc root. Manioc is in fact already reported as a core exemplar of the *-pa* class in Old Mojeño (Marbán 1702:73). On her side, Terhart (2016:143–144) hypothesizes a semantic change from 'powder' to 'swarms', on the one hand, and 'needle', on the other hand.

sand, and seeds. Peripheral members of the category consist of any type of mass made of non-individu-ated substances, such as any kind of dough or paste, or minced meat.

> (145) nyerepareko móteji.
>   *n-yere-**pa**-re-ko*   *moteji*
>   1SG-carry-**CLF:mass**-PLURACT-ACT   soil
>   'I carry soil.' [T28.011]

4.1.16 *-pa₂* CLF:needle

The core meaning of the second *-pa* classifier is that of a thin, long, and pointed tool. Core members are typically metallic, as in (146), such as a needle or a skewer. Peripheral members include hammers, and non-metallic items such as palm fronds, ribs, and hairs.[38]

> (146) syustitijikpo te pjuena gieropa
>   *s-yusti-CV-ji-k=po*   *te*   *p-ju-ena*   *giero-**pa***
>   3F-cut-RED-INTENS-ACT=PFV PREP.NH   DEM-NH.SG-DIST   iron-**CLF:needle**
>   'She cut it in slices, with this metalic tool (an egg-cutter).' [C&B.F.023]

4.1.17 *-pa₃* CLF:manioc

The third *-pa* classifier associates specifically to manioc, as illustrated in (147). It is a 'unique' classifier, associating with only one entity. It is used for anything forming part of manioc plants, or derived from manioc, and is attested in the corpus for manioc plants, manioc tubers, and manioc starch. Because manioc is a culturally salient entity in the Amazon basin, however, it is not rare in discourse. It is note-worthy that the noun for manioc root, *kujpa*, is derived with the *-pa* classifier attached to the root *kuju*.

> (147) tanistutupakwoko.
>   *ta-nistu-CV-**pa**-k-woko*
>   3NH-bite-RED-**CLF:manioc**-ACT-PL
>   'They (birds) keep pecking the manioc roots.' [T07.030]

4.1.18 *-pa'i ~ -pue* CLF:ground

This category categorizes clear and open ground, but includes marginally other large surfaces. It can be used for 'bare ground' in opposition to wooded land (which is classified by *-je*). Most often, it associates with the ground as a location, as in (148).

> (148) tejapuekompo, te to 'pog'e tejapuekono.
>   *t-eja-**pue**-ko-m=po*   *te*   *to*   *'pog'e t-eja-**pue**-ko-no*
>   3-sit-**CLF:ground**-ACT-PL=PFV PREP.NH ART.NH   ground 3-sit-**CLF:ground**-ACT-PL
>   'They sat down on the ground, on the ground they sat down.' [T24.100]

4.1.19 *-pe* CLF:blade

This classifier is not very frequently used. It prototypically associates with blades, i.e., something flat, rigid, bounded and sharp, as in (149), where it associates with 'knife'. By extension, it can refer to objects with the same general shape, without being 'sharp', such as fish, pot lids, flames, or a shallow dishes.

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[38] 'Hair' has been classified under this homonym, because most examples with *-pa* associating with hair on verbs were referring to length, i.e., showing an analogy with a needle-like element, long and pointed.

(149)   tyújepe pjo 'chátrope
        *ty-uje-**pe**   *p-jo*   *'chatrope*
        3-be_fat-**CLF:blade**   DEM-NH.SG   knife.NPOSD
        'The knife is greasy.' [Loc.L.012]

4.1.20 *-pewo* CLF:foot

This classifier is used for 'foot', as shown in (150). The class of entities it categorizes is reduced to a single member. Note that the classifier differs formally from the noun *-iype* 'foot'.

(150)   tiptsipewo
        *t-iptsi-**pewo***
        3-be_naked-**CLF:foot**
        'He is barefoot.' [T40.068]

4.1.21 *-pewo'u* CLF:hand

This class is strictly used for 'hand', as illustrated in (151). Just as *-pewo*, the class of entities it categorizes is reduced to a single member. Note that the classifier differs formally from the noun *-wupe* 'hand'. The classifier *-pewo'u* is sometimes realized *-pew'u* or *-pewu*.

(151)   tyajarupewo'u
        *ty-ajaru-**pewo'u***
        3-be_wide-**CLF:hand**
        'She is spreading out her fingers.' [C&B.F.016]

4.1.22 *-pi* CLF:fili

This classifier denotes long, thin, narrow, and flexible entities, i.e., filiform objects, prototypically a rope or snake. In example (152), it semantically characterizes the referent of a nominalized form of the verb root *ooji* 'be dry'. By metaphorical extension in the sound domain, it denotes speech, words, languages, songs, music, metaphorically understood as a linear process. By metaphorical extension in cognitive activities, it denotes feelings. And by metaphorical extension in time, it expresses events, especially when used in nominalizations. These various metaphorical extensions are discussed in Section 4.4, where they are illustrated with examples.

(152)   te pjo vioojiipi
        te   *p-jo*   *vi-ooji-V-**pi***
        PREP.NH   DEM-NH.SG   1PL-be_dry-SP.P.NZ-**CLF:fili**
        'On the clothes line.' [Answer to the question: 'Where is the clothes pin?']
        [Loc.C.033]

4.1.23 *-pu'i* CLF:island

The classifier *-pu'i* is associated in the text corpus with pockets of forest in the pampa, which are called *islas* in Bolivian Spanish (literally 'islands'), as in (153), where they are mentioned as the habitat of pumas. In their Ignaciano grammar, Olza Zubiri et al. (2002:286–287) define this category as comprising ball-shaped objects, such a ball or bread roll, or soft objects with an elliptical shape such a bar of soap, a mud ball, a cake, or a bundle tied up with rope. In the elicited example in (154), the classifier *-pu'i* has been interpreted by a Mojeño Trinitario speaker as referring to testicles.

(153) te jmani wo vim'a viti, etjo to tayumrujsi'wo, eto te to tyuupu'ono 'jiorejono.

te	*j-ma-ni*	*wo*	*v-im-'-a*	*viti*
PREP.NH	DEM-NH.PL-PROX	NEG	1PL-watch-ACT-IRR	1PL

et-jo	*to*	*ta-yumru-j-s-i'-wo*
3NH-EXIST	ART.NH	3NH-hide-CLF:amorph-ACT-APPL1-MID

eto	*te*	*to*	*ty-uu-**pu'**-ono*	*'jiorej-ono*
3NH	PREP.NH	ART.NH	3-be_good-**CLF:island**-PL	thick_forest-PL

[about pumas] 'Around here, we don't see them, they have their hiding place, it is in the islands with a lot of vegetation.' [T30.054]

(154) noktayapú'icho
*n-oktaya-**pú'i**-cho*
1SG-step_on-**CLF:island**-ACT
'I stepped on his parts (testicles).' [elicited]

4.1.24 *-si* CLF:sphere

The *-si* category is used for spherical objects, such as heads, balls, pots, and onions. In (155), it categorizes onions, and in (156), a head. It is also used for insects, as in (157), drawn from a tale that tells about how Rooster came to eat Cricket.

(155) nkoy'epo to sa… sevoya, 'chopesiwko, asi elay sevoyano
n-ko-y'e=po	*to*	*sevoya*	*'chope-**si**-wko*	*asi*	*elay*	*sevoya-no*
1SG-VZ-GPN=PFV	ART.NH	onion	big-**CLF:sphere**-PL	like.this(Sp)	INTJ	onion-PL

'I also had onions, they were big, like this, wow! the onions.' [T38.160]

(156) tyupajiimama jmaka 'chane, manje'e... ene titosiwre
ty-u-pa-jiimama	*j-ma-ka*	*'chane*	*manje'e*
3-large-CLF:needle-beard	DEM-M-PROX	person	PH

ene	*t-ito-**si**=wre*
and	3-be_bare-**CLF:sphere**=once_again

'This man has a long beard, um... and he is bald (lit. bareheaded).' [T40.043]

(157) tyompuiji tkoojajarikri'iji to 'mu'ji ajta to ñichmoopo toj ñijiisikpuiji.
t-yom=pu=iji	*t-k-ooja-CV-ri-k=ri'i=ji*		*to*	*'mu'ji*
3-go=PFV=RPT	3-CAUS-scratch-RED-PLURACT-ACT=IPFV=RPT		ART.NH	husk

ajta	*to*	*ñ-ichmoo=po*	*toj*	*ñi-jii-**si**-k=pu=iji*
until	ART.NH	3M-find=PFV	gulp	3M-swallow-**CLF:sphere**-ACT=PFV=RPT

'He searched the corn husks, they say, until he found him and swallowed him (Cricket).' [T35.062]

4.1.25 *-ugi* CLF:face

The *-ugi* classifier almost always denotes faces, as in (158). Surprisingly, the homonymous noun *ugi* is present in derived nouns with meanings that are all related to 'eyes' and not 'face'.[39] If this noun was the source for the classifier, it has undergone a semantic shift in the process. It is all the more puzzling that the regular noun for 'face' *miro* has itself grammaticalized as a classifier with the same 'face' core

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[39] An anonymous reviewer noticed that cross-linguistically "the association between 'eye' and 'face' is rather commonplace. In fact, the CLICS database lists 38 colexifications involving the two concepts, making it the most frequent colexification involving 'face'" (Rzymski et al. 2020).

meaning (see 4.1.7). There are examples where the classifier *ugi* refers to the figure or the general appearance of an entity, see Section 4.4.

(158) tkospugiono taye'e
       *t-ko-sp-**ugi**-ono*   *ta-ye'e*
       3-MID-wash-**CLF:face**-PL   3NH-PREP
       'They wash their faces in it.' [T20.026]

4.1.26 *-ve* **CLF:pointed**

I have elicited the classifier *-ve* on stative intransitive verbs after having read its description for Old Mojeño in Marbán (1702:88). Created examples with this classifier on transitive verbs and on numerals suggested to native speakers were rejected. In elicitation on intransitive verbs, speakers suggested associations with combs, thorns, or palm hearts, as in (159). It is found only once in the corpus, as part of the nominal stem *-en-ro-ve* 'hook', derived from the verb 'fish', given in (160).[40]

(159) tsisove
       *t-siso-**ve***
       3-be_black-**CLF:pointed**
       'It is black (a comb made of cow horn, a thorn, a palm heart).' [elicited]

(160) pjoka vkomnu 'cheve, mateka, tyompo eto wakakore, ene etopo to venrovena...
       p-jo-ka   *v-komnu*   *'cheve*   *mateka*   *tyompo*   *eto*   *waka-kore*
       DEM-NH.SG-PROX   1PL-need   salt   butter   and_also   3NH   meat-?

       ene   *eto=po*   *to*   *v-en-ro-**ve**-na*
       and   3NH=PFV   ART.NH   1PL-fish-NZ-**CLF:pointed**-IRR
       'here we need salt, butter and meat and for our fish hooks...' [T25.165]

4.1.27 *-'a* **CLF:ovoid**

The *-'a* category groups entities that are ovoid, typically eggs and eyes, but also testicles. Its main function is derivational, since it attaches to nouns denoting entities to which an ovoid object can be related, such as eyes in a face, and the eggs of a hen, as in (161).

(161) tnikri'iji pjoko wray'a.
       t-ni-k=ri'i=ji   *p-jo-ko*   *wray-**'a***
       3-eat-ACT=IPFV=RPT   DEM-NH.SG-NAE   chicken-**CLF:ovoid**
       'She ate chicken eggs.' [T26.020]

4.1.28 *-'e* **CLF:convex**

The *-'e* category groups entities that are curved and — seen from an external perspective — convex. It prototypically includes bellies, as illustrated in (162). It can also be used for drums, balloons, skillets, bells, and inflated things, such as the ball in example (163). From this list it seems that the entities concerned are most often not completely filled, in contrast to those classified with *-si*. However, *-'e* is attested in the corpus as characterizing bread and sweet potatoes, which *are* completely filled.

(162) tappú'eko pjuena sju'e
       *t-appú-**'e**-ko*   *p-ju-ena*   *s-ju'e*
       3-inflate-**CLF:convex**-ACT   DEM-NH.SG-DIST   3F-belly
       'Her belly swelled.' [T12.009]

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[40] The sequence *ve* is also found in *move* 'comb', but this root is not synchronically analyzable.

(163) tyokchu'eriiko pjo pelota tyutsárono
       ty-okchu-'e-ri-i-ko   *p-jo*   *pelota*   *ty-utsár-ono*
       3-kick-**CLF:convex**-PLURACT-?-ACT   DEM-NH.SG   ball   3-play-PL
       'They kick the ball and play.' [Path.C.021]

4.1.29 -*'i₁* **CLF:atmo**

There are two -*'i* classifiers, associated with two different categories of entities; in this section I address the first category of entities. This category is difficult to define, because it comprises intangible entities, typically general elements of the natural environment, such as the weather, the scenery and spatial environment, but also time. Very often, there is no noun phrase expressing the referent categorized by this classifier. This is precisely the case in (164), where it refers to the wind, and in (165), where it refers to the general atmosphere of a place. In (166), it refers to the time of an event, i.e., 'the death of my father'. This meaning of -*'i* is very similar to that of -*mu'i*: it denotes the natural environment, especially for the expression of weather. A major difference is that the classifier -*'i* is found only on stative intransitive predicates, which is only one of the possible environments of -*mu'i*.

(164) chin chin takepripo eto mraka'i mraka'ipo.
       chin   *chin*   *ta-ke=pripo*   *eto*   *mraka-'i*
       woosh   woosh   3NH-be_like_this=CONC.MOT.PFV   3NH   strong-**CLF:atmo**

       mraka-'i=po
       strong-**CLF:atmo**=PFV
       'Now comes the strong (wind) "woosh, woosh", it's already strong.' [T17.030]

(165) tmopkumori'ini, wo'tseriji tgiwa etotse tmopkumo tmotna'ri'iji
       t-mopku-mo=ri'i=ni   *wo'=tse=r=iji*   *t-giw-a*
       3-be_dark-CLF:fabric=IPFV=PST   no=contrast=UNQ=RPT   3-rain-IRR

       eto=tse   *t-mopku-mo*   *t-motna-'=ri'i=ji*
       3NH=contrast   3-be_dark-CLF:fabric   3-keep_quiet-**CLF:atmo**=IPFV=RPT
       'It (the sky) was dark, but it was not raining, in fact it (the sky) was dark and it was quiet.' [T19.053]

(166) tyere'ipo muepenira ma... ma tataeni
       t-yere-'i=po   *mu-epen-ira*   *ma*   *tata=eni*
       3-last-**CLF:atmo**=PFV   3M-die-EV.NZ   ART.M   my_father=PST
       'The death of my late father occured long ago.' [T48.015]

4.1.30 -*'i₂* **CLF:fruit**

The second -*'i* category groups entities that are spherical with a type of protrusion, or 'neck' in Gill's (1957:37) words. It typically includes birds and fruits (due to their heads and stems, respectively). Example (167) illustrates its use for 'fruit', and (168) for 'bird'. This category also includes containers with a handle, such as bottles, pots, and cups, as well as udders. The entity that is classified can be soft or hard. This category can also be used for containers that are neither round nor have a neck, such as cans, barrels, tanks, coconuts, and houses. Example (168) illustrates how this classifier associates with beer bottles.

(167) to tagiigire, tayukjo'iko pjuena to'i
       to   *ta-giigire*   *ta-yukjo-'i-ko*   ***p-ju-ena***   ***t(a)-o'i***
       ART.NH   3NH-arrow   3NH-pierce-**CLF:fruit**-ACT   **DEM-NH.SG-DIST**   **3NH-fruit**
       'The arrow, it pierces that fruit.' [Loc.L.030]

(168)   schuno'ikpo su mayeno
        s-chuno-'i-k=po   *su*   *ma-yeno*
        3F-parboil-**CLF:fruit**-ACT=PFV   ART.F   3M-wife
        'His wife parboils it (the bird).' [T21.089]

(169)   siete, ocho, nueve'i jmani nae... naeesanri'i
        siete   ocho   nueve-'i   j-ma-ni   na-ee-sa-n=ri'i
        seven   eight   nine-**CLF:fruit**   DEM-NH.PL-PROX   3PL-drink-HAB.P.NZ-PL=IPFV
        'Seven, eight, there are nine bottles.' (lit. '…nine are these bottles.') [T40.129]

4.1.31 -*'o* CLF:body

The -*'o* category is usually used to refer to animate bodies, whether human or not. In (170), it is used for 'bulls' and in (171) for 'children'. The corpus shows some occurrences where it extends to inanimate bulky objects, such as a motorcycle seat or a bunch of firewood. It is very likely lexicalized with the adjective *'chi'chu* 'small', the morphophonemically unexpected form *'chi'cho'o* being regularly used for 'child'.

(170)   ene tiñere'o to toro.
        ene   t-iñe-re-'o   *to*   *toro*
        and   3-inspire_awe-NZ-**CLF:body**   ART.NH   bull
        'And the bulls are (physically) impressive.' [T27.021]

(171)   nuti nanosípo nae pno 'chi'cho'ono
        nuti   n-a-nosí=po   na-e   p-no   'chi'cho-'-ono
        1SG   3SG-IRR-stay=PFV   3PL-PREP   DEM-H.PL   small-**CLF:body**-PL
        'I can stay with the little ones (i.e., children).' [T29.015]

4.1.32 -*'ugi* CLF:eye

The -*'ugi* category strictly refers to eyes, as exemplified in (172). Note that there is a nominal root *ugi* for 'eye' (without the initial glottal stop), that always occurs with a classifier. It takes the classifier -*'a* for ovoid items to denote 'eye' and the classifier -*mo* for thin and flexible entities to denote 'eyelid'. It can metaphorically extend to 'color patches' (see Section 4.4).

(172)   esu tyamo'ugi
        esu   *ty-amo-'ugi*
        3F   3-swell-**CLF:eye**
        'Her eyes are swollen.' (lit. 'She is eye-swollen.') [T42.071]

4.2 Semantic parameters relevant for the classifier system

This section addresses the semantics of the classifier system taken as a whole and aims at highlighting which semantic parameters are relevant for the system. The semantic features used in this section are taken from Allan (1977), Frawley (1992), Aikhenvald (2000:272–275), and Denny (1986). Out the three major semantic domains that Aikhenvald gives for classifiers, "physical properties" is by far the major parameter in Mojeño Trinitario, as is the case for most Arawak languages (Dunn & Rose to appear), "animacy" is rather a marginal parameter, and "function" does not seem to be relevant.

Within the domain of physical properties, mostly relevant for a large set of 'shape classifiers' (see Table 15), the relevant parameters are extendedness (shape and dimensionality), interiority and boundedness, consistency, and quantity. There are several classifiers that denote properties with one, two, or three dimensions, so that dimensionality is never sufficient to distinguish different categories. Categories are more crucially distinguished by the shape that defines them, as well as by the consistency (mainly the opposition between flexibility and rigidity) and emptiness (see the contrast between -*gi* '1D, cylindrical' and -*ño* 'tubular', and possibly between -*ku* 'space enclosed by parallel boundaries' and -*ju'e*

'interior of a bounded entity'). Quantity is only relevant in the classifier *-muri* 'group'. The definitions of the shape classifiers are rather fine-grained: for example, the four classifiers *-si*, *-'i*, *-'e* and *-pu'i* could all be defined as a category for spherical entities, but *-'i* requires a protrusion, the rarely used *-pu'i* may refer to some entity with a smooth or floppy outline, *-'e* seems to take a particular perspective focusing on the exterior outline, and often referring to empty elements, in contrast to *-si*, which most often associates with filled entities.

Among the cross-linguistically defined parameters or sub-parameters of physical properties, some are not relevant in Mojeño Trinitario. Direction and orientation are irrelevant. For instance, the classifier *-gi* referring to cylinders could classify a standing tree or a fallen one, and if it is fallen, its orientation does not matter. Size is never a primary component of the definition of a classifier, so that the classifier *-gi* for cylinders can associated with either trees or seeds. Size is only relevant indirectly in terms of properties such as 'thin' and 'long', and is never the single feature contrasting a pair of classifiers. Size contrasts may be partially involved in some pairs of classifiers, however, as in the case of *-no ~ -ne* 'curved and elongated' which mostly associates with large animals, and *-'o* 'body' which mainly associates with medium-sized one; but note that neither classifier is restricted to animals. The material feature is not involved in the system either, except perhaps in the case of the 'liquid' classifier, which can also be interpreted as a form of consistency, or in the contrast between the two rarely used *-pa* '1D, long, thin and pointed' and *-ve* 'thin and pointed, hard' classifiers, where most entities associated with *-pa* are made of metal (except for palm fronds, ribs, and hairs), while the small number of entities associated with *-ve* are made of plants or animal parts (e.g., combs are made of cattle horn), with the exception of fishing hooks, which are metallic at least in the present-day Mojeño culture. Finally, arrangement is not a central feature in the classifier system. It is part of the definition for the *-pa* 'mass' classifier, and maybe for the *-'o* 'body' classifier, which can associate with dense aggregates of objects, such as bundles of sticks.

As for the animacy domain, the human parameter is highly relevant only in the *-na* classifier when used with its specific 'human' meaning, and gender is completely irrelevant. The animacy domain is not primary for any of the other classifiers, as it does not distinguish between classifiers. Although it is difficult to imagine some classifiers associating with animate entities, such as *-pa'i* '2D, bare ground' or *-omo ~ -e* 'liquid', most classifiers are neutral in terms of animacy. For example, classifiers like the *-'o* 'body' and the *-muri* 'group' classifiers very often associate with animate referents (see 4.1.31 and 4.1.9) but can nevertheless also be associated with inanimate entities. In (173), *-'o* associates with a body of water, and in (174) with rolls of fabric. In (175), *-muri* associates with ears of corn.

(173) tsi'oopo to une ónogi
    t-si-'o-o=po   *to*   *une*   *onogi*
    3-be_much-**CLF:body**-MID=PFV   ART.NH   water   there
    'There had been a flood there' [T38.102]

(174) to 'attajri'i 'muirijirich'o te piesa, mittu'orich'o.
    to   *'attaj=ri'i*   *'muiri-ji=rich'o*   *te*   *piesa*   *mittu-'o=rich'o*
    ART.NH fabric=IPFV   all-CLF:amorph=still PREP.NH piece(Sp) be_thick-**CLF:body**=still
    'Fabric was still sold by the piece, it was thick.' [T25.084]

(175) ene suvemuu'ogierekoo'i jma spunu... spoñono
    ene   *s-uve-**muu**-'o=giereko=o'i*   *j-ma*   *spoñ-ono*
    and   3F-embrace-**CLF:group**-ACT=CONT=IPFV   DEM-NH.PL corn-PL
    'And she holds the bundled ears of corn.' [T40.010]

Similarly, shape classifiers that often associate with inanimate entities can also associate with animate entities. In fact, most animals are by default categorized depending on their shape, as summarized in Table 14.

animal groups	shape classifier	gloss of the classifier	definition of the category
insects	*-si*	CLF:sphere	3D, sphere
fish	*-pe*	CLF:blade	2D, flat, rigid with sharp boundaries
snakes	*-pi*	CLF:fili	1D, narrow, long, thin and flexible, filiform
big animals	*-no ~ -ne*	CLF:back	curved and elongated
birds	*-'i*	CLF:fruit	3D, sphere with protrusion

Table 14. Categorization of animal groups with shape classifiers

To close the discussion of the human and animacy parameter in the Mojeño Trinitario classifier system, I present counts made for the seven-text sample (see the Appendix).[41] The 168 tokens of classifiers are distributed as follows: as far as humanness is concerned, 123 classifiers associate with a non-human referent, 33 with a human referent, and eleven with the body part of a human referent. As for animacy, 105 classifiers associate with an inanimate referent, and 62 with an animate referent.

Other associations can be made between shape classifiers and animate entities. For example, the classifier *-si* '3D, sphere' can refer to an animal on the basis of its shape as in (176) but most often evokes a human entity by pointing to their 'head' as in (177), and the classifier *-mo* '2D, flat, large, and generally flexible' can associate with dogs, possibly because they are skinny, as in (178).

(176)   moverasi to sipono
        *movera-**si***   *to*   *sip-ono*
        many-**CLF:sphere**   ART.NH   turtle-PL
        'There were many turtles.' [elicited]

(177)   te pjo tapeno... tyuchsiikoo'i
        te   *p-jo*   *ta-peno*   *ty-uch-**si**-V-ko=o'i*
        PREP.NH   DEM-NH.SG   3NH-house.POSD   3-exit-**CLF:sphere**-PLURACT-ACT=IPFV
        'In its home (doghouse), it wants to put its head out (only the half can be seen).'
        [Answer to the question: 'Where is the dog?'] [Loc.S.071]

(178)   ene mojomontsero tata jmani pye'ono paku
        *ene mojo-**mo**-n=tse=ro*   *tata j-ma-ni*   *p-ye'-ono   paku*
        and mangy-**CLF:fabric**-PL=contrast=UNQ   sir   DEM-NH.PL-PROX   2SG-GPN-PL dog
        'But there are mangy (they have scabies), sir, your dogs here.' [T10.014]

The semantics of the classifiers discussed to this point are grounded in tangible properties of referents in the experiential world. There are two classifiers that do not, however: *-mu'i* 'space and time, visual experience' and *-'i* 'atmosphere, intangible'. These associate with referents that are cannot be pointed out in the world in same way because they are not tangible: they are not defined through physical properties (though *-mu'i* can refer to visual properties).

4.3 Semantic sets of classifiers

By investigating the semantic parameters relevant to Mojeño Trinitario classifiers, three semantically distinguished sets of classifiers have been identified in the preceding section: shape classifiers, the human classifier, and classifiers for intangible entities. Generally speaking, these classifiers are semantically broad, with more diffuse and disparate meanings than those of nouns, being able to associate with a broad range of referents (see the possible referents listed in the last two columns of Table 13). Two other sets of classifiers can be identified, this time based on their particular semantic extension: unique classifiers, and the classifier *-na* in its generic function. The semantic extension of these latter classifiers is described in this section.

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[41] In this appendix, Humanness is coded with "h" for human, "nh" for nonhuman, and "bodypart" for bodyparts of human referents. Animacy is coded with "i" for inanimate, and "a" for animate. The code "n/a" applies to one example where the classifier *-mu'i* is not associated with a referent (see Section 4.1.10).

Five semantic sets of classifiers are thus distinguished in Mojeño Trinitario, based on semantic parameters and semantic extension. They are listed in Table 15, with the the classifier *-na* occurring both as a semantically specific classifier used for humans and a generic classifier, depending on the part of speech of its host. Note that these semantically based sets of classifiers do not show further differentiation among themselves, other than their semantics, except for the reduced morphosyntactic distribution of *-na* CLF:H/CLF:GNR, which does not appear on active verbs (see 4.1.11).

primary semantic domain	semantic sets of classifiers	list	number of categories
physical properties	shape classifiers	CLF:plank	22
		CLF:cyl	
		CLF:interior	
		CLF:amorph	
		CLF:path	
		CLF:fabric	
		CLF:group	
		CLF:back	
		CLF:tube	
		CLF:liquid	
		CLF:mass	
		CLF:needle	
		CLF:ground	
		CLF:blade	
		CLF:fili	
		CLF:island	
		CLF:sphere	
		CLF:pointed	
		CLF:ovoid	
		CLF:convex	
		CLF:fruit	
		CLF:body	
animacy	human classifier	CLF:H	1 (*na*)
other	classifiers for intangible entities	CLF:setting	2
		CLF:atmo	
body parts + manioc	unique classifiers	CLF:digit	7
		CLF:face	
		CLF:manioc	
		CLF:foot	
		CLF:hand	
		CLF:face	
		CLF:eye	
universal	generic classifier	CLF:GNR	1 (*na*)

Table 15. Semantically based sets of classifiers

The set of unique classifiers, which have very specific meanings and associate with essentially one type of referent each, consists of seven classifiers. Their semantic extensions are much more restricted than that of the other classifiers. Six of the unique classifiers associate with body parts, while one *-pa* classifier associates with manioc, a staple in traditional Amazonian societies. There are several interesting remarks to be made on the form and meaning of the body part classifiers, which are given in Table 16. First, two of these unique classifiers are used for 'face' (*-miro* and *-ugi*), and neither the small number of textual examples nor elicitation with consultants have yielded insight regarding the semantic distinction between them. Second, the 'eye' classifier *-'ugi* and one of the 'face' classifiers *-ugi* differ only

by one consonant, the initial glottal stop. Third, the forms of last four body part classifiers in Table 16 show seem to be related to their associated nouns by switching syllable order.[42]

form	gloss	associated noun
-miro	CLF:face	*-miro* 'face'
-ugi	CLF:face	*-miro* 'face'
-'ugi	CLF:eye	*-ug'a* 'eye'
-pewo	CLF:foot	*-iype* 'foot'
-pewo'u	CLF:hand	*-wupe* 'hand'
-giwu	CLF:digit	*-wugi* 'finger'
		-iwgi 'toe'

Table 16. Unique body part classifiers

Finally, the last semantic set consists solely of the generic use of the *-na* classifier, when found on numerals and numeral-like quantifiers. It stands out from the corpus study that *-na* is overwhelmingly favored on numerals, where it is found in 204 out of 271 occurrences of classifiers on numerals and numeral-like quantifiers. As the huge variety of examples and work in elicitation sessions shows, it can be used for any type of referent. Allan (1977:300) mentions that some languages have a 'general or residual classifier', i.e., "a classifier used of a large number of heterogeneous inanimate objects, some of which may be alternatively classified by more specialized classifiers". It is not absolutely clear whether the classifier *-na* with its generic meaning falls under that category. It is used on almost all tokens of numerals in discourse, whatever the semantic properties of the referent it associates with, and could theoretically be replaced with more specialized classifiers. But since it is a default classifier for any referent, it therefore does not play any role in categorization in this morphosyntactic context. The classifier *-ji* could also be considered less specific than other classifiers. It seems to be able to associate with a greater variety of referents than other classifers, *-na* excepted.

4.4 Semantic shifts

Now that each semantic set of classifiers has been discussed, a few words are in order about the semantic extensions from the concrete meanings, explored in Sections 4.1 and 4.2, to more abstract meanings.

In a cross-linguistically very common manner, items with body-part meanings have, via metonymy, undergone semantic extension to relational location meanings. When construed with these more abstract meanings, these classifiers are not restricted to associating with animate referents. The classifier *-miro*, for example, exhibits its body-part meaning 'face' in (179), and its locative meaning 'in front of' in (180), a common grammaticalization pattern (Heine & Kuteva 2002:167). The classifier *-je*, whose core meaning is 'stomach', as in (181), exhibits its more abstract meaning, 'interior', in (182), another common grammaticalization pattern (Heine & Kuteva 2002:53).

(179)   pvepkomrocha ma piapiaru pim'a pjo mamiro.
         *p-v-epko-**mro**-ch-a*   *ma*   *pi-apiaru*
         2SG-INV-cover-**CLF:face**-ACT-IRR   ART.M   2SG-uncle

         p-im-'-a   *p-jo*   *ma-miro*
         2SG-watch-ACT-IRR   DEM-NH.SG   3M-face
         'Uncover the face of your uncle to look at his face.' [T06.121]

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[42] This does not mean that the syllables were actually reordered in the historical development of these four classifiers. A close look at the data suggests that a compound of two nominal roots in one order grammaticalized into a classifier, and later a sequence of the same roots in the other order lexicalized into the present body-part nouns.

(180)   tochmiruchworepuiji to Ú'arii'i
      *t-och-**mir**-u-ch=wore=pu=iji*   *to*   *Ú'ari=i'i*
      3NH-exit-**CLF:face**-APPL3-ACT=once_again=PFV=RPT   ART.NH Jucumari=IPFV
      'The Jucumari appeared in front of them.' [T19.161]

(181)   'nuuji eto taewkujecho, taewkujecho, tyo'kopo, tsokpo
      'nuuji   *eto*   *ta-ew-ku-**je**-cho*
      right_after   3NH   3NH-beat-CLF:path-**CLF:interior**-ACT

      *ta-ew-ku-**je**-cho*   *ty-o'-ko=po*   *t-sok=po*
      3NH-beat-CLF:path-**CLF:interior**-ACT   3-vomit-ACT=PFV   3-defecate=PFV
      'Immediately there was thumping in her belly, there was thumping in her belly, she
      vomited, she defecated.' [T12.016]

(182)   ene tyompo te smeno masiopjechpo
      ene   *t-yom=po*   *te*   *smeno*   *ma-siop-**je**-ch=po*
      and   3-go=PFV   PREP.NH   forest   3M-enter-**CLF:interior**-ACT=PFV
      'And he went within the forest, he entered deep into it.' [T08.011]

Body-part classifiers also show semantic extensions into abstract domains other than location, where, again, they can associate with inanimate entities. The classifier *-'ugi*, that generally denotes 'eye', as in (183), can, via metaphor, be used to refer to the color patches on a multicolor entity, as in (184). The classifier *-ugi*, with the core meaning 'face', as in (185), can, via a common metonymic process (see Heine & Kuteva 2002:130–131), be used to refer to the general appearance of an entity, as in (186).

(183)   tyamo'uggierekoo'i
      *ty-amo-**'ug**=giereko=o'i*
      3-swell-**CLF:eye**=CONT=IPFV
      'She has swollen eyes.' [T42.072]

(184)   mopo'ugi to pyachu
      *mopo-**'ugi***   *to*   *py-achu*
      three-**CLF:eye**   ART.NH   2SG-hammock
      'Your hammock has three colors.' [elicited]

(185)   nkospugi (to nmiro)
      *n-ko-sp-**ugi***   *to*   *n-miro*
      1SG-MID-wash-**CLF:face**   ART.NH 1SG-face
      'I wash my face.' [elicited]

(186)   wo naechogienena eto pjuena úkoji taviuggio.
      wo   *na-echo-gienena* *eto* *p-ju-ena*   *úkoji*   *t-avi-**ug**-gio*
      NEG   3PL-know-?   3NH   DEM-NH.SG-DIST cloud   3-cover-**CLF:face**-ACT
      'And they don't know that the cloud covers it (the sun).' [T25.159]

Semantic extensions to abstract domains are not restricted to classifiers originating from body-part nouns. In fact, the two classifiers that are more commonly used with abstract meanings are shape classifiers. The classifier *-pi* 'filiform', whose basic association is to rope-like entities, as in (187), also associates with a variety of intangible items, through a metaphor of their being linear: speech and sound, as in (188); cognition, as in (189); and feelings and topics of conversations, as in (190); habits and customs, as visible in the two noun-based habitual nominalisations: *v-emtone-re-**pi*** in (191), and *ta-ye'e-re-**pi*** in (192). It even associates with the more generic meaning of 'event' in nominalizations, as exemplified in the verb-based nominalization *ta-naek-ru-**pi**,* in (193), and the noun-based nominalization *pelota-ra-**pi*** in (194). Finally, it can also associate with the meaning of 'time', as in (192).

(187)   syustipko pjuena womapi
         *s-yusti-**p**-ko*   *p-ju-ena*   *woma-**pi***
         3F-cut-**CLF:fili**-ACT   DEM-NH.SG-DIST   plastic-**CLF:fili**
         'She cuts this plastic thread.' [C&B.F.060]

(188)   no wchichanoviono naemtiskopripo to vechjiriiwo tkíjare trinranropi.
         no   *w-chicha-noviono*   *na-emtis-ko=pripo*
         ART.PL   1PL-son/daughter-PL.KIN   3PL-forget-ACT=PROG.GRAD

         to   *v-echjiriiwo*   *t-k-íjare*   *trinran-ro-**pi***
         ART.NH   1PL-language   3-VZ-name   Trinitario-NZ-**CLF:fili**
         'Our children progressively forget our language that one calls "our way of speaking of
         the Trinitario people".' [T31.014]

(189)   nemtiskojnopo; wo tonapii'i pjo nchuti
         n-emtis-ko=jno=po   *wo* *t-a-una-**pi**=i'i*   *p-jo*   *n-chuti*
         1SG-forget-ACT=RES=PFV   NEG 3-IRR-put_aside-**CLF:fili**=IPFV   DEM-NH.SG 1SG-head
         'I've forgotten once more; my head isn't good.' [T34.035]

(190)   tajpukayo pjokroropii'i?
         taj=puka=yo   *p-jo-kro-ro-**pi**=i'i*
         NH.INDT=DUB=FUT   DEM-NH.SG-POT.LOC-NZ-**CLF:fili**=IPFV
         'What is it going to be about now?' [T20.070]

(191)   pechapotsero eto vemtonerepi viti trinranono
         p-ech-a-po=tse=ro   *eto*   *viti*   *to*   *v-emtone-re-**pi***
         2SG-know-IRR-MID=contrast=UNQ   3NH   1PL   ART.NH   1PL-work-NZ-**CLF:fili**

         viti   *trinran-ono*
         1PL   Trinitario-PL
         'Listen to the way we work, we the Trinitarios.' [T34.022]

(192)   svejno eto taye'erepi joka viowsa, tanaekrupi joka viowsa
         s-vejno   *eto*   *ta-ye'e-re-**pi***   *jo-ka*   *vi-owsa*
         3F-bring   3NH   3NH-GPN-NZ-**CLF:fili**   NH.SG-PROX   1PL-village

         *ta-naek-ru-**pi***   *jo-ka*   *vi-owsa*
         3NH-start-NZ-**CLF:fili**   NH.SG-PROX   1PL-village
         'She takes the traditions of our village, the start of our village.' [T47.070]

(193)   to pelotarapi
         to   *pelota-ra-**pi***
         ART.NH   ball-NZ-**CLF:fili**
         'a ball game' [elicited]

(194)   te'ripkayo te taejgiipi pjoka koje…
         te'=ripka=yo   *te*   *ta-ejgi-i-**pi***   *p-jo-ka*   *koje*
         PREP.NH=DUB=FUT   PREP.NH   3NH-tail-NZ-**CLF:fili**   DEM-NH.SG-PROX   month
         'It could be at the end of this month…' [T23.002]

The classifier *-ku* 'path' has as its core meaning a space enclosed by parallel boundaries. It thus associates with hollow spaces, as in (195); paths or rivercourses, as in (196); vehicles (based on the prototype of dugout canoes), as in (197); or rooms with walls, as in (198). More abstractly, it associates with commitments to activities from which one cannot freely leave without having completed them, a metaphorical extension of the notion of traveling down a path or tunnel, which must be followed to its end before it can be exited. Examples of such activities are the military service, as in (199); or a class or

a work contract/program, as in (200). The classifier *-ku* 'path' also associates with nighttime and day-light alternations, as in (201) and (202), respectively. In these cases, it is unclear whether the path metaphor applies to the sky or the passing of time.

(195)   choyoroku
        *choyoro-**ku***
        round-**CLF:path**
        'a round hole' [elicited]

(196)   nuti nkowsa oni te' to 'tsekrereku
        *nuti   n-k-owsa   oni   te'   to   'tsekre-re-**ku***
        1SG   1SG-VZ-village   there PREP.NH   ART.NH   Sécure-NZ-**CLF:path**
        'I live there on the Sécure river.' [T33.002]

(197)   nowku'o te pkure
        *n-ow-**ku**-'o   te   pkure*
        1SG-live-**CLF:path**-ACT   PREP.NH   canoe
        'I am in the canoe.' [elicited]

(198)   aay tkutim'i tyuusamrepo, kuch... tyuchku'po
        *aay   t-kuti-m'i   ty-uusamre=po   ty-uch-**ku**-'=po*
        whoa   3-be_like-CLF:setting   3-be_happy=PFV   3-exit-**CLF:path**-ACT=PFV
        'Whoa, it looks like he is happy, now that he is out (of jail).' [T40.211]

(199)   to año sinkuenta y sinko nuchku'po, nchoopo te pjoka Trinra nnospo.
        *to   año   55   n-uch-**ku**-'=po*
        ART.NH   year   55(Sp) 1SG-exit-**CLF:path**-ACT=PFV

        n-choo=po   te   p-jo-ka   Trinra   n-nos=po
        1SG-go_back=PFV   PREP.NH   DEM-NH.SG-PROX   Trinidad   1SG-stay=PFV
        'In the year 1955, I left (military service), I came back here to Trinidad and stayed.'
        [T09.017]

(200)   tsikurich'o to pemtone
        *t-si-**ku**=rich'o   to   p-emtone*
        3-be_much-**CLF:path**=still   ART.NH   2SG-work
        'Your work takes a long time' [T28.067]

(201)   tuprik'o yoti
        *tupri-**k**-'o   yoti*
        be_in_middle-**CLF:path**-ACT   night
        'middle of the night' [T25.041]

(202)   te las sey tyurimuirisrapo tyjarakuyrepo to sache.
        te   las   sey   ty-urimuirisra=po
        PREP.NH   o'clock six   3-dawn=PFV

        *ty-jara-**ku**=yre=po   to   sache*
        3-be_light-**CLF:path**=FUT=PFV   ART.NH   day
        'At six o'clock it was not dark anymore, the day became clearer.' [T25.041]

The *-muri* 'group' classifier originally comes from the obligatorily prefixed noun illustrated in (203), whose possessor must consist of discrete entities. Consequently, this noun is not compatible with mass noun possessors, as demonstrated in (204). As a classifier, it is also often used to qualify a referent consisting of discrete animate entities, as in (205), but its meaning also extends to quantities in general, including that of mass entities, as in (206), and even abstract ones, as in (207). This is most notable on its use with the adjective *'chope* 'big', as is the case in (206) and (207).

(203)   tyarekono no namuriono
        ty-are-ko-no   *no*   *na-**muri**-ono*
        3-resume-ACT-PL   ART.PL   3PL-**group**-PL
        'Their groups are reorganizing.' [elicited]

(204)   * tamuri to une, * tamuri to wsufrichwo
        *ta-**muri***   *to*   *une*   *ta-**muri***   *to*   *w-sufrich-wo*
        3NH-**group**   ART.NH   water   3NH-**group**   ART.NH   1PL-suffer-MID
        Intended meaning: 'a lot of water, a lot of suffering'

(205)   pnokro 'chaňono te mpeno 'chopemuriono
        p-no-kro   *'chañ-ono*   *te*   *m-peno*   *'chope-**muri**-ono*
        DEM-PL-POT.LOC   person-PL   PREP.NH   1SG-house   big-**CLF:group**-PL
        'The people in my house are numerous.' [T19.007]

(206)   tmopuikono ene etjorich'o 'chopemuri to mopji to nakuumutko
        t-mopuiko-no   *ene*   *et-jo=rich'o*   *'chope-**muri***   *to*   *mopji*
        3-collect_honey-PL   and   3NH-EXIST=still   big-**CLF:group**   ART.NH   wax

        to   *na-k-uumut-ko*
        ART.NH   3PL-CAUS-meet-ACT
        'They were making honey and there was still much wax to gather.' [T06.044]

(207)   'chopemuurich'o to vsufrichwo te to vitorisra
        *'chope-**muu**=rich'o*   *to*   *v-sufrich-wo*   *te*   *to*   *v-itori-s-ra*
        big-**CLF:group**=still   ART.NH   1PL-suffer-MID   PREP.NH   ART.NH 1PL-live-ACT-EV.NZ
        'There was much suffering in our lives.' [T23.025]

4.5 Semantics and the frequency of individual classifiers

To wrap up this section on the semantics of classifiers, it is interesting to note that the semantic extension of the various sets of classifiers nicely correlates with their frequency of use in discourse. Figure 5 illustrates the frequency of use of individual classifiers in the corpus, over all morphosyntactic contexts. Frequency of use in specific morphosyntactic contexts will be examined in Chapter 5. The first remark to be made relates to the great variability in the use of various classifiers: from no occurrence at all for the *-ño ~ -ñe* 'tube' classifier in the corpus, to 251 occurrences of *-na* 'human/generic', i.e., more than a fourth of the 889 occurrences of classifiers in the corpus.
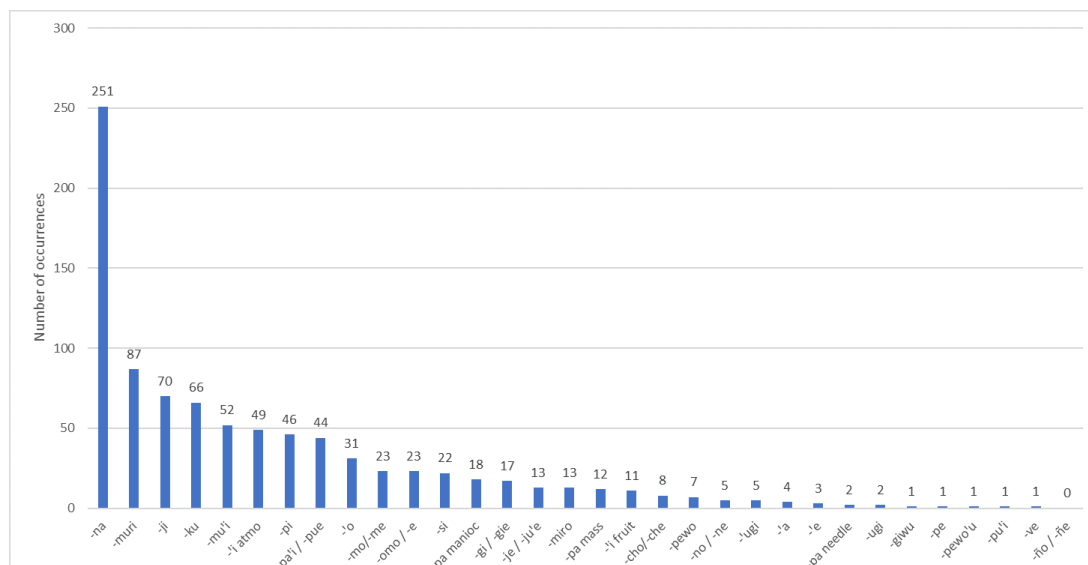
Figure 5. Frequency of individual classifiers within the corpus

Four groups of classifiers can be distinguished, albeit subjectively, based on their frequency, and these correlate well with the sets identified in Section 4.3. The most frequent classifier is *-na* 'human/generic', the classifier that has been described as having a general meaning.[43] A second group consists of classifiers with 40 to 100 occurrences. These mostly comprise classifiers which have been noted in Sections 4.3 and 4.4 as having wider semantics than simple shape classifiers. This group consists of the two classifiers for intangible entities, *-mu'i* for 'space and time, visual experience' and *-'i* 'atmosphere, intangible'; two shape classifiers with abstract extensions, *-pi* 'filiform' and *-ku* 'path'; the *-ji* 'amorphous' classifier, whose meaning has been described as not very specific; the *-muri* 'group' classifier, that extends over animates and inanimate entities; and also the shape classifier for 'bare ground', *-pa'i* that is particularly commonly used. The third group of classifiers, those with 10 to 40 occurrences, mostly consists of shape classifiers, the 'manioc' unique classifier *-pa*, and one body-part unique classifier: *-miro* 'face'. Finally, the fourth group of classifiers, with fewer than ten occurrences, comprise the other five body-part unique classifiers, as well as some rare shape classifiers.

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[43] Note that among the 211 occurrences of *-na* in the text corpus, 204 occur on numerals, i.e., in its generic use, and only seven in other contexts, with its 'human' meaning.

5
Morphosyntactic distribution of the classifiers

The Mojeño Trinitario classifier system is a multilocus one: the same set of 32 classifiers appears in four different kinds of morphosyntactic environments: on numerals, nominals, adjectives, and verbs.[44] As such, it constitutes a very typical Arawak multilocus classifier system (see Dunn & Rose to appear). Classifiers are not found on articles, interrogatives,[45] nor in locative phrases and possessive constructions. Note that only on numerals are classifiers obligatory in most circumstances (see Section 5.1). Table 17 summarizes the basic information on the morphosyntactic distribution of classifiers. It also accounts for an irregularity within the multilocus system: the classifier *-na* 'human/generic' does not incorporate into active verbs, and is the default classifier used on numerals in spontaneous speech.

host	optional/obligatory	comments
numerals and numeral-like morphemes	obligatory	*-na* generic and default classifier
nouns and demonstratives	optional	
adjectives	optional	
verbs	optional	*-na* not on active verbs

Table 17. Morphosyntactic distribution of classifiers

The four environments will be described in detail in the following subsections: numeral and numeral-like items in Section 5.1, nouns and demonstratives in Section 5.2, adjectives in 5.3, and verbs in 5.4. In each of these sections, the frequency of individual classifiers in each of the four environments in the sample of 48 texts will be summarized in a figure and discussed. The entirety of the frequency data is given in Table 18. A general analysis comparing the four environments is elaborated below.

	V	N	ADJ	NUM	total
all	**368**	**169**	**40**	**312**	**889**
-cho ~ -che	8	0	0	0	**8**
-gi ~ -gie	6	6	5	0	**17**
-giwu	1	0	0	0	**1**
-je ~ -ju'e	11	1	1	0	**13**
-ji	45	22	0	3	**70**
-ku	59	7	0	0	**66**
-miro	6	6	1	0	**13**
-mo ~ -me	17	3	3	0	**23**
-muri	13	2	10	62	**87**
-mu'i	26	26	0	0	**52**
-na	5	1	1	244	**251**
-no ~ -ne	5	0	0	0	**5**
-ño ~ -ñe	0	0	0	0	**0**
-omo ~ -e	17	6	0	0	**23**
-pa 'manioc'	1	15	2	0	**18**

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[44] For the two classifiers that have only been uttered in elicitation sessions (*-ño* 'tube', *-pu'i* 'island') as well as *-ve* 'pointed', the full set of loci is not attested.

[45] Classifiers are actually found on the interrogative *oyo*, but only when this has the quantitative meaning of 'how many'. I consider this use as classification on a numeral-like quantifier (see Section 5.1).

	V	N	ADJ	NUM	total
-pa 'mass'	11	1	0	0	**12**
-pa 'needle'	2	0	0	0	**2**
-pa'i ~ -pue	33	11	0	0	**44**
-pe	1	0	0	0	**1**
-pewo	7	0	0	0	**7**
-pewo'u	1	0	0	0	**1**
-pi	17	28	0	1	**46**
-pu'i	1	0	0	0	**1**
-si	14	5	3	0	**22**
-ugi	2	0	0	0	**2**
-ve	0	1	0	0	**1**
-'a	1	3	0	0	**4**
-'e	1	1	1	0	**3**
-'i 'atmo'	36	7	6	0	**49**
-'i 'fruit'	5	4	0	2	**11**
-'o	13	12	6	0	**31**
-'ugi	3	1	1	0	**5**

Table 18. Frequency of each classifier on different parts of speech in the corpus

The distribution of classifiers in the four environments in discourse is given in Figure 6, again based on the sample of 48 texts. Among the occurrences of classifiers in these texts, most classifiers are found on verbs or numerals, fewer on nominals, and the fewest on adjectives.
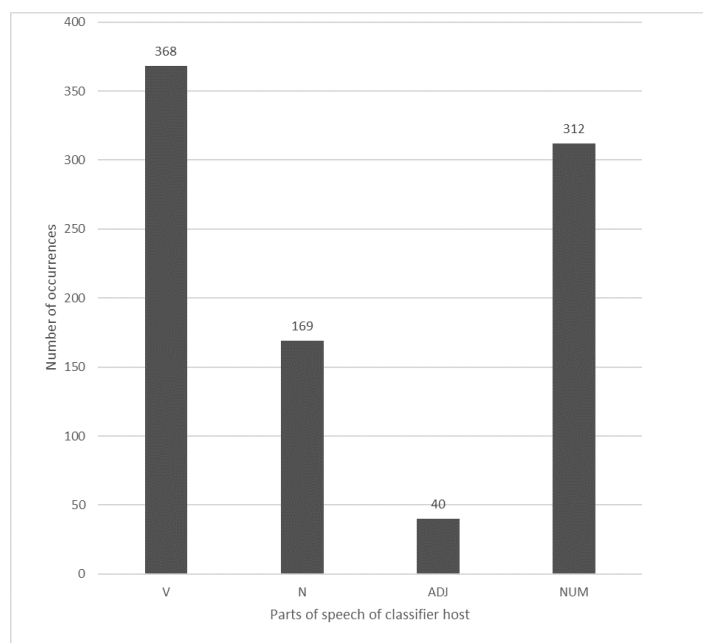
Figure 6. Morphosyntactic distribution of classifiers in discourse

Given the disparity of frequency of different parts of speech in discourse, Figure 6 is not telling on the share of potential hosts that actually take classifiers. To account for this, the number of potential

hosts has been extracted from the 48 texts, i.e., the total number of verbs, nouns, adjectives, and numerals.[46] The actual number of occurring classifiers in each environment in that sample is then compared to the number of potential hosts. Results are given in Table 19.

parts of speech	occurring classifiers	share of all classifiers	potential hosts	share of potential hosts
V	368	41%	6564	6%
N	169	19%	5058	3%
ADJ	40	5%	416	10%
NUM	312	35%	399	78%

Table 19. Distribution of classifiers by parts of speech of hosts

The results given in Table 19 give some perspective to the picture in Figure 6. Most occurrences of the classifiers are indeed found on verbs (almost half of them). However, verbs are the most frequent parts of speech in the texts among the potential classifiers host: they represent more than half of them. As a matter of fact, the share of verbs that host a classifier in the texts is actually low: about 6% of them. Classifiers on nouns, which represent almost a fifth of all classifiers in the texts, similarly attach to only a very small share of the nouns of the sample, about 3%. In contrast, classifiers on adjectives and numerals constitute respectively about 5% and 35% of all classifiers in the texts, but given that adjectives and numerals are relatively rare in the Mojeño Trinitario speech, they are actually found rather often on adjectives (10% of adjectives) and extremely often on numerals and numeral-like quantifiers (78% of numerals and numeral-like quantifiers). This last number may seem surprisingly low given the fact that classifiers are almost obligatory on numerals, but remember that numerals starting at 'four' are loanwords from Spanish and do not require classifiers. To sum up, most tokens of classifiers in discourse are found on verbs, but they are proportionally more frequent on numerals, when the relative frequency of different parts of speech in discourse is taken into account.

As a final general note on the frequency of classifiers on different hosts, it should be noted that there is considerable variation in the frequency of different classifiers, as evident in Figure 7, which compares the frequency of a selection of classifiers (those with more than 40 tokens in the 48-text corpus) across hosts. For this reason, in each of the four following sections, which focus on the morphosyntactic environments in which classifiers appear, the frequency of each of the 32 classifiers will be compared graphically via bar plots that order classfiers from most to least frequent.

	-na	-muri	-ji	-ku	-muˈi	-ˈi atmo	-pi	-paˈi / -pue
NUM	244	62	3	0	0	0	1	0
ADJ	1	10	0	0	0	6	0	0
N	1	2	22	7	26	7	28	11
V	5	13	45	59	26	36	17	33
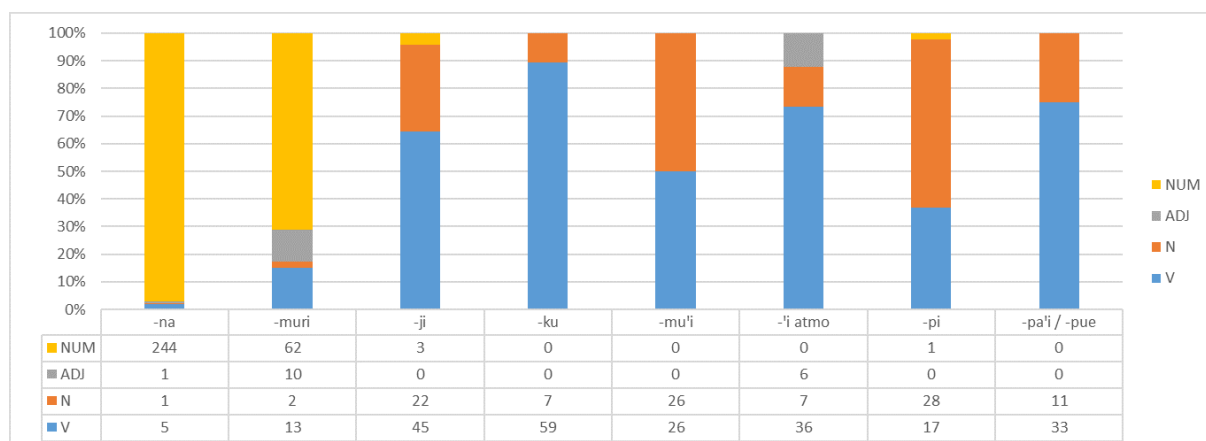
Figure 7. Distribution of a selection of classifiers on different hosts

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[46] Note for the 'nouns' as potential hosts, only common nouns have been counted, excluding proper names and demonstratives. NUM covers numerals proper (including loanwords) and numeral-like quantifiers.

5.1 On numerals and numeral-like items

Mojeño Trinitario numerals never occur bare. Most often they take classifiers, which can be said to be obligatory on numerals, except when certain other morphemes, described below, attach to them. This generalization holds, regardless of the function of numerals: as modifiers, as in (208); as NP heads, as in (209); as predicates, as in (210); or in the counting routine exemplified in (211).

(208) enjo no apinano 'chañono, 'seno ene 'jiro terono to une te to woteya

    en-jo   *no*   *api-**na**-no*   *'chañ(e)-ono*   *'seno*   *ene*   *'jiro*

    3PL-EXI   ART.PL two-**CLF:GNR**-PL person-PL   woman and man

    t-ero-no   *to*   *une*   *te*   *to*   *woteya*

    3-drink-PL ART.NH water   PREP.NH   ART.NH   bottle

    'There are two persons, a woman and a man, they are drinking water in a bottle.'

    [Path.M.011]

(209) no sinkónano tyonono te pjo tachusi pjo kogiure

    no   *sinkó-**na**-no*   *t-yono-no*   *te*   *pjo*   *ta-chusi*

    ART.PL five-**CLF:GNR-PL** 3-go-PL   PREP.NH   DEM.NH 3NH-ravine

    pjo   *kogiure*

    DEM.NH lake

    'The five people go to the ravine of the lake.' [Path.S.019]

(210) juiti kuatrunawokovi, viti 'senono

    juiti   *kuatru-**na**-wokovi*   *viti*   *'seno-no*

    now   four-**CLF:GNR**-1PL   1PL   woman-PL

    'Now we are four women, us.' [T33.015]

(211) pkeyre: etona, apina, mopona

    p-ke-yre: *eto-**na***   *api-**na***   *mopo-**na***

    2SG-say=FUT one-**CLF:GNR** two-**CLF:GNR** three-**CLF:GNR**

    '[I will teach you how to speak our language], you are going to say: one, two, three.'

    [T20.041]

There are two other types of morphemes that may suffix to a numeral root instead of a classifier. First, a nominal root can be compounded with the numeral, as in (212), forming a construction that is very rare in discourse but is often produced in elicitation sessions focusing on classifiers on numerals, as is the case with (213) — see Section 2.6. Second, the multiplicative *-'e* suffix can attach to a numeral root, adverbializing it with the meaning '*n* times', as in (214). Finally, a special case where a numeral may occur bare is that of numerals borrowed from Spanish, which are used for numbers from 4 on: they usually do not take classifiers, as in (215), with some exceptions, like (210).[47] Language contact has thus affected the usual distribution of classifiers on numerals.

(212) la ochoyoti

    la   *ocho-**yoti***

    o'clock   eight-**night**

    'eight in the evening' [T28.030]

(213) apipgienu

    *api-**pigienu***

    two-**neck**

    'two necks' [elicited]

---

[47] The same situation has been reported for other Arawak languages, such as Yukuna (Schauer & Schauer 2000:521) and Warekena (Aikhenvald 1998:298–299).

(214)   eto'e vniko eto?
        eto-'e   *v-ni-ko*   *eto*
        one-**MULT**   1PL-eat-ACT   NH
        'Have we eaten that once?' [T27.069]

(215)   te kuatrupuiji to ñi'añura eñi ñi 'moyo
        te   *kuatru=pu=iji*   *to*   *ñi'añura*   *eñi*   *ñi*   *'moyo*
        SUB   four=PFV=RPT   ART.NH   3NH-age-POS   3M   ART.3M   child
        'When the boy was four years old…' (lit. 'When the age of the boy was four…')
        [T19.128]

In addition, there are three roots that are not numerals, strictly speaking, but behave like numerals, in that they normally appear with a classifier.[48] Moreover, just like numerals, they most often take the classifier *-na*, which is then not restricted to its 'human' meaning, as will be discussed below for numerals in general. The first of these numeral-like elements is the interrogative word *oyo* 'where, when, how, how many', which systematically takes classifiers when it has the quantitative meaning of 'how many', as in (216), and only optionally otherwise, as in (217).

(216)   oynapka... ocho diapuka, ocho sache najicho to nakemtonera…
        *oy-**na**=pka*   *ocho*   *dia=puka*   *ocho*   *sache*
        INTER-**CLF:GNR**=DUB   eight   day=DUB   eight   day

        na-jicho   *to*   *na-k-emtone-ra*
        3PL-do   ART.NH   3PL-VZ-work-EV.NZ
        'How many (days) could that be... maybe eight days, during eight days they do the
        work…' [T21.011]

(217)   nwoo'o to nimom'ikyoo'i oypuka takoyemri'i oyim'ipka
        n-woo-'o   *to*   *n-imo-m'i-ko=yo=o'i*
        1SG-want-ACT   ART.NH   1SG-watch-CLF:setting-ACT=FUT=IPFV

        oy=puka   *ta-koyem=ri'i*   *oy-**im'i**=pka*
        how=DUB   3NH-happen=IPFV   how-**CLF:setting**=DUB
        'I want to see how it will be, what it will look like.' [T29.030]

The other two numeral-like entities are the quantifiers *'muiri* 'all' and *'po* 'other'. The root *'muiri* 'all' always occurs with a classifier, as in (218), where it occurs with the classifier *-muri* 'group', yielding *'muiimuri* 'all (the people)'.[49] The root *'po* 'other' also always occurs with a classifier, either the classifier *-muri* 'group' (often followed by the plural suffix), yielding *'pomri(ono)* 'others' as in (219), or the classifier *-na* in its generic sense. The resulting form *'pona* 'other' can be used with either human or nonhuman referents, as in (220) and (221), respectively. It can combine with plural referents, as in (222), but in practice is mostly used for singular referents in the corpus, as in (220) and (221). The numeral-like behavior of *'po* may be related to its reconstructed etymon being the numeral 'one'. The cognate sets for 'one' and 'other' in Arawak languages are clearly related, and have been reconstructed as **ba* and **bayina* (Payne 1991:414–415).[50]

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[48] Several examples of the quantifier *movera* 'many' have been elicited with a classifier, but it is never attested with classifiers in the text corpus.

[49] The form *'muiimuri* is the result of regular syncope, /ɾ/ deletion, and vowel lengthening on the underlying form *'muiri-muri* (Rose 2019a).

[50] Aikhenvald (2020) notes that in the Arawak family, the root meaning 'one' is also used in the meaning of 'other'. Baure, a language closely related to Mojeño, has two cognate forms, *po-* 'other' and *po-*CLF-*š* 'one' (numeral), considered by Danielsen (2007:159) to be adjectives, the latter derived from the former.

(218) 'muiimuri trinranono eno tparaakono.
　　　 *'muii-**muri**　　　 trinran-ono　　 eno　 tparaa-k-ono*
　　　 all-**CLF:group**　　 Trinitario-PL　 3PL　 charge-NPOS-PL
　　　 'The persons in charge were all Trinitarios.' [T24.002]

(219) pno 'pomriono techjirikwono…
　　　 *p-no　　　　　 'po-**mri**-ono　　　　　 t-echji-ri-k-wo-no…*
　　　 DEM-H.PL　　　 other-**CLF:group**-PL　　 3-speak-PLURACT-ACT-MID-PL
　　　 'The others discuss…' [Path.S.023]

(220) taniikworepuiji ñomuire eñi ñi 'pona 'chane
　　　 *ta-nii-k=wore=pu=iji　　　　　 ñ-omuire eñi ñi　 'po-**na**　　　 'chane*
　　　 3NH-eat-ACT=once_again=PFV=RPT 3M-also　 3M　 ART.M other-**CLF:GNR** person
　　　 'It ate this other man too.' [T19.049]

(221) nñompo nkemtone te' to 'pona ranchogra.
　　　 *n-ñom=po　　 n-k-emtone　　 te'　　　 to　　　 'po-**na**　　　 rancho-gra*
　　　 1SG-go=PFV　 1SG-VZ-work　 PREP.NH　 ART.NH other-**CLF:GNR**　 ranch-DIM
　　　 'I went to work in another small ranch.' [T36.028]

(222) enjopri'i 'ponano yporapenviono,…
　　　 *en-jo=pri'i　　　　 'po-**na**-no　　 y-porape-nviono*
　　　 3PL-EXIST=DISTR　　 other-**CLF:GNR**-PL 1PL-brother-KIN.PL
　　　 'There are several other brothers' (who want to create problems).' [T32.011]

Elicitation shows that all classifiers can occur on numerals, with their usual semantics. Example 0 illustrates the numeral 'one' with a sample of classifiers. At the same time, the -*na* classifier, restricted to human referents in other morphosyntactic contexts, associates with any referent when on numerals, and not just with human referents, as exemplified in (224) to (226). Consequently, this morpheme is glossed as a 'generic classifier' when on numerals and numeral-like morphemes. The same referent can thus potentially be categorized either by a specific classifier or the generic one on a numeral.[51]

(223) a. étopi
　　　　　 *éto-**pi***
　　　　　 one-**CLF:fili**
　　　　　 'one (speaking of, for example, a belt, snake, candle, thread, song, or story)'

　　　 b. étogi
　　　　　 *éto-**gi***
　　　　　 one-**CLF:cyl**
　　　　　 'one (speaking of, for example, a tree).'

　　　 c. étosi
　　　　　 *éto-**si***
　　　　　 one-**CLF:sphere**
　　　　　 'one (speaking of, for example, a ball)'

(224) étona
　　　　 *éto-**na***
　　　　 one-**CLF:GNR**
　　　　 'one (speaking of, for example, a person, knife, table, face, or ball)'

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[51] Aikhenvald (1998:298–299) describes a similar situation in the Nazaré dialect of Warekena, where the paradigm of six numeral classifiers alternates with the generic use of the human masculine classifier.

(225)   tyjuukopo takripo etna añu, apina añu.
        ty-juu-ko=po   *ta-ke=ripo*   *et-**na***   *añu*   *api-**na***   *añu*
        3-grow-ACT=PFV   3NH-be_so=PFV   one-**CLF:GNR**   year   two-**CLF:GNR**   year
        'It grows, it is like that one year, two years.' [T21.057]

(226)   to vgiekrupe mopona.
        to   *v-giekrupe*   *mopo-**na***
        ART.NH   1PL-spirit   three-**CLF:GNR**
        'Our spirits (ghosts) are three.' [T30.113]

In discourse there is a strong preference for the generic classifier over any specific classifier. It stands out from the corpus study that *-na* is overwhelmingly the favored classifier on numerals. In the texts, it is found in 244 cases out of the 312 occurrences of classifiers on numerals and numeral-like quantifiers. Only four other classifiers are found in that environment in the text sample, as visible in Figure 8. Only one of them, *-muri* 'group', is found more than marginally.
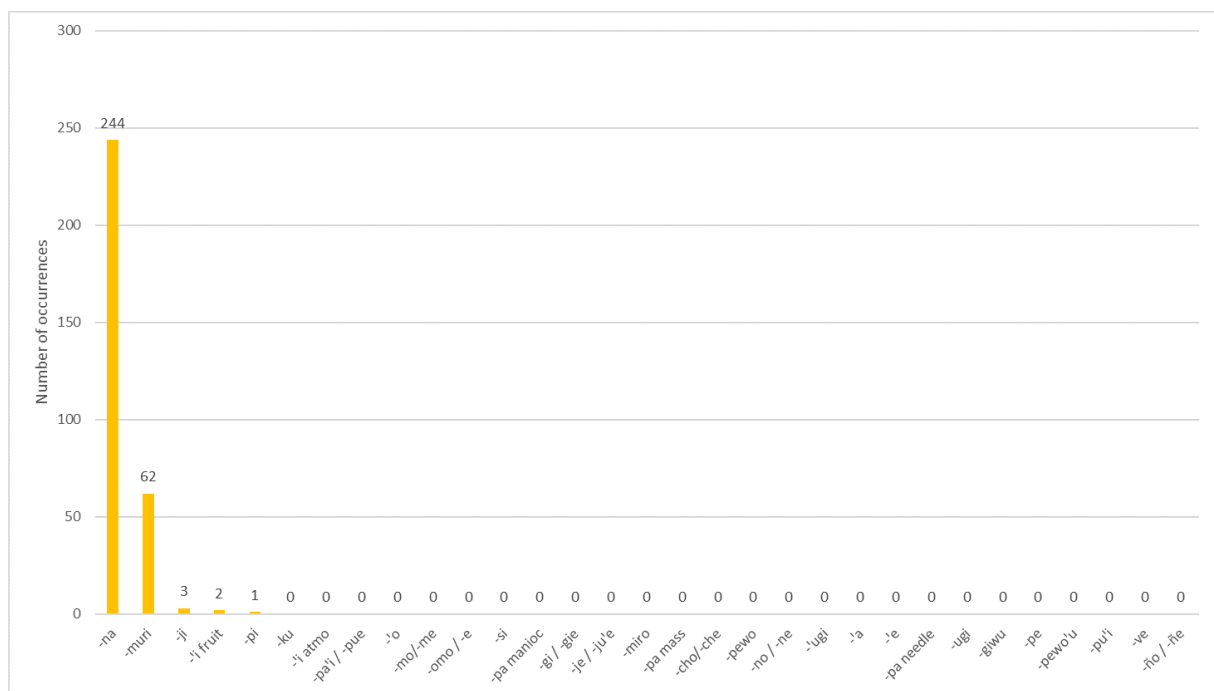
Figure 8. Frequency of individual classifiers on numerals and numeral-like elements

Figure 8 details which classifiers are found on numerals and numeral-like morphemes in the texts. The huge variety of examples with *-na* shows that it can be used for any type of referent, although it is not attested on the numeral-like host *'muiri* 'all'. Figure 8 also shows that the only other classifier that really competes with *-na* CLF:GNR is *-muri* 'CLF:group', mostly found on the *'po* 'other' root, as discussed above. In that very specific environment, *-na* happens to occur mainly with singular referents, and *-muri* only with plural ones: compare (220) with (219).

classifier	gloss	number of occurrences	host	referent
-pi	CLF:fili	1	numeral	rope
-'i	CLF:fruit	2	numerals	oranges, bottles
-ji	CLF:amorph	3	*'muiri* 'all'	fabric, meat, forest
-muri	CLF:group	62	*po* 'other', *'muiri* 'all', numerals	people, animals, artifacts, abstract concepts
-na	CLF:GNR	244	numerals, *po* 'other'	anything

Table 20. Classifiers on numerals and numeral-like quantifiers

The reasons for the use of classifiers other than *-na* on numerals in discourse are not obvious. If we focus on numerals per se, there are only three such cases in the texts and one in a description of a stimulus, presented in (227) to (230). In all four examples, the numeral is not used as a modifier adjacent to the nominal expressing the referent. In example (227), there is a placeholder after the numeral, so that the classifier is informative in the temporary delay of the head noun (here a finite verb nominalized through its position as a head noun in the noun phrase starting with the article *to*). In example (228), the numeral is used as an NP head, and the selection of a specific classifier helps tracking the antecedent of the anaphora by disambiguating the interpretation of the referent: the speaker was talking about both plants and fruits in the preceding stretch of discourse, and the classifier *-'i* for 'sphere with protrusion' solves this ambiguity in favor of 'fruits'. In example (229), the numeral is the predicate and the classifier has a high semantic contribution, because it is used as a measure term. In example (230), the numeral seems to be used as a secondary predicate. The use of the *-mo* 'fabric' classifier makes it clear that the numeral refers to the result of the action described by the verb phrase, i.e., 'cutting in two pieces'. In brief, disambiguation seems to be the motivation for the rare use of a specific classifier on a numeral.

(227)   trotowo to (…) tavechtikpuiji to etopi manje'e taettiti'oo'i
     t-roto-wo   *to*   *ta-vechti-k=pu=iji*   *to*   *eto-**pi***
     3-succeed-MID   ART.NH   3NH-detach-ACT=PFV=RPT   ART.NH   one-**CLF:fili**

     manje'e   *ta-ettit-i'o=o'i*
     PH   3NH-tie-APPL=IPFV
     'They managed to untie the rope.' [T06.030]

(228)   wo takajnono to api'ina
     wo   *t-a-kaj-n-ono*   *to*   *api-**'**-ina*
     NEG   3-IRR-share-1SG-PL   ART.NH   two-**CLF:fruit**-IRR
     'And they don't give me two (fruits) when they come to Trinidad.' [T38.216]

(229)   tyutekpo eto sera 'attaji, to serari'i apimri
     ty-ute-k=po   *eto*   *sera*   *'attaji*   *to*   *sera=ri'i*   *api-**mri***
     3-come-ACT=PFV 3NH silk fabric   ART.NH silk=IPFV two-**CLF:group**
     'The silk arrived, the silk was of two types.' [T25.089]

(230)   ñiyustiko pñigia 'chane pjuena 'attaji apimo
     ñi-yusti-ko *p-ñi-gia*   *'chane* *p-ju-ena*   *'attaji* *api-**mo***
     3M-cut-ACT DEM-M-PROX   person DEM-NH.SG-DIST fabric   two-**CLF:fabric**
     'This man cuts that fabric in two.' [C&B.F.042]

5.2 On nominals

We have seen that nouns rarely bear classifiers. When they do, they can be used as NP heads (231), modifiers (232), or predicates (246). Morphology then attaches to these nouns bearing classifiers as with any nominal stem. This is so for both inflectional suffixes, such as the plural suffix *-(o)no* in (234), and TAME clitics, such as the clitic *=(ri)ch(o)'o* 'still' in (231). In terms of semantics, nominal stems formed with classifiers mostly denote nonhuman entities, as in (231) and (232), but some denote humans, such as (233). Note also that classifiers can be found on proper nouns (235).

(231)   te to chkotemu'rich'o
     te   *to*   *chkote-**mu'**=rich'o*
     PREP.NH   ART.NH   whip-**CLF:setting**=still
     'in the times of slavery' (lit. 'in the times of the whip') [T02.045]

(232)   tyutekpo eto tkijare eto to proremo 'attaji.
     ty-ute-k=po   *eto*   *t-k-ijare*   *eto*   *to*   *prore-**mo***   *'attaji*
     3-come-ACT=PFV 3NH 3-VZ-name 3NH ART.NH flower-**CLF:fabric** fabric
     'What is called the flowery fabric arrived.' [T25.089]

(233)   'chane'oo'iji to ñog'e
        *'chane-**'o**=o'i=ji*   *to*   *ñ-og'e*
        person-**CLF:body**=IPFV=RPT   ART.NH   3M-body
        'His body was a human body'. [T19.070]

(234)   tkowsano te to 'chope smeno, ymomojono, kogiurekono
        t-k-owsa-no   *te*   *to*   *'chope*   *smeno*   *ymomo-**j**-ono*
        3-VZ-village-PL   PREP.NH   ART.NH   big   forest   marsh-**CLF:amorph**-PL

        kogiurek-ono
        small_lake-PL
        'They live in the big forest, in the marshes, in the small lakes.' [T30.056]

(235)   (to piesta) Trinram'i
        (to   *piesta)*   *Trinra-**m'i***
        ART.NH   festival   Trinidad-**CLF:setting**
        'the festival of Trinidad (city)' [T29.071], [T25.103]

Some nominal roots never occur without a classifier. If the nominal root of this type occurs always with the *same* classifier, I do not segment them, since there is no evidence for the root as independent morpheme. In such cases, I consider the given N+CLF combination to be synchronically lexicalized, as with *úkoji* 'cloud' and *wkugi* 'tree'. If nominal roots can occur with various classifiers, resulting in nominal stems referring to entities of different kinds, I consider them to be derivations, as with the 'bee-related' nouns based on *mopo* in (236) (see Section 6.4 about the derivational function of classifiers).

(236)   a.   moposi
             *mopo-**si***
             bee-**CLF:round**
             'bee'

        b.   mopomo
             *mop-**omo***
             bee-**CLF:liquid**
             'honey'

        c.   mopji
             *mop-**ji***
             bee-**CLF:amorph**
             'wax'

The nominals to which classifiers can attach include demonstratives. The corpus shows several examples of the classifier *-mu'i* 'setting' on the adverbial demonstrative *ene* 'here, there, this way', as in (237); (238) is likely an example of the atmospheric classifier on an adnominal demonstrative.

(237)   taa takoyemri'i to enem'iwokouri'i?
        taa   *ta-koyem=ri'i*   *to*   *ene-**m'i**-wokow=ri'i*
        NH.INDET   3NH-happen=IPFV   ART.NH   ADV.DEM-**CLF:setting**-1PL=IPFV
        'Why are we like that?' (lit. 'What happens that we are like that?') [T19.046]

(238)   tako'e pjokni'i, to nim'ogne to nye'e 'chojriikowo pjoka nitorisra.
        ta-ko'e   *p-jo-kni-**'i***   *to*   *n-im-'o-gne*
        3NH-be_like_this   DEM-NH.SG-NVIS-**CLF:atmo**   ART.NH   1SG-watch-ACT-GNR.P.NZ

        to   *n-ye'e*   *'chojriikowo*   *p-jo-ka*   *n-itori-s-ra*
        ART.NH   1SG-GPN   story   DEM-NH.SG-PROX   1SG-live-ACT-EV.NZ
        'That's how it (i.e., life at that time) was, what I have seen, my story of my life.'
        [T15.025]

Importantly, classifiers are also found on some derived nominal expressions. There are three types of nominalizing constructions in Mojeño Trinitario: (i) finite clauses used in the position of a noun, often preceded by a determiner; (ii) nonfinite nominalizations, marked by one of nine nominalizing suffixes; (iii) a rarer nominalizing construction, involving a nominalizer *-rV* and a classifier (see Section 2.11). In the first two types, it is either the whole clause, the verbal word or the verbal stem that is nominalized. Because classifiers are common in verbal stems (Section 5.4), classifiers may appear in these two types of nominalizations, where they behave as classifiers in verbs. Example (239) shows a verb stem including a classifier *nitta-gie* that is nominalized with the nominalizer *-ru*, and marked as possessed with the *na-* prefix. Example (240) shows a verb form *tijromo*, which includes a classifier and is nominalized without dedicated nominalizing morphology, but rather by virtue of occupying the head noun position following a determiner. These two nominalizing constructions also occur without classifiers.

(239)   to nanittagierujono
        to   *na-nitta-**gie**-ru-jono*
        ART.NH   3PL-bite-**CLF:cyl**-SP.PAT.NZ-PL
        'the cylinders (bones) that they had gnawed' [T19.112]

(240)   to tijromo
        to   *t-ijr-**omo***
        ART.NH   3-be_hot-**CLF:liquid**
        'the breakfast/dinner' (lit. 'the hot liquid') [elicited]

In contrast, the contribution of classifiers is crucial to the third type of nominalizing construction. These nominalizations are marked with the semantically empty nominalizer *-rV* followed by a classifier, whose semantics crucially contributes to the meaning of the derived nominal stem. The basic root in such derived nominal stems can be of many types: a noun, as in (241), a verb, as in (242), an adjective, as in (243), a demonstrative, as in (244), and even the negative auxiliary, as in (245). In this construction, the classifier functions as a nominal marker. It plays an important role in facilitating the flexibility among parts of speech by indicating the nominality of the derived stem, of which it is the semantic head.

(241)   eto pjuena sachere'yore
        eto   *p-ju-ena*   *sache-re-**'**=yore*
        3NH   DEM-NH.SG-DIST   sun-NZ-**CLF:atmo**=FUT
        'This is the dry season (the time of the sun).' [T14.021]

(242)   tejapuekpo te pjo sepajiimo.
        t-eja-pue-k=po   *te*   *p-jo*   *s-epaji-i-**mo***
        3-sit-CLF:ground-ACT=PFV   PREP.NH   DEM-NH.SG   3F-lie_down-NZ-**CLF:fabric**
        'She sits on the blanket.' [Path.C.074]

(243)   je'e, titowopo pjoka 'chosioropi, rusrupaya.
        je'e   *t-ito-wo=po*   *p-jo-ka*   *'chosi-o-ro-**pi***   *rusrupaya*
        VALD   3-finish-MID=PFV   DEM-NH.SG-PROX   old-?-NZ-**CLF:fili**   thank_you
        'All right, the old story is over, thank you.' [T39.011]

(244)   nawoo'oo'i to napuegne'a pjokniripii'i
        na-woo-'o=o'i   *to*   *na-puegne'-a*   *p-jo-kni-ri-**pi**=i'i*
        3PL-want-ACT=IPFV   ART.NH   3PL-follow-IRR   DEM-NH.SG-NVIS-NZ-**CLF:fili**=IPFV
        'They want to follow this topic (of the elections).' [T29.076]

(245)   te wo'iripi
        te   *wo'i-ri-**pi***
        PREP.NH   NEG-NZ-**CLF:fili**
        'about negation' (Ibáñez Noza et al. 2007:216)

Two morphonological observations can be made regarding classifiers in this third type of nominal-izing construction. First, the *-rV* suffix harmonizes with the preceding underlying vowel, as visible by comparing its surface form in the different examples. Second, because of syncope and consonant se-quence repair (see Sections 2.3 and 2.4), the *-rV* suffix sometimes surfaces as vowel lengthening only, as in (242) and (246). Another interesting point is that the classifier *-pi* 'filiform' is particularly fre-quently used in this construction. It then often categorizes abstract entities related to speech and cogni-tion, as well as events, as in (247). In example (245), the classifier *-pi* is used with a nominalizer on the negative auxiliary to derive a noun stem for a linguistic concept, a neologism found in the bilingual grammar by Ibañez Noza et al. (2007:216).

(246)   eti wosareenano
        eti   *wosare-e-**na**-no*
        2PL   village-NZ-**CLF:H**-PL
        'You are villagers.' [T01.009]

(247)   nitkowre to v'animárapi
        n-it-ko=wre   *to*   *v-'animá-ra-**pi***
        1SG-know-ACT=once_again   ART.NH   1PL-host-NZ-**CLF:fili**
        'I also know how to host/facilitate (religious ceremonies)'. [T09.026]

A final example comes from another neologism for a grammatical concept from the bilingual gram-mar by Ibáñez Noza et al. (2007:120): *juiti-mu'i* 'present tense'. This nominal is derived from the adverb *juiti* 'now, today' with the assistance of the classifier *-mu'i* 'setting', but without a nominalizer.

Figure 9 illustrates the frequency of different classifiers on nominals. The classifiers *-pi*, *-mu'i* and *-ji* are the most frequent ones, probably due to the extensions yielding abstract meanings for *-mu'i* and *-pi*, and the broad meaning of *-ji* 'amorphous'. The classifier *-pa* 'manioc' is also fairly frequent, essentially due to its presence on the nominal form *kuj-pa* manioc-CLF:manioc for 'manioc root'. Other classifiers found on nominals are mainly shape classifiers.

Figure 9. Frequency of individual classifiers on nominals

5.3 On adjectives

Classifiers are regularly found on adjectives (on about a quarter of them in the text corpus), but adjectives are rarely found in discourse, so that the ADJ-CLF construction is rather rare, with only 46 examples in the text corpus.

Adjectives bearing a classifier can be used as a modifier, as in (248); an NP head, as in (249); or a predicate, as in (250). In the latter case, the classifier categorizes the subject of the adjectival predicate.

(248) su 'seno simoorokoo'i to chopegie wkugi

su	*'seno*	*s-imoo-ro-ko=o'i*		*to*	*chope-**gie***	*wkugi*
ART.F	woman	3F-watch-PLURACT-ACT=IPFV		ART.NH	big-**CLF:cyl**	tree

'The woman is watching the big tree.' [Path.M.063]

(249) nanosipo nae pno 'chi'cho'ono

n-a-nosi=po	*na-e*	*p-no*	*'chi'cho-**'o**-ono*
1SG-IRR-stay=PFV	3PL-PREP	DEM-H.PL	little-**CLF:body**-PL

'I am going to stay with the children.' (lit. '…the ones with little bodies') [T29.015]

(250) pnokro 'chañono te mpeno 'chopemuriono

p-no-kro	*'chañ-ono*	*te*	*m-peno*	*'chope-**muri**-ono*
DEM-PL-POT.LOC	person-PL	PREP.NH	1SG-house	big-**CLF:group**-PL

'The people in my house are numerous.' [T19.007]

Figure 10 shows that only a dozen classifiers appear on adjectives in the text corpus. The numbers are too small to comment on, especially since, in the corpus this study is based on, most of these classifiers appear on only one particular adjective each. I take this as mostly due to the limitations of the corpus rather than to lexical preferences, since the same ADJ-CLF combinations often occur within a given text. For example, in one text, there are six occurrences of the classifier *-'i* 'atmospheric', which are all found on the adjectival root *mraka* 'strong', serving to characterize a strong wind. The only clear result that can be obtained from the corpus is that the root *'chope* 'big' is the adjectival root most commonly found with a classifier, in 21 out of the 40 examples in the text corpus.[52] It is exemplified in (248) and (250).

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[52] Aikhenvald (2007:488) observes that in Baniwa, another Arawak language with classifiers, "the dimension adjective *maka* 'big, large' occurs with a large array of form and shape classifiers, thus effectively making up for the lack of adjectives such as 'curved' or 'round' in the language". In Mojeño Trinitario, this observation applies more strikingly to the verbal root *u* 'be large', which can be translated as 'big, long, large, tall' depending on the context (see Section 5.4). Nevertheless, note that the combination *'chope-muri* big-CLF.group is used to render 'numerous'.
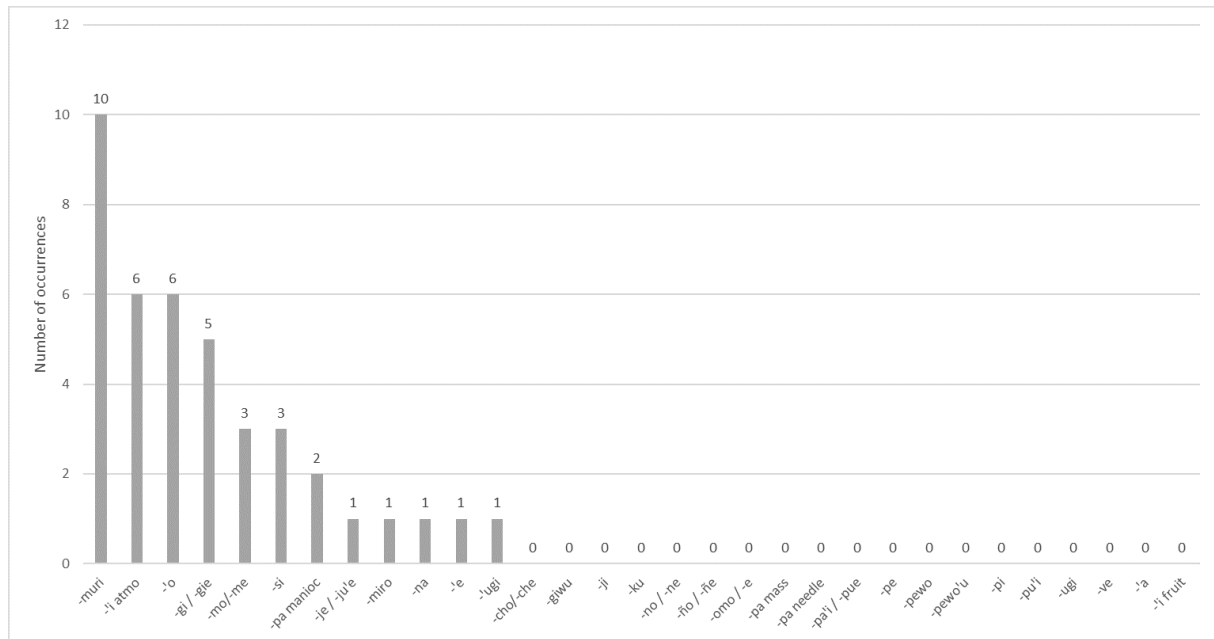
Figure 10. Frequency of individual classifiers on adjectives

5.4 In verbal stems

Among the different parts of speech, verbs are the most common hosts for classifiers in discourse, even though only a small proportion of verbs actually hosts classifiers in the corpus (see Table 19). Classifiers in verb stems can classify three different types of participants, the grammatical or semantic role of which is not specified by the structure. On intransitive verbs, classifiers can classify the S of stative or active stems, as in (251) and (252), respectively; or a peripheral participant, as in (253). On transitive verbs, they can either classify the O argument, as in (254), or a peripheral participant, as in (255). Denominal verbs can also take a classifier, as in (256). Classifiers in the verb stem can sometimes lead to a change of valency. This will be addressed in Section 6.6.

> (251)   a. tsisono
>   *t-siso-**no***
>   3-be_black-**CLF:back**
>   'It is black (speaking, for example, of a horse, or a caiman).'
>
>   b. tsiso'o
>   *t-siso-**'o***
>   3-be_black-**CLF:body**
>   'It is black (speaking, for example, of a cat, or an armadillo).'
>
>   c. tsisopa
>   *t-siso-**pa***
>   3-be_black-**CLF:mass**
>   'It is black (speaking, for example, of sand, or rice hulls).'
>
>   d. tsisope
>   *t-siso-**pe***
>   3-be_black-**CLF:blade**
>   'It is black (speaking, for example, of a saw).'

(252) a. tewarasko
       *t-ewara-**s**-ko*
       3-break-**CLF:**sphere-ACT
       'It broke (a stone).'

     b. tewara'ako
       *t-ewara-**'a**-ko*
       3-break-**CLF:**ovoid-ACT
       'It broke (an egg).'

     c. tewaracheko
       *t-ewara-**che**-ko*
       3-break-**CLF:**plank-ACT
       'It broke (a plank, a wall).'

     d. tewarapeko
       *t-ewara-**pe**-ko*
       3-break-**CLF:**blade-ACT
       'It broke (the plate).'

(253) a. tejapuekompo te to 'pog'e
       *t-eja-**pue**-ko-m=po*   *te*   *to*   *'pog'e*
       3-sit-**CLF:**ground-ACT-PL=PFV   PREP.NH   ART.NH   earth
       'They sat on the ground.' [T24.100]

     b. tejamereko te pjo ñiye'e estera pñi 'chane
       *t-eja-**me**-re-ko*   *te*   *p-jo*   *ñi-ye'e* *estera*
       3-sit-**CLF:fabric**-PLURACT-ACT   PREP.NH   DEM-NH   3-GPN mat

       p-ñi   *'chane*
       DEM-M   person
       'The man sits on his mat.' [Path.S.051]

     c. nejajko to tyuraji
       *n-eja-**j**-ko*   *to*   *tyuraji*
       1SG-sit-**CLF:amorph**-ACT   ART.NH   mud
       'I sit in the mud.' [elicited]

(254) a. netchuchusiko
       *n-etchu~chu-**si**-ko*
       1SG-mince~RED-**CLF:sphere**-ACT
       'I am mincing (an onion).'

     b. netchuchujiko
       *n-etchu~chu-**ji**-ko*
       1SG-mince~RED-**CLF:amorph**-ACT
       'I am chopping up (a branch).' [elicited]

(255) nessupueko te pog'e to 'saype
       *n-essu-**pue**-ko*   *te*   *pog'e*   *to*   *'saype*
       1SG-rub-**CLF:ground**-ACT PREP.NH earth   ART.NH   machete
       'I am cleaning the machete on the ground.' [elicited]

(256)   nkiñesi
           *n-k-iñe-**si***
           1SG-VZ-creature-**CLF:sphere**
           'I have lice (on my head).' [elicited]

The absolutive basis for the association of the classifier with an NP expressing the categorized referent has for long been recognized as typical in the typological literature. Nevertheless, the categorization of peripheral participants by classifiers is supposed to be cross-linguistically rare. Aikhenvald (2000:162) states the following: "Verbal classifiers signal the presence of a surface NP. In every language this NP may be in S and in O function, that is, they operate on an 'absolutive' basis (Keenan 1984). In a few languages, verbal classifiers can also refer to peripheral arguments". From that perspective, it seems important to evaluate the importance, within the Mojeño Trinitario language, of that cross-linguistically rare type of association. Table 21 shows the distribution of the function of the noun phrase associated with the classifiers occurring in the 83 verbs of the subsample of seven texts. While the O function is by far the most common, the peripheral participants represent a good share of the classified referents.

function	Mojeño Trinitario	typology
S of intransitive verbs	23%	cross-linguistically common
O of transitive verbs	49%	cross-linguistically common
peripheral participant	28%	rarely described

Table 21. Functions of NPs expressing referents categorized by classifiers in verbs

The peripheral participants that classifiers associate with generally express a location: the ground, as in (253); the source, as in (257); or the goal, as in (258), usually depending on the semantics of the verb. Additionally note that with the same verb and the same classifier, the interpretation of the semantic role of the participant expressed by the classifier may vary depending on the context, as exemplified with the classifier for 'bare ground', indicating the source of the motion event in (259), and to both the source and the goal of flying in (260).

(257)   tyuchjiko su 'seno te to smeno
           *ty-uch-**ji**-ko*   *su*   *'seno*   *te*   *to*   *smeno*
           3-go_out-**CLF:amorph** ART.F   woman   PREP   ART.NH   woods
           'The woman goes out of the woods.' [Path.M.039]

(258)   ene tyompo te smeno masiopjechpo
           ene   *t-yom=po*   *te*   *smeno*   *ma-siop-**je**-ch=po*
           and   3-go=PFV   PREP.NH   forest   3M-enter-**CLF:inside**-ACT=PFV
           'And he went within the forest, he entered deep into it.' [T08.011]

(259)   tyoropueko
           *ty-oro-**pue**-ko*
           3-fly-**CLF:ground**-ACT
           '(the plane) is rising to fly' [elicited]

(260)   tyororopueko
           *ty-oro-ro-**pue**-ko*
           3-fly-RED-**CLF:ground**-ACT
           'it goes flying and landing' [elicited]

Note that the functions of the participants that the classifier on verbs associate with correspond closely to the semantics of noun incorporation (presented in Section 2.9.3). The following three pairs of

examples illustrate a nominal root and a classifier on a verb, and associated with an S argument in (261) and (262); an O argument in (263) and (264); and a peripheral participant in (265) and (266).

(261) titomuig'e   **V-N(S)**
       *t-ito-**muig'e***
       3-be_bare-**back**
       'His/her/its back is bare.' [elicited]

(262) titoji   **V-CLF(S)**
       *t-ito-**ji***
       3-be_bare-**CLF:amorph**
       'It is bare (e.g., a tree without fruits).' [elicited]

(263) tvo'iriko   **V-N(O)**
       *t-v(e)-**o'i**-ri-ko*
       3-take_out-**fruit**-PLURACT-ACT
       'He collects fruits.' [elicited]

(264) psamuekyore to neesa   **V-CLF(O)**
       *p-samu-**e**-k=yore*   *to*   *n-ee-sa*
       2SG-feel-**CLF:liquid**-ACT=FUT   ART.NH   1SG-drink-HAB.P.NZ
       'You are going to taste my manioc beer.' [T35.020]

(265) tkojmagño   **V-N(OBL)**
       *t-ko-jma-**gño***
       3-VZ-be_sick-**ear**
       'S/he is sick (in the ear).' [elicited]

(266) nkiñesi   **V-CLF(OBL)**
       *n-k-iñe-**si***
       1SG-VZ-creature-**CLF:sphere**
       'I have lice (on the head)' [elicited]

Classifiers and incorporated nouns indeed show strong similarities. They are nevertheless distinguishable first in that only nouns — but not classifiers — can be used as the head of a noun phrase (Section 3.3); second, because classifiers and incorporated nouns can co-occur (Section 3.5); and third, because their functions differ. In particular, noun incorporation in Mojeño Trinitario does not have the 'classifying function' of noun incorporation described by Mithun (1984), since, in contrast to classifiers, incorporated nouns do not co-occur with co-referential external nouns within the same clause in Mojeño Trinitario (see Rose & Van linden 2022).

Now back to classifiers. It is important to note combining the very same verb root, different classifiers can indicate referents expressed by noun phrases in different functions. Example (267) illustrates this with the intransitive verb *uchu* 'go out': in (267a), the *-si* for 'sphere' classifies the S argument, and in (267b), the *-ku* for 'path' classifies the source of the motion.

(267) a. tyuchsiko
           *ty-uch-**si**-ko*
           3-go_out-**CLF:sphere**-ACT
           'He puts his face out.' [elicited]

       b. tyuchku'ompo
           *ty-uch-**ku**-ko-ono=po*
           3-go_out-**CLF:path**-ACT-PL=PFV
           'They withdrew (from a contract, a job…).' [elicited]

And conversely, the very same classifier can occur with different verb roots and be associated with NPs in different functions. Examples (268) to (270) show the classifier *-e* 'liquid' on various transitive verbs: it is in turn associated with a patientive object, a locative object, or a location that is distinct from the patientive object.

(268) psamuekyore to neesa
   *p-samu-**e**-k=yore*   *to*   *n-ee-sa*
   2SG-feel-**CLF:liquid**-ACT=FUT   ART.NH   1SG-drink-HAB.P.NZ
   'You are going to taste my beer.' [T35.020]

(269) vianaegia'e to kjokrereku
   *vi-ana-**e**-ko-a-'e*   *to*   *kjokre-re-ku*
   1PL-cross-**CLF:liquid**-ACT-IRR-?   ART.NH   river-NZ-CLF:path
   'Let's cross the riverbed.' [T17.014]

(270) tyoktáyeko jma mariono
   *t-yoktáy-**e**-ko*   *j-ma*   *mari-ono*
   3-step_on-**CLF:liquid**-ACT   DEM-NH.PL   stone-PL
   'He steps on the rocks (in the water).' [Path.S.042]

Finally, there are some observations regarding the distribution of classifiers with verbal stems that merit discussion. First of all, some verb roots require a classifier in order to form a stem that can be used in discourse. This is the case, for instance, of *tupri* 'be in the middle' or *u* 'be large', exemplified with various classifiers in (271). In cases such as that of *u* 'be large', this may be due to the fact that verbal stems must be at least bisyllabic, even though a classifier is still attested on *u* 'be large' when it incorporates a noun, as is the case in (271d & e). A second observation concerns the classifier *-na*, which is noticeably found only on stative intransitive verbs, as in (271f) or (272). It is remarkably absent on active verbs, whether intransitive or transitive. Active verbs are morphologically very rich in Mojeño Trinitario, and constitute the environment where classifiers are specifically stem-internal suffixes. Nonetheless, *-na* is never attested in that position.[53] One might think that this is a consequence of the humanness of the core participants already being marked on these verbs by the person indexes, but this is not often the case. Third-person objects are not indexed on the verb at all, and third-person subjects are marked with a set specifying gender/number only on transitive verbs, and then only if the object is also a third person (Rose 2011). This is a very noticeable and unique defective distribution for a classifier.

(271) a. tyu'i
        *ty-u-**'i***
        3-be_large-**CLF:fruit**
        'It is big (the gourd).' [elicited]

     b. tyupi
        *ty-u-**pi***
        3-be_large-**CLF:fili**
        'It is long (e.g., a song).' [elicited]

     c. tyu'a
        *ty-u-**'a***
        3-be_large-**CLF:ovoid**
        'It is big (the egg of the caiman)' [elicited]

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[53] A tentative explanation for the absence of classifier *-na* in that position would be that the classifier *-na* comes from the Proto-Arawak animate/human plural **-na/*-ni* (Aikhenvald 1999:84), whose original position in active verbs was possibly too distant from that of other sources of classifiers for it to have formed part of that paradigm. This historical hypothesis needs to be investigated further.

    d. tyupajiimama jmaka 'chane, manje'e... ene titosiwre
       *ty-u-**pa**-jiimama*   *j-ma-ka*   *'chane*
       3-be_large-**CLF:needle**-beard   DEM-M-PROX   person

       manje'e   *ene*   *t-ito-si=wre*
       PH   and   3-be_bare-CLF:sphere=once_again
       'This man has a long beard, um... and he is bald.' [T40.043]

    e. tyumomu'ri'i
       *ty-u-**mo**-mu'=ri'i*
       3-be_large-**CLF:fabric**-dress=IPFV
       'Their tipoy was long.' [T25.099]

    f. tyuna
       *ty-u-**na***
       3-be_large-**CLF:H**
       'S/he is big.' [elicited]

(272) tyjopuna
      *ty-jopu-**na***
      3-be_white-**CLF:H**
      'She is white.' [T03.004]

The reduced distribution of *-na* 'human' is evident in Figure 11, which depicts the frequency of individual classifiers on verbs, and shows this classifier *-na* is among the less common classifiers on verbs. Figure 11 very clearly shows that almost all classifiers are found on verbs in the corpus, many more than are found on numerals, nominals, and adjectives. Verbs are therefore the type of host that combines with the widest range of classifiers. It combines more often with shape classifiers, and among them, more often with those that easily express peripheral participants like location, such as *-ku* 'path', *-ji* 'amorphous', *-'i* 'atmospheric', *-pa'i ~ -pue* 'ground', and *-omo ~ -e* 'liquid'. This can be partly explained by the fact that about a quarter of the classifiers on verbs associate with peripheral participants.
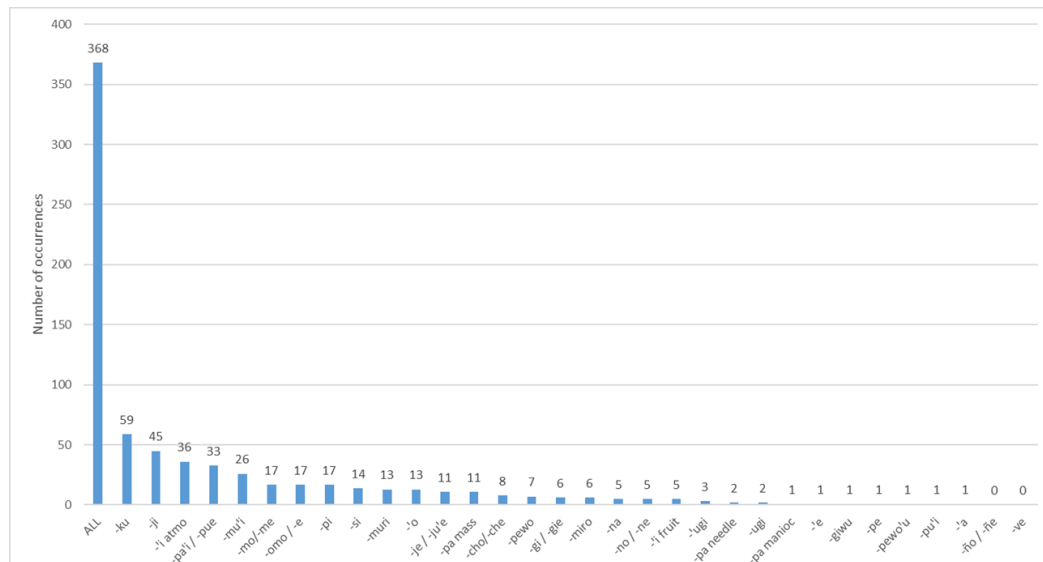
Figure 11. Frequency of individual classifiers on verbs

6
Functions of the classifiers

This section aims at specifying the functions of Mojeño Trinitario classifiers, against the background of the general literature on classifiers. Descriptions of classifier systems are often very brief when it comes to this topic, because it is taken for granted that the major function of classifiers is to classify. The exploration of various functions of classifiers in individual languages is rare, and even rarer if one considers only studies grounded in a quantitative analysis of corpus data. The present section shows that the topic of the functions of classifiers is a particularly rich topic, worthy of detailed descriptions based on corpus studies.

The general literature on classifiers mentions the following functions for classifiers: agreement, individuation, reference-tracking, and building of the discourse structure (Aikhenvald 2000, inter alia). Importantly, François (1999) argues that classifiers have a 'classifying effect', but that categorization is not their primary function, just like gender encoding is not the main function of articles in Romance languages. I therefore call this set of suffixes "classifiers" not because categorization is their primary function, but because semantic categorization is what unites the paradigm, beyond its different morpho-syntactic loci and its multiple functions.

This section first provides arguments for why I do not consider agreement to be a function of Mojeño Trinitario classifiers in Section 6.1, and why the notion of individuation also does not seem particularly relevant in Section 6.2. I will then discuss the four functions that Mojeño Trinitario classifiers have: qualification (Section 6.3), derivation (Section 6.4), reference management and identification (Section 6.5), and finally applicativization (Section 6.6). The main finding is that the most salient functions of classifiers in Mojeño Trinitario are qualification and discourse management. Another important finding, first published in Rose (2019b), is that classifiers can be involved in valency-changes mechanisms (creating applicative constructions in Mojeño Trinitario). And a general observation is that this variety of functions operate at very different levels: qualification in semantics and discourse, derivation in morphological word-formation, reference management and identification in discourse, and valency-changes in syntax. This makes the classifiers a pervasive and multifunctional device in the different aspects of the Mojeño Trinitario grammatical system.

Before we dive into the possible functions of the Mojeño Trinitario classifiers, it is worth addressing the question of how the different functions of classifiers associate with the different environments of classifiers in multilocus classifier systems. Table 22 summarizes how, in my view, different functions of Mojeño Trinitario classifiers associate with the parts of speech of their hosts. What I label here 'default use' is the obligatory presence of a classifier on numerals, especially when the generic classifier -*na* is used. This happens when the speaker does wish to employ another morpheme on the numeral, or a classifier with a qualificative function: -*na* then fills the relevant position without much information weight. This use is specific to classifiers on numerals, just as the different discourse functions and the applicative function are restricted to classifiers on verbs. The qualifying function of classifiers is possible on all types of hosts, and the derivational use of classifiers has been attested on all types of hosts but numerals.

	numerals	nominals	adjectives	verbs
qualification	yes	yes	yes	yes
default use	yes			
derivation		yes	yes	yes
discourse				yes
applicative				yes

Table 22. Association of functions of Mojeño Trinitario classifiers with the part of speech of their host

Table 23 summarizes the results of an exploration of the seven-text sample on the relative frequency of these different functions of classifiers in speech (rows of Table 23), in association with the type of

host of the classifiers (columns of Table 23). In this text sample, the most frequent function is the discourse function of classifiers, found on verbs (the most frequent host). Then comes the derivational use of classifiers, mostly found on nominals (nouns and demonstratives), but also to a lesser degree on verbs and adjectives. A third important function of classifiers is their qualifying use, mostly found on nouns, but also on adjectives and numerals. Finally, marginal uses of classifiers are also found in this sample. There is one case of the applicative use of classifier (on a verb), and two instances of 'dubitative' use of the classifier *-mu'i* 'setting' on a demonstrative and the similarity root *kuti* 'be like' (see Section 4.1.10).

	numerals	nominals	adjectives	verbs	*kuti*	total
qualification	3	16	6			25
default	34					29
derivation		21	3	6		30
discourse				76		76
applicative				1		1
dubitative		1			1	2
total	37	38	9	83	1	168

Table 23. Functions of classifiers in the seven-text sample

6.1 Not an agreement device

In Mojeño Trinitario, nouns are not uniquely categorized, as is typically expected in noun class systems (Grinevald & Seifart 2004). Instead, the system shows variable categorization, i.e., different classifiers provide information about different possible referents of the same noun, as in (273). Even nouns which referents are prototypical members of a category can still associate with other classifiers. For example, human referents can be associated to *-na* 'human', *-'o* 'body', *-muri* 'group', or *-mo* 'fabric' (if they are skinny). The house or different aspects of it can be classified with *-si* 'sphere', *-pa'i* 'ground', *-ju'e* 'interior' or *-ku* 'path'. This observation leads to the conclusion that Mojeño Trinitario classifiers categorize particular referents, rather than nouns.

(273) a. térepi
           tére-pi
           belt-CLF:**fili**
           'belt (typically a leather one)'

       b. téremo
           tére-mo
           belt-CLF:**fabric**
           'woven belt'

Because there is no automatic covariance between a controller and a target, the Mojeño Trinitario classifier system is not an agreement system. Indeed, "the term agreement commonly refers to some systematic covariance between a semantic or formal property of one element and a formal property of another" (Steele 1978:610; cited in Corbett 1991:105). Also, agreement is supposed to be redundant rather than informative (Corbett & Fedden 2016:498). In Mojeño Trinitario, we will now see how the use of classifiers is informative: in that respect, they are more lexical than grammatical. When selecting a classifier, speakers select the characteristics of the referent that are important in the context of the utterance. Because a particular noun can refer to quite different referents, the same noun can associate with different classifiers. For example, the noun *tawo*, to which I have given the general gloss 'branch', can refer to a tree branch or to antlers, and it is classified differently depending on its meaning in context, as shown by the comparison of (274) and (275). As it does not systematically trigger the same classifier, agreement is not involved here. Similarly, a noun can also be categorized by different classifiers because the shape of its referent has been modified. This is shown by (276), where two different classifiers associate with tobacco: *-ji* 'amorphous' and *-omo* 'liquid'. The classifier *-ji* in the verb indeed indicates

the tobacco leaves as they are being chewed (i.e., a small pile of leaves in the mouth of the healer). The classifier -*omo* on the noun indicates that tobacco is in the form of a liquid (i.e., tobacco juice that results from the chewing of the leaves). The switch in classifiers corresponds to different properties of the tobacco through time: as the leaves are chewed, they yield tobacco juice. Interestingly, this example shows that the linguistic element with which the classifier -*ji* associated is the root *saware* (tobacco), not the whole word *sawariomo*, because -*ji* could not be associated with a liquid, and semantically, the liquid could not have been chewed.

(274)   ene mauriko te to tatáwogi to wkugi.

ene	*ma-(o)u-ri-ko*	*te*	*to*	*ta-táwo-gi*	*to*	*wkugi*
there	3M-be_at-PLURACT-ACT	PREP.NH	ART.NH	3NH-branch-**CLF:cyl**	ART.NH	tree

'There he is, in the branches of the tree.' [T18.031]

(275)   wo muem'a etjoripka to tatáwoji taji'u to… to kjowo.

wo	*mu-em-'-a*	*et-jo=ripka*	*to*	*ta-táwo-ji*
NEG	3M-see-ACT-IRR	3NH-EXI=DUB	ART.NH	3NH-branch-**CLF:amorph**

ta-ji'u	*to*	*kjowo*
3NH-horn	ART.NH	deer

'He did not see that they might be the antlers of the deer.' [T18.039]

(276)   nescho to sawariomo, étona kchara to sawariomo to nnujre.

n-escho	*to*	*sawari-omo*	*éto-na*	*kchara*
1SG-give_drink	ART.NH	tobacco-**CLF:liquid**	one-CLF:GNR	spoon

to	*sawari-omo*	*to*	*n-nu-j-re*
ART.NH	tobacco-**CLF:liquid**	ART.NH	1SG-chew-**CLF:amorph**-SP.PAT.NZ

'I gave her some tobacco juice to drink, one spoon of tobacco, the one that I had chewed.' [T12.014]

Furthermore, different classifiers can also be used to highlight different aspects of the very same referent. Classifiers therefore participate in directing the attention of the hearer towards particular properties of the referent that speakers deem important to highlight (see Section 6.3). In (277), two different classifiers categorize the same referent 'tree' on the same verb 'be bare'. The addressee's attention is directed by the -*gi* 'cylindrical' classifier towards the trunk of the tree in (277a), and by the -*si* 'spherical' classifier to its crown in (277b). Example (97) provides another illustration of a single referent being conceptualized as pertaining to different categories. In (278), the manioc flour is first categorized with -*ji* 'amorphous', indicating that it forms a dough rather than its usual powder-like texture, and later categorized with -*pa* 'manioc' (or possibly -*pa* 'mass'), referring to its original plant source (or its powder-like texture).

(277)   a. títogi to wkugi

t-íto-gi	*to*	*wkugi*
3-be_bare-**CLF:cyl**	ART.NH	tree

'The trunk of the tree is bare.'

b. títosi to wkugi

t-íto-si	*to*	*wkugi*
3-be_bare-**CLF:sphere**	ART.NH	tree

'The branches of the tree are bare.' [elicited]

(278)   te to etopo to jarínaji, manje'e… ene ssuupas'o.

te	to	eto=po	to	jarína-**ji**
PREP.NH	ART.NH	PRO3=MOT.PRES	ART.NH	flour-**CLF:amorph**

manje'e	ene	s-suu-**pa**-s-'o
HES	DEM	3F-toast-**CLF:manioc**-ACT-APPL

‘When there is flour dough, um... with this she toasts it.’ [T21.077]

A second argument against the analysis of Mojeño Trinitario classifiers as forming an agreement system is that classifiers are never really obligatory (Section 5.1). Table 19 above was evaluating how often classifiers are found on hosts of different parts of speech, and on none of these are they systematically found. Their highest frequency of use is on numerals, where they are obligatory under certain circumstances. However, we have seen that on numerals it is essentially the generic classifier *-na* that is used for all types of nouns and referents, so that it is difficult to speak of agreement in absence of formal variance. Let us rather observe the use of classifiers on adjectives, a typical locus for agreement. Adjectives are few in the lexicon (61 adjectives / 2958 lexical roots in my lexical dataset) and not frequently used in discourse (45 adjective tokens occur in the 368 sentences of the seven-text sub-sample). In the 48-text corpus, there are 416 occurrences of adjectives, but only 40 examples of an adjective carrying a classifier. Adjectives are used as noun modifiers, predicates and NP heads in Mojeño Trinitario. As stated in Section 5.3, they can take classifiers in each of these functions. Among the 40 combinations of adjective and classifiers, 11 modify a noun, as in (279), 14 are used as an NP head referring anaphorically to a noun introduced previously in the discourse, as in (280), and 20 are predicative adjectives, but of these, only 13 have their subject expressed as a noun phrase, as in (281). This means that in only about half of the cases is the associated noun present in the same clause as the adjective bearing the classifier. At any rate, the important point is that most adjectives do not take a classifier, whether they function as a modifier, as in (282); a predicate, as in (283); or as an NP head, as in (284).

(279)   su 'seno simoorokoo'i to chopegie wkugi

su	'seno	s-imoo-ro-ko=o'i	to	**chope-gie**	wkugi
ART.F	woman	3F-watch-PLURACT-ACT=IPFV	ART.NH	**big-CLF:cyl**	tree

‘The woman is watching the big tree.’ [Path.M.063]

(280)   'chopegie etjoo'i

'chope-gie	et-jo=o'i
big-CLF:cyl	3NH-EXIST=IPFV

‘There are some big ones.’ [talking about trees] [T21.005]

(281)   'chopemuurich'o to vsufrichwo te to vitorisra, viti, 'chaniono trinranono

'chope-muu=rich'o	to	v-sufrich-wo	te	to	v-itori-s-ra
big-CLF:group=still	ART.NH	1PL-suffer-MID	PREP.NH	ART.NH	1PL-live-ACT-EV.NZ

‘It was our suffering in our lives.’ [T25.023]

(282)   nnosyore te pjoka 'chope wkugi

n-nos=yore	te	p-jo-ka	**'chope**	wkugi
1SG-stay=FUT	PREP.NH	DEM-NH-PROX	**big**	tree

‘I am going to stay in this big tree.’ [T19.054]

(283)   te 'chopepo une te pjoka Trinra,…

te	**'chope**=po	une	te	p-jo-ka	Trinra
SUB	**big**=PFV	water	PREP.NH	DEM-NH-PROX	Trinidad

‘When there was a big flood here in Trinidad…’ [T09.010]

(284) wich'o naema no 'chosiono.
     wi=ch'o   *na-a-ema*   *no*   **'chosi**-*ono*
     NEG=still   3PL-IRR-be_stingy   ART.PL   **old**-PL
     'The people from long ago were not stingy yet.' [T27.017]

Now as far as classifiers in verbs are concerned, they may co-occur with the noun phrase encoding the referent that they categorize, as in (285), a structure that looks like agreement between the verb and one of its arguments. However, there may also be no overt noun phrase for the referent categorized by the verb classifier, as in the first clause of (286); or there may be a noun phrase but no classifier, as in (287); or both may be absent, as in the second clause of (286). The distribution of these alternatives in discourse will be discussed in Section 6.3. For now, the most important point is that core arguments are not systematically marked on the verb with classifiers, and this absence of systematicity again calls against an analysis in terms of agreement.

(285) to tagiigire, tayukjo'iko pjuena to'i
     to   *ta-giigire,*   *ta-yukjo-**'i**-ko*   ***p-ju-ena***   ***t(a)-o'i***
     ART.NH 3NH-arrow 3NH-pierce-**CLF:fruit**-ACT   **DEM-NH.SG-DIST**   **3NH-fruit**
     'The arrow, it pierces that fruit.' [Loc.L.030]

(286) schuno'ikpo su mayeno. tnikono
     *s-chuno-**'i**-k=po*   *su*   *ma-yeno.*   *t-ni-ko-no.*
     3NH-boil-**CLF:fruit**-ACT=PFV   ART.F   3M-wife   3-eat-ACT-PL
     'His wife boils it (the bird). They eat it.' [T21.089]

(287) sve'o pjo kanasto
     s-ve-'o   *p-jo*   *kanasto*
     3F-take-ACT   DEM-NH.SG   basket
     'She takes the basket.' [Path.C.024]

To conclude, because the categorization of a given noun (or even the same referent) is variable, and because classifiers are not obligatory, the classifier system of Mojeño Trinitario should not be considered an agreement system.

6.2 Not an individuation function

This section will discuss a function of the classifiers that is often invoked in the literature: that of individuation. The literature on classifiers in general (Contini-Morava & Kilarski 2013), and numeral classifiers in particular, generally underlines their individuating function. In languages with numeral classifiers, nouns have to be classified to be numerable or countable (Bisang 1999, Seifart 2009): "the noun refers to some kind of mass and the classifier gives a unit to this mass" (Denny 1986:298).[54] Within the literature on Arawak classifiers, it is asserted at least for Kampa languages that "classifiers have a basic individuating function when used with number words" (Mihas 2019:52). For languages with a multiple classifier system, i.e., a system where the same classifiers are found on different hosts (such as the systems found in Mojeño Trinitario and in Kampa languages), it does not seem enlightening to assert that the indivualization function of classifiers is at work only when those attach to numerals. It would be much simpler to advocate that numerals themselves have an individuating function. Still, this section aims at examining individuation as a potential function of Mojeño Trinitario classifiers.

In Mojeño Trinitario, it is the case that a classifier is required for a noun to be counted (with native numerals only), so that classifiers could be seen as "unitizing" the mass concept that the noun would refer to. However, note that a classifier is not required for a noun to be marked as plural, as shown in

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[54] Bale & Coon (2014) summarize two different hypotheses aiming at explaining this. Chierchia (1998) considers that numeral classifiers are used in languages without a mass/count distinction in nouns. In these languages with mass nouns only, classifiers are required to convert kinds into atomic sets. Krifka (1995) instead considers that numeral classifiers are required only with numerals that do not incorporate a measure function. The latter theory allows differing requirements for classifiers among the numerals of a particular language.

(288). Pluralization is an operation for which the referent needs to be conceptually unitized before being pluralized. In Mojeño Trinitario, the use of classifiers is not required for pluralization.

> (288)   ajochapo jma tapajono
> *a-joch-a=po*   *j-ma*   *tapajo-no*
> 2PL-close-IRR=PFV   DEM-NH.PL   door-PL
> 'Close the doors!' [T06.113]

Moreover, in the absence of numerals, most nouns that have individual referents do not appear categorized by classifiers on other hosts, as illustrated in (289).

> (289)   esu tnikyore pjo apu.
> *esu*   *t-ni-k=yore*   *p-jo*   *apu*
> 3F   3-eat-ACT=FUT   DEM-NH.SG   banana_sp
> 'She is going to eat a banana.' [C&B.S.064]

On the contrary, example (290) shows that a classifier can even inform on a noun whose referent is not individuated. Note that the noun *móteji* is not introduced by a determiner, precisely because it is not specific (see Section 2.8). Actually, in the seven-text sample, there are 13 such cases of classifiers (on hosts other than numerals) that associate with a noun which is not preceded by a determiner. The referent which is classified is presented as nonspecific, and still, it is categorized by a classifier. This is ample evidence against a unitization function of classifiers in Mojeño Trinitario.

> (290)   nyerepareko móteji
> *n-yere-**pa**-re-ko*   *móteji*
> 1SG-carry-**CLF:mass**-PLURACT-ACT   earth
> 'I carry earth.' [T28.011]

In conclusion, classifiers in Mojeño Trinitario do not have an individuating function. Instead, this function is encoded in that language by the presence of determiners, i.e., articles or demonstratives (Rose 2013b).

6.3 Qualification

The presence of classifiers in an utterance is facultative, i.e., it depends on the choice of the speaker, except on numerals. Speakers also have flexibility in choosing among classifiers: that is, the selection of a classifier for a given noun phrase is not deterministic, as it would be if each noun strictly pertained to a specific category. Instead, the classifier selected depends on the speaker's decision to highlight a particular property of the referent, whether inherent or temporary. This is so whether the host is a noun, an adjective or a verb. Example (291) shows, for example, two different classifiers on the same nominal root, distinguishing different inherent properties of the referents. Example (276), on the other hand, shows how the very same referent can be categorized differently based on its different temporary characteristics. In other words, classifiers are used freely to qualify the nouns they associate with, in a similar way to adjectives in languages where these are frequently found in discourse.

> (291)   a.   marisi
>   *mari-**si***
>   stone-**CLF:sphere**
>   'a round stone'
>
>   b.   maricho
>   *mari-**cho***
>   stone-**CLF:plank**
>   'stone block'

Example (292) illustrates the qualifying use of a classifier on an adjective. The selection of the *-gie* 'cylindrical' classifier on the adjective *'chope* 'big' modifying *wkugi* 'tree' may at first view seem to be uninformative, but in fact it triggers the interpretation that the size expressed by the adjective applies to the length of the trunk, rather than to other possible dimensions of the tree. Alternatively, the speaker could have chosen another classifier, and then the size qualification would have applied to some other dimension, such as the width of the trunk, as in (293). Example (294) illustrates the qualifying use of a classifier on a verb. The selection of the *-ku* classifier (expressing 'inside a bounded space with parallel sides') on the verb *uch-ko* 'exit' in association with the noun phrase 'the place where he was' restricts the interpretation of this place as being a closed space where the character was 'stuck' for some time (namely, a jail cell, in the context of this recording).

(292) su 'seno simoorokoo'i to chopegie wkugi
su   *'seno*   *s-imoo-ro-ko=o'i*   *to*   *chope-**gie***   *wkugi*
ART.F   woman   3F-watch-PLURACT-ACT=IPFV   ART.NH   big-**CLF:cyl**   tree
'The woman is watching the big tree.' [Path.M.063]

(293) tnarakongierekoo'i te to 'chope'e wkugi
t-nara-ko-n=giereko=o'i   *te*   *to*   *'chope-**'e***   *wkugi*
3-rest-ACT-PL=CONT=IPFV   PREP.NH   ART.NH   big-**CLF:convex**   stick
'They rested on a large round trunk.' [elicited]

(294) juiti to manosjii'i jma, tkutim'i to tyuchku'ripo te to mawriko
juiti   *to*   *ma-nosji=i'i*   *j-ma*   *t-kuti-m'i*
now   ART.NH   3M-stay=IPFV   DEM-M   3-be_like-CLF:setting

to   *ty-uch-**ku**-'=ripo*   *te*   *to*   *ma-ow-ri-ko*
ART.NH   3-exit-**CLF:path**-ACT=PFV   PREP.NH   ART.NH   3M-be_at-PLURACT-ACT
'Now he is staying, it looks like he went out of where he was.' [T40.212]

This section first focuses on the qualifying function of classifiers on nouns, and next on verbs. In the sample of seven texts, 15 classifiers on nouns were found to be used for qualification, and 20 for derivation, which will be discussed in the next section.

To distinguish the qualifying and derivational use of classifiers on nouns, I use the following criterion: if the stem composed of a nominal root plus a classifier denotes an instance of the class of referents denoted by the nominal root, we are dealing with qualification; if the stem composed of a nominal root plus a classifier denotes an entity (or type) different from that denoted by the nominal root, we are dealing with derivation of a nominal stem. The semantic features denoted by the classifier then characterize the denotation of the nominal stem by association with the meaning of the noun root. In (295a), the 'leather belt' is a kind of 'belt' among other possible kinds (see the contrast in (273)): the classifier qualifies the noun. In (295b), the 'candle' is not a kind of 'fire' with a long, thin, and flexible shape, but a long, thin and flexible entity associated with fire. The classifier derives a new nominal stem. The derivational use of classifiers is detailed in Section 6.4, and the distinction between the qualification and derivation uses of classifiers on nouns is extensively discussed in Rose and Van linden (2022).

(295) a. térepi   qualification
          *tére-**pi***
          belt-**CLF:fili**
          'belt (typically a leather one)'

       b. yukpi   derivation
          *yuk-**pi***
          fire-**CLF:rope**
          'candle'

The qualifying function of classifiers is found on all classes of Mojeño Trinitario nouns, except proper nouns and vocatives. It may be found on the head noun of a phrase, or on a noun modifying another noun, as in (296). It may be noteworthy to note that classifiers are often found on borrowings, as in (297) to (299). Then the semantics of the classifier may seem to be redundant with the core meaning of the noun root. The use of a classifier may in that case be a means to "nativize" the Spanish loanword.

(296) tyutekpo eto tkijare eto to proremo 'attaji.
       *ty-ute-k=po   eto   t-k-ijare   eto   to   prore-**mo**   'attaji*
       3-come-ACT=PFV   3NH   3-VZ-name   3NH   ART.NH   flower-**CLF:fabric**   fabric
       'What is called the flowery fabric arrived.' [T25.089]

(297) to aramrepi
       *to   aramre-**pi***
       ART.NH   wire-**CLF:rope**
       'barbed wire' (Spanish *alambre*)

(298) to risagi
       *to   risa-**gi***
       ART.NH   alder-**CLF:cyl**
       'aliso (tree sp.)'

(299) ñi rokosi
       *ñi   roko-**si***
       ART.M   mad-**CLF:sphere**
       'madman' (Spanish *loco*)

In fact, the qualifying use of classifiers on native (i.e., non-borrowed) nouns can sometimes seem relatively uninformative or even redundant, as in (300) to (302). This is interesting, because redundancy might be supposed to arise because of obligatoriness. This is clearly not the case in Mojeño Trinitario, where these qualifying classifiers are not obligatory. In some cases, they are indeed not obligatory but are strongly preferred. For example, *tsera* 'tear' has been elicited without a classifier, but is always used with the classifier *-omo* 'liquid' in the text corpus. In such cases, the use of classifier can be said to be conventionalized on some roots. Other times, classifiers encode more crucial information. In (303), for example, the preposition *te* could be construed as 'in', 'towards', 'from', etc. The classifier *-ku* 'inside a bounded space with parallel sides' specifies that the lake is the ground for the swimmers, so that the preposition must be understood as 'in'. Even in other cases, classifiers significantly help restrict the possible extension of referents. The noun *iñe* 'creature' can refer to very different kinds of undesirable creatures, as shown in (304): earth creature, well creature, stomach parasites, and lice.

(300) to vtseramo
       *to   v-tsera-(**o**)**mo***
       ART.NH   1PL-tear-**CLF:liquid**
       'our tears' [T26.043]

(301) te pjo 'attajmo
       *te   p-jo   'attaj-**mo***
       PREP.NH   DEM-NH   fabric-**CLF:fabric**
       'on the mat' [Loc.C.040]

(302) to tachene'iono
       *to   ta-chene-**'i**-ono*
       ART.NH   3NH-breast-**CLF:fruit**-PL
       'its udder' [T14.006]

(303)   ene eto to chuyono tyutsarekonri'iji te to kogiúreku.

       ene   *eto*   *to*   *chuy-ono*   *ty-utsare-ko-n=ri'i=ji*

       and   PRO3   ART.NH   fox-PL   3-swim-ACT-PL=IPFV-RPT

       te   *to*   *kogiúre-**ku***

       PREP.NH   ART.NH   lake-**CLF:path**

       'And the foxes were playing in the lake.' [T06.009]

(304)   a.   taeñepa'i pog'e

          *ta-eñe-**pa'i***   *pog'e*

          3NH-creature-**CLF:ground**   earth

          'creatures of the earth (worms, ants, …)' [elicited]

      b.   taeñeku

          *ta-eñe-**ku***

          3NH-creature-**CLF:path**

          'animal/spirit of the well' [elicited]

      c.   niñeju'e

          *n-iñe-**ju'e***

          1SG-creature-**CLF:interior**

          'I have parasites in my stomach' [elicited]

      d.   niñesi

          *n-iñe-**si***

          1SG-creature-**CLF:sphere**

          'my lice' [elicited]

The use of classifiers on nouns is a common way to qualify a referent in Mojeño Trinitario. In the seven-text sample, there are in fact 15 classifiers qualifying a noun, and 40 tokens of adjectives, among which only 12 modify a noun. In this sample, the use of classifiers is therefore more common than the use of adjectives to qualify a noun within the same noun phrase. Mojeño Trinitario indeed displays few adjectives and these are rarely used as modifiers (see the numbers in Section 2.6). Not only are classifiers more commonly used than adjectives as a qualifying device, but adjectives and classifiers divide the semantic space of qualification in a complementary manner. Adjectives express size, age, value, emotion, while classifiers mainly encode shape, consistency, and interiority (see Chapter Classifier semantics).

I now turn to the qualifying function of classifiers on verbs. In the seven-text sample, there is no obvious example where the classifier on a verb clearly provides information about the referent of the noun it associates with that is not otherwise expressed by the noun: in the 16 cases in which an associated noun is expressed within the clause, the semantics of the classifier redundantly expresses a property of the referent of the associated noun (i.e., liquid for a river, powdery for flour, cylindrical for a bone, for instance). We will see later that classifiers on verbs most often serve a discourse management function (see Section 6.5). Nevertheless, we have already mentioned in Section 6.1 that the same noun, and even the same referent, may be categorized differently. The same referent may be tracked in discourse through different successive classifiers. Examples where a noun is first associated with one classifier and then is recategorized with another one show the use of the classifiers to re-present a referent in different manners. As already mentioned in Section 6.1, recategorization within the discourse occurs in two different circumstances: (i) when the physical properties of the referent evolve through time, as already illustrated in (276), or (ii) when the speaker adopts a different perspective on the same referent.

The next two examples illustrate the second circumstance. They show a switch in classifiers for the same referent, which is stable through time but categorized in various ways by the speaker at different points in the discourse. Consider a discourse in which the dogs of a family are the topic of the conversation during seven utterances, of which two are presented in (305). They are first introduced in (305a) with a noun phrase and the classifier *-mo* on the verb, where this classifier indicates that its associated

noun refers to something flat and flexible, highlighting the skinniness of the dogs. In the following sentences, the dogs are indicated either via a third-person subject marker, or with the classifier *-mo* 'flat flexible'. In (305b), the dogs are reclassified as a group with the group classifier *-muri*. Note that throughout this sequence of seven sentences, the dogs are both skinny and forming a group, but that the speaker decides to highlight different characteristics at different times.

(305) a. noma jmani paktatajono tijanemono
           *n-om-a   jmani   pak-tataj-ono   t-ijane-**mo**-no*
           1SG-take-IRR   DEM   dog-DESP-PL   3-stink-**CLF:fabric**-PL
           'They (the men) could take (for a hunt) these damned (skinny) dogs that stink.'

       b. eto nommuu'aa'ini
           *eto   n(a)-om-**muu**-'-a=a'i=n*
           3NH   3PL-take-**CLF:group**-ACT-IRR=IPFV=FRUST
           'They (the men) could have taken the dogs (as a group).' [T29.042/45]

Similarly, in example (306), two different classifiers associate with the referent 'the woods' in a single stretch of text. They are separated by one sentence only. In (306a), the classifier *-je* 'interior' is used, referring to the fact that the woods are seen as a container filled with some dense material: the woods are seen as a space to be cleared (by someone unseen using an axe). In (306b), the classifier *-ji* 'amorphous' is used, conveying the idea of the woods as a disorganized space, maybe highlighting the difficulty of leaving the woods (where the main character is lost).

(306) a. ñisampuijiro eto to iwoti te to ttuprijechgiene smeno
           ñi-sam=pu=iji=ro   eto   to   iwoti
           3M-listen=PFV=RPT=UNQ   3NH   ART.NH   axe

           *te   to   t-tupri-**je**-ch-giene   smeno*
           PREP.NH   ART.NH   3-be_middle-**CLF:interior**-ACT-INTENS   forest
           'He heard an axe in the middle of the woods.' [T19.060]

       b. ene to ñisamo'chirari'i eto ñiwoo'oripuiniji to tyuchjikyoori'iniji
           ene   to   ñi-samo'ch-ira=ri'i   eto
           and   ART.NH   3M-listen_distantly-EV.NZ=IPFV   3NH

           ñi-woo-'o-=ripu=ini=ji
           3M-want-ACT=PFV=FRUSTR=RPT

           *to   ty-uch-**ji**-k=yoo=ri'i=ni=ji*
           ART.NH   3-go_out-**CLF:amorph**-ACT=FUT=IPFV=FRUST=RPT
           'And when listening to this, he wanted to get out of the woods.' [T19.062]

In their qualifying function, classifiers usually highlight particular characteristics of a referent. In some cases, they actually highlight a subpart of it. The classifier is then not fully congruent with the referent of a noun phrase but points more specifically to only part of the referent, as in (307) and (308).

(307) nowku'o te pkure
       *n-ow-**ku**-'o   te   pkure*
       1SG-be-**CLF:path**-ACT   PREP.NH   canoe
       'I am in a canoe' [elicited]

(308) nsipuggio ñi 'moyo
       *n-sip-**ug**-gio   ñi   'moyo*
       1SG-wash-**CLF:face**-ACT   ART.M   baby
       'I wash the face of the baby.' [elicited]

In a way similar to more typical classifiers like *-pi*, which highlights certain physical characteristics of a snake, for example, their being long, thin, narrow, and flexible, disregarding its temperature, texture, boundary types, possible excrescences, and arrangement, *-ku* focuses on the 'inside' part of the canoe, and *-ugi* zooms in on the facial part of the referent that it qualifies. The classifier *-ku* categorizes referents as empty volumes, typically with parallel sides (e.g., a path, house, or canoe), and a the interpretation resulting from its use is a relational locative one: it is usually translated as "the interior of", as in (307). The presence of the classifier yields the construal of the 'canoe' as a hollow space, and this triggers the interpretation of the preposition as 'in'.[55] In (308), the classifier *-ugi* 'face' is also only partly coreferential with the referent of the noun phrase, in a metonymic relationship with it, within a construction that could be characterized as external possession ('I face-wash the baby').[56] As such, the classifier expresses circumstantial information with respect to the event, i.e., a location with respect to the noun phrase (cf. 'I wash-at-face the baby', 'I am in a canoe, in the interior part of it').

To summarize, the use of classifiers is a common way to qualify a referent in Mojeño Trinitario, which is especially obvious when the classifier is on nouns, rather than on verbs.

6.4 Derivation

Mojeño Trinitario classifiers are also used to derive nominal stems.[57] The use of a classifier to derive nominal stems from nominal roots is a common process throughout the Arawak family (Dunn & Rose to appear). This is exemplified in (309), which involves the proper noun *Trinra*, the name of a city. Classifiers may also derive nominal stems from verbal roots, as in (310), and much more rarely from other types of roots: adjectives, as in (311), demonstratives, adverbs and even the negative auxiliary in recent neologisms (see examples in Section 4.5). Arguably, they also do so on numerals, as discussed below. Sometimes, an additional nominalizer *-rV* (with the vowel assimilating to the preceding vowel) appears before the classifier, as in (309d) and (310d).

> (309) a. to yukpi
>   *to   yuk-**pi***
>   ART.NH   fire-**CLF:fili**
>   'a candle'
>
>   b. to wray'a
>   *to   wray-**'a***
>   ART.NH   chicken-**CLF:ovoid**
>   'a chicken egg'
>
>   c. Trinram'i
>   *Trinra-**m'i***
>   Trinidad-**CLF:liquid**
>   'Trinidad's festival'
>
>   d. piypéreku
>   *p-iypé-re-**ku***
>   2SG-foot-NZ-**CLF:path**
>   'your footprint'

---

[55] Note that the verb stem *owku'o* still requires the preposition.

[56] Payne & Barshi (1999:3) define external possession as a construction "in which a semantic possessor–possessum relation is expressed by coding the possessor as a core grammatical relation of the verb and in a constituent separate from that which contains the possessum".

[57] The derivational function of classifiers has been described for long for Western Amazonian languages (Grinevald & Seifart 2004; Aikhenvald 2000) and is common in South America (Krasnoukhova 2012).

(310) a. to tijromo
           *to   t-ijr-**omo***
           ART.NH   3-be_hot-**CLF:liquid**
           'the breakfast/dinner' [elicited]

       b. to ymokoji
           *to   y-moko-**ji***
           ART.NH   1PL-sleep-**CLF:amorph**
           'our nest, bed' [T19.107]

       c. muekorosi
           *mu-ekoro-**si***
           3M-bury-**CLF:sphere**
           'his tomb'

       d. to neeresi
           *to   n-ee-re-**si***
           ART.NH   1SG-drink-NZ-**CLF:sphere**
           'my glass'

(311) 'chope'e
       *'chope-**'e***
       big-**CLF:convex**
       'a drum'

Derivation is an important function of classifiers, especially on nouns. In the seven-text sample, 20 of the 35 occurrences of classifiers on nouns have a derivational function, one of the 3 examples on demonstratives, 3 of the 9 occurrences on adjectives, and 6 out of the 83 occurrences on verbs.

The use of classifiers is indeed a major device for creating new nominal lexemes from nominal roots (see Rose & Van linden 2022 for a description of other binominal structures in Mojeño Trinitario). In a list of 90 Mojeño Trinitario items expressing 88 of the 100 complex concepts compiled by Pepper (2020:145–169), the most common "binominal structure" (following Pepper's terminology) is the N+CLF structure: 10 of the 27 binominals involve the derivational use of a classifier.

Headedness within N+CLF nominal stems in Mojeño Trinitario is discussed in Rose and Van linden (2022), and summarized here. In these derived nominal stems, the characteristics expressed by the classifier form the semantic head of the derived stem. The classifier is also taken to be the morphological head of classifier-derived nominal stems, as it determines the gender feature of the determiner. For instance, in example (312), the determiner is nonhuman, agreeing with the nonhuman meaning of the classifier *-pa'i* 'ground' rather than with the human masculine singular meaning of the root *Peru*. Note that this morphological headedness does not imply that classifiers can function as the syntactic head of NPs; in (312), the classifier *-pa'i* is the morphological head of the word *Perupa'i*, but it is the complex word form *Peru-pa'i* that is the head of the NP, not just the classifier.

(312) to Perupa'i
       *to   Peru-**pa'i***
       ART.NH   Pedro(M)-**CLF:ground**
       'Pedro's land' [elicited]

Interestingly, the status of the classifier as a semantic and morphological head in N+CLF words where the classifier plays a derivational role does not prevent the nominal root, which is semantically a modifier, from remaining referential. This is illustrated with (313), where the nominalization *to nnujre* '(the thing) that I chewed' modifies the nominal root *saware* 'tobacco', which is in turn the part of the classifier-derived word *sawariomo* 'tobacco juice' that functions as a modifier; note that it is not the juice that was chewed, as the juice results from the process of chewing the tobacco leaves.

(313)   nescho to sawariomo, étona kchara to sawariomo to nnujre
        *n-escho   to   sawari-**omo**   éto-na   kchara*
        1SG-give_drink   ART.NH   tobacco-**CLF:liquid**   one-CLF:GNR   spoon

        *to   sawari-**omo**   to   n-nu-**j**-re*
        ART.NH   tobacco-**CLF:liquid**   ART.NH   1SG-chew-**CLF:shapeless**-SP.PAT.NZ
        'I gave her some tobacco juice to drink, one spoon of tobacco, the one that I had
        chewed.' [T12.014]

Finally, note that there is some uncertainty regarding what causes the nominalization when classifiers derive nominal elements from non-nominal roots: is it the presence of the classifier, or the plain fact that the word it attaches to is used as an NP head (generally preceded by a determiner)? Since adjectives and verbs may function as NP heads without classifiers in Mojeño Trinitario, as in (314) and (315), it might seem that the classifier is not crucial for nominalization in this type of construction. However, while this morphologically unmarked form of nominalization is a type of grammatical nominalization, the form of nominalization involving a classifier, illustrated in (309) to (311), is a type of lexical nominalization (i.e., the nominalization involves the derivation of a new nominal stem with different reference from the original noun). Take, for example, the word *chope-'e* 'big-CLF:convex' in (311), which refers to a drum, and is a case of lexical nominalization. The same wordform could also refer to someone with a big belly, in which case it would be a grammatical nominalization, with a metonymic use of the classifier. In fact, grammatical nominalizations as in (314) and (315) do not exclude the use of a classifier: example (316) is a case of grammatical nominalization involving a verb bearing a classifier.

Evidence of the different behavior of classifiers in lexical (i.e., derivational) and grammatical nominalization comes from the fact the classifiers functioning derivationally substitute for the active suffix on active verbs, as exemplified by the lexical nominalization in (310), while in unmarked grammatical nominalizations, classifiers normally appear before the active suffix, as in (316).

(314)   no tkojmano
        no   t-ko-jma-no
        ART.PL   3-VZ-sickness-PL
        'sick people'

(315)   no chosiono
        no   chosi-ono
        ART.PL   old-PL
        'elders'

(316)   te pjo ttuprik'o pjo... yukpi
        *te   p-jo   t-tupri-**k**-'o   p-jo   yuk-pi*
        PREP.NH   DEM-NH.SG   3-be_in_middle-**CLF:path**-ACT DEM-NH.SG   fire-CLF:fili
        'in the middle of the candle' [Loc.S.004]

In short, I consider classifiers as having a derivational function in cases of lexical nominalizations, but not in cases of grammatical nominalizations. As a consequence, I have treated all occurrences of classifiers on numerals in the absence of a head noun as cases of grammatical nominalization. In such cases I consider the nominalization to result automatically from the simple presence of a determiner before the numeral, rather than by the use of a classifier, as in (317), where the numeral *api-na* fills the head position of the NP determined by the demonstrative *jmaro*. Note that in the dataset on the classifiers in the seven-text sample, the function of classifiers on a numeral in absence of a head noun has been labelled 'default', since numerals are expected to carry a classifier, whatever their syntactic position.

(317)   jmarjorich'oo'i jmaro apina?
        *j-ma-r-jo=rich'o=o'i   j-ma-ro   api-**na***
        DEM-NH.PL-MED-EXIST=still=IPFV   DEM-NH.PL-MED   two-**CLF:GNR**
        'Are there still these two?' [T45.022]

6.5 Reference management and identification

This section addresses the reference management and reference identification functions of classifiers, which have only been found with verbs. Classifiers are very frequently found on verbs in discourse, even though they are not obligatory: in the seven-text sample (totaling 520 utterances), classifiers occur on verbs in 32% of utterances. Only a few of these occurrences can be analyzed as having a derivational function (see Section 6.4), and most of them do not seem to have an obvious qualifying function (see Section 6.3), where their meaning would be important in specifying characteristics of the referent. Most occurrences of classifiers on verbs actually have functions at the discourse level. These discourse functions are discussed in this section.

The discourse functions of classifiers have been discussed in the literature, but rarely investigated on the basis of a systematic corpus study. Payne (1987) asserts that "the primary function of a noun classification system may be related to discourse level participant reference". Aikhenvald (2000) and Contini-Morava & Kilarski (2013) review how the use of non-obligatory classifiers frequently depends on the definiteness and pragmatic properties of the referent noun. Classifiers are often used anaphorically instead of a noun phrase, usually for a referent that has already been introduced and is thus backgrounded (Mithun 1986, Seifart 2005). Contini-Morava & Kilarski (2013) identify three main discourse functions: reference management, referent identification, and re-presentation of referents. Reference management relates to the establishment and maintenance of referents in discourse, thus encoding differences in the discourse status of referents. Reference identification is taken as the anaphoric or deictic use of classifiers to help identify a referent. Finally, re-presentation of referents is about the re-categorization of a referent in discourse, indicating a change of speaker perspective. This has already been discussed under qualification (Section 6.3). The present section therefore details the functions of reference management and reference identification of Mojeño Trinitario classifiers on verbs in discourse, based on a corpus study.

Let's start with reference management. Using the sample of seven texts, the referential distance (RD) and topic persistence (TP) of the noun phrase associated with classifiers on verbs has been measured, following the general methodology of Givón (1983).[58] In order to facilitate comparison, the RD and TP of full noun phrases without an associated classifier on the verb were also measured.[59] The RD is the number of clauses between the referring and the most recent previous overt presence of the same referent (the score of 20 is given to referents that are new). The TP is the number of clauses following the element in which the referent continues uninterruptedly as a semantic argument of the clause, whether marked overtly or not. Table 24 gives the average and median RD and TP values for three different types of referential expressions: noun phrases, classifiers alone, and combinations of the two.

	average RD	median RD	average TP	median TP
N (61)	13.23	20	0.87	0
CLF+N (15)	12.2	20	1.53	1
CLF (61)	7.44	2	1.16	0

Table 24. Referential distance and topic persistence of different referential expressions

This table yields two interesting results among these three referential expressions. First, the presence of a classifier associates with higher topic persistence: if the referent is a topic, there is a greater chance that it is expressed with a classifier. Conversely, nouns that are not associated with a classifier show a lower topic persistence. These nouns usually introduce completely new participants (hence the 20 maximal RD median number), or refer to given, rather old, and non-topical participants. This shows that overt nouns without a classifier tend to be less optimal topics in Mojeño Trinitario.

Second, the presence of a nominal expression depends essentially on referential distance: if the referent is given and old, or new (the RD is high in both cases), there is a greater chance that it is expressed via a noun.

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[58] These measures exclude the small number of classifiers on verbs with applicative or (nominal) derivational functions.

[59] Measures of RD and TP of full noun phrases were obtained from a subsample, in order to reach the same number (62) of full NPs as the number of CLFs without an associated noun in the regular sample. The number of tokens of N+CLF is smaller: 16.

Classifiers on verbs may co-occur with the noun phrase whose referent they categorize. In such cases, the noun phrase is foregrounded. This can be done either to introduce a new participant or to reactivate a given but old participant. This is evident from the rather high RD for CLF+N in Table 24. Example (318) shows a classifier introducing an overt noun phrase as a new participant in the text. Example (319) shows a classifier along with an associated noun phrase within a prepositional phrase, which both indicate a referent — a river — that was first introduced ten sentences before and is presented again after a side sequence, so that there are seven sentences without any mention of the river before the sentence under scrutiny. Introducing a new participant or reactivating a given but old participant are two types of foregrounding effected by the co-occurrence of a classifier on a verb and its associated noun phrase.

(318) tappú'eko pjuena sju'e
t(a)-appú-'e-ko   *pjuena*   *s-ju'e*
3NH-swell-**CLF:convex**-ACT   DEM   3F-stomach
'Her stomach swelled.' [T12.009]

(319) enepo te to kjokre te to une tewtsekwompo eto to 'uupiono.
ene=po   *te*   *to*   *kjokre*   *te*   *to*   *une*
and=PFV   PREP.NH   ART.NH   river   PREP.NH   ART.NH   water

*t-ewts-**e**-k-w-om=po*   *eto*   *to*   *'uupi-ono*
3-throw-**CLF:liquid**-ACT-MID-PL=PFV   3NH   ART.NH   frog-PL
'And there in the river, the frogs jumped into the water.' [T18.054]

Note that classifiers on the verbs often occur *without* an associated noun phrase, since any noun phrase can be omitted for discourse reasons (see Mithun 1986; Payne 1987). The occurrence of a classifier without an associated noun phrase is not only common but is actually more common than its co-occurrence with an associated noun phrase in Mojeño Trinitario. Out the 76 classifiers that occur on verbs in our sample of seven texts,[60] 15 occur with an associated noun phrase, and 61 without. This means that about 80% of classifiers on verbs occur without an associated noun phrase. The uses of classifiers without an associated noun phrase subsume both the so-called "anaphoric" and "absolute" use of classifiers (Grinevald & Seifart 2004), i.e., those where the co-referential noun phrase has been given but is old in the discourse, and those where it is not overt at all in the speech context. In the anaphoric use, the classifier "retains the entity in question within the arena of discourse", like incorporated nouns do, because indeed, "incorporated nouns, not salient constituents in themselves, do not obstruct the flow of information, yet their presence is sufficient to narrow the scope of the verb" (Mithun 1986:381–382). A classifier without an associated noun phrase is used in Mojeño Trinitario for two main purposes: the anaphoric mention of a given participant, as in (320), and more rarely, the introduction of a new non-topical participant, as in (321). In the case of anaphoric mentions, the participant was present in the discourse rather recently (see the low RD in Table 24). In (320), for example, the referent is overtly expressed by a noun phrase in the preceding clause. In the case of the introduction of new non-topical participants, the participants generally have not been mentioned previously, and are not maintained in the subsequent discourse either. The classifier *-mo* in example (321) is the only mention of the 'sky' in the whole text: it is not expressed as a noun phrase, and is obviously not a topic in the text.

(320) nanokpo to muiji, noktayajikpo.
na-nok=po   *to*   *muiji*   *n(a)-oktaya-**ji**-k=po*
3PL-put-ACT=PFV   ART.NH   straw   3PL-step_on-**CLF:amorph**- ACT=PFV
'They put down the straw, they step on it.' [T20.026]

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[60] These counts again exclude the few uses of classifiers on verbs with an applicative or a (nominal) derivative function.

(321)   tmopkumo
        *t-mopku-**mo***
        3-be.dark-CLF:fabric
        'It (the sky) was dark.' [T19.053]

Let's now turn to the relation between classifiers and reference identification. Since the overwhelming majority of classifiers on verbs occur without an associated noun phrase, the issue of reference identification is crucial. How can the referent of a classifier be identified, especially in the absence of an associated noun phrase?

One way in which the referent of a classifier can be retrieved is exophorically, i.e., by deictic reference to an entity present in the speech event, as in (322). In general, the politeness of Mojeño Trinitario people makes them invite guests to sit upon arrival, showing them where to sit.

(322)   vejapuegia
        *v-eja-**pue**-gi-a*
        1PL-sit-**CLF:ground**-ACT-IRR
        'Let's sit down (on the floor).' [T24.099]

A second way by which the referent of a classifier can be identified is via inference based on the previous discourse. This includes straightforward cases of anaphora, where the classifier points back to a previous expression in the discourse with which it is coreferential. In (323), the classifier -*'i* for a round entity with a protrusion is used in two clauses to recall the referent of a noun phrase expressed overtly in a preceding clause, *parawa-tataji* 'the damned macaw'.

There are also cases without overt antecedents, where inferences about the referents of classifiers are based on an understanding of the circumstances conveyed by the discourse as well as background knowledge. This is the so-called "absolute" function of classifiers, in which the classifiers are linked neither syntactically nor anaphorically to a noun phrase (Grinevald & Seifart 2004:271). Payne (1987:39) puts forward the hypothesis that classifiers may be used to avoid full noun phrases, since "when a classifier occurs in any syntactic context […], it indicates sufficient features of the referent such that a more specific head noun may not be pragmatically necessary in a given context". In (324), for example, -*ku* is interpreted as indicating a path, but this referent is not rendered explicit by a noun phrase. This interpretation is obtained, however, due to combination of the topic of text, i.e., a trip through the forest, local world knowledge that a path is the most likely place for people to meet while walking through the forest, and the compatibility of a path interpretation with the meaning of the -*ku* classifier, i.e., an empty space between two parallel lines.

The utterance in (325) provides another example, where the classifier -*mo* for thin, flat, and flexible elements is found on the verb 'be dark', without an associated noun phrase. However, the mention of 'night' in the preceding sentence favors the interpretation of the classifier as refering to the sky. In some cases, the inference regarding the referent is based on metonymy, and often more specifically, meronymy, which facilitates bridging, or indirect anaphora (Seifart 2005:297). For example, in (326), the classifier -*si* is interpreted as referring to the 'head' of a participant in the discourse, even though 'head' is never expressed overtly in the text. It is the only spherical thing associated with this participant (a dog) that can plausibily be put in a jar. The participant is topical, but its head is not, so it is introduced with a classifier only.

(323)   pjorjojno parawatataji, wcho'igia vnigia. wcho'igiaa'ini vijrokaa'ini psuro wrinko.
         p-jo-r-jo-jno   *parawa-tataji*   *w-cho-'i-gi-a*
         DEM-NH-MED-EXIST-again   macaw-DESP   1PL-pluck-**CLF:fruit**-ACT-IRR

         v-ni-gi-a   *w-cho-'i-gi-a=a'i=ni*
         1PL-eat-ACT-IRR   1PL-pluck-**CLF:fruit**-ACT-IRR=IPFV=FRUST

         v-ijro-k-a=ri'i=ni   *p-su-ro*   *wrinko*
         1PL-give-ACT-IRR=IPFV=FRUST   DEM.F.MED   foreigner
         'There again is this damned macaw, we should pluck it and eat it. If we had plucked it,
         we would have given it to that foreign woman (for her to eat it so that she becomes
         talkative).' [T29.049/050]

(324)   tkuchoku'avi
         t-kucho-ku-'-a-vi
         3-wait-**CLF:path**-ACT-IRR-1PL
         'It is waiting for us (on the path).' [trip in the forest] [T30.052]

(325)   tmopkumori'ini
         t-mopku-mo=ri'i=ni
         3-be_dark-**CLF:fabric**=IPFV=FRUST
         'It (the sky) was dark (in vain)'. [Preceding context: "It's going to be night again", he
         said: […]] [T19.053]

(326)   ene tkosiopsikwopo taye'e.
         ene   t-ko-siop-si-k-wo=po   *ta-ye'e*
         and   3-CAUS-enter-**sphere**-MID=PFV   3NH-PREP
         'And it (a dog) put its head into it (a jar).' [T18.015]

A third way in which the referent of a classifier can be identified involves more vague form of
identification, as a nonspecific 'kind' of referent defined by the characteristics typically associated with
the classifier, or as a prototypical member of the category expressed by the classifier. In example (327),
the classifier *-e* 'liquid' is interpreted as indicating a body of water: the classifier refers to liquid, and
the verb *anu* 'cross' is a motion verb. This first mention of the body of water is vague, however, probably
because this entity only acts as a ground for the decisive actions that take place there, and possibly also
because this traditional tale is supposed to be well-known. The next sentence repeats the classifier and
additionally specifies the referent with an overt noun phrase 'the lake'. Similarly, in (328), the interpre-
tation of the classifier *-ku* 'space between parallel lines' remains vague: it is rendered in the translation
only as 'out'. The source of the motion of the participants does not really matter here, what is important
is that they went out of that unidentified space and are now visible.

(327)   ñikanaekpuiji to 'chope merómero
         ñi-k-ana-e-k=pu=iji   *to*   *'chope*   *merómero*
         3M-CAUS-cross-**CLF:liquid**-ACT=PFV=RPT   ART.NH   big   caiman
         'He said he helped the man to cross (the body of liquid) on the great caiman.'
         [T19.170]

(328)   takepo tyuchku'ompo to pomriono sapgirano
         takepo   ty-uch-ku-'-om=po   *to*   *po-mri-ono*   *sap-gira-no*
         after   3-go_out-**CLF:path**-ACT-PL=PFV   ART.NH   other-CLF:group   toad-DIM-PL
         'Then other toads went out (of the river, of the trunk?).' [T11.040]

This third type of referent retrieval often arises in translation tasks involving a classifier where no
associated noun phrase or context is supplied. In this kind of situation, consultants generally suggest
prototypical members of the extensional category associated with classifier for any participants for
which an overt noun phrase is not supplied. Nevertheless, the selection of a prototypical member of the

category (and even of a non-prototypical one) is guided by the meaning of the verb. Example (329) illustrates this with the classifier *-ku*, used for empty spaces bounded by parallel lines. When *-ku* is used with a motion verb implying a boundary crossing, entities that form spatial boundaries, like rivers and streets, are most often suggested as possible referents. When *-ku* is used with a motion verb implying a boundary crossing and a closed space, entities that have closed volumes with entrances are preferred, such as houses. With the verb 'cut', *-ku* is interpreted as being the empty space resulting from the cutting activity. A common Mojeño Trinitario activity involving cutting that results in an empty space is clearing a field by felling trees in a delimited space in the forest, so that *-ku* is in such cases is typically construed as indicating the field. With the verb 'to wash', the consultant used a middle form and *-ku* was interpreted as expressing a body-part, the vagina, a non-prototypical member of the *-ku* category.

(329)   a.   sanku'o
             *s-an-**ku**-'o*
             3F-cross-**CLF:path**-ACT
             'She is crossing a river, a street.'

        b.   nsiopku'o
             *n-siop-**ku**-'o*
             1SG-enter-**CLF:path**-ACT
             'I enter an empty house.'

        c.   naechku'po
             *na-ech-**ku**-'=po*
             3PL-cut-**CLF:path**-ACT=PFV
             'They cut down (trees into a field).'

        d.   nkosipku
             *n-ko-sip-**ku***
             1SG-MID-wash-**CLF:path**
             'I wash my vagina.' [elicited]

Finally, the following example shows how the presence of a classifier can help disambiguate between two possible referents. In the example (330), the object of the verb *jii-ko* 'swallow' could possibly be the corn husks, or a cricket (explicitly expressed by a noun phrase three sentences prior, and then expressed via a person index in the preceding two sentences). The classifier *-si* for spherical entities helps identify the referent of the object of 'swallow' as being the cricket, since insects are members of the extensional category associated with this classier.

(330)   tyompuiji tkoojajarikri'iji to 'mu'ji ajta to ñichmoopo toj ñijiisikpuiji
        t-yom=po=iji   ti-ko-uuja-ja-ri-k=ri'i=ji   to   'mu'ji
        3-go=PFV=RPT   3-MID-scrape-RED-PLURACT=PFV=RPT   ART.NH   husk

        *ajta   to   ñi-ichmowo=po   toj   ñi-jii-**si**-k=pu=iji*
        until   ART.NH   3M-meet=PFV   ?   3M-swallow-**CLF:sphere**-ACT=PFV=RPT
        'It (the rooster) searched the corn husks, they say, until it found it and swallowed it, it says.' [T35.062]

6.6 Applicativization

In Mojeño Trinitario, a classifier on the verb that associates with either an S or O argument usually has no effect on the valency of the predicate, regardless of whether an associated noun phrase is present. An intransitive stem incorporating a classifier for S remains intransitive: this intransitivity is evident in (331) by the use of a third person prefix *ti-* (see Section 2.9.1). A transitive stem incorporating a classifier

for O remains transitive: this transitivity is evident in (332) by the use of a semantically specific third person prefix, which is employed when the object is also third person (see Section 2.9.1).[61]

(331)   tijyepa (to jarina)
        *t(i)-ijye-**pa***   *(to   jarina)*
        3-smell_good-**CLF:mass**   ART.NH   flour
        'The flour smells good.' (example built on [T21.078])

(332)   schuno'ikpo (to po'i)
        s-chuno-'i-k=po   *(to   po'i)*
        3F-boil-**CLF:fruit**-ACT=PFV   ART.NH   duck
        'She boils the duck.' (example built on [T21.089])

However, the classifiers associating with peripheral participants may, in contrast, have an applicative function in Mojeño Trinitario. While Mithun (1986) describes a stage where noun incorporation is used for case manipulation, valency-changing effects have rarely been described for classifiers (note that Mihas (2009) describes such a case in the Kampan branch of the Arawak family). More discussion on this surprising function of classifiers from typological and diachronic perspectives can be found in Rose (2019b). The following sections describe applicativization via classifiers first on intransitive verbs (6.6.1) and then on transitive verbs (6.6.2). The subsequent sections discuss the semantics (6.6.3) and pragmatics (6.6.4) of the classifier-marked applicative construction.

6.6.1 Applicativization in intransitive verbs

Intransitive verbs that optionally take prepositional phrases, with various possible semantic roles, can be applicativized through the incorporation of classifiers expressing these peripheral roles, and the peripheral participants can be expressed by noun phrases in object position. The verbs are then transitivized, as evident by the appearance of semantically specific third-person subject markers. The following classifiers have been found to exhibit this applicativizing function: *-je* 'interior', *-e* 'liquid', *-muri* 'group', *-ji* 'amorphous', *-pi* 'filiform', and *-me* 'fabric-like'.

For example, the intransitive verb *ow(o)-'o* 'to be, to live' normally takes a prepositional phrase to express the ground (i.e., the location), as in (333). In (334) and (335), a classifier is incorporated in the verb and categorizes the ground, which may now be expressed as an object noun phrase, without a preposition, as in (334). The verb is transitivized, as evidenced by (i) the use of a semantically specific third-person prefix when the object is third person, as in (334); and (ii) the use of a person suffix for an object that is an SAP, as in (335).

(333)   to kwoyu tyow'o te to une
        to   *kwoyu*   *ty-ow-'o*   ***te***   *to*   *une*
        ART.NH   horse   3-be-ACT   **PREP.NH**   ART.NH water
        'The horse is in the water.' [elicited]

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[61] Classifiers are compatible with overt valency changes. In the following example, a classifier expresses the figure of the motion event *siopo* 'enter', and this verb root is marked with both a causative prefix (to express the control and intention of the causer) and a middle suffix (to express that the causer and the causee are the very same person).

    ene tkosiopsikwopo taye'e.
    *ene t-ko-siop-**si**-k-wo=po*   *ta-ye'e.*
    and 3-CAUS-enter-**CLF.sphere**-ACT-MID=PFV   3NH-PREP
    'And it put its own head into it.' [T18.015]

(334)   to kwoyu toweko to une
        to   *kwoyu*   *t(a)-ow-**e**-ko*   *to*   *une*
        ART.NH   horse   3NH-be-**CLF:liquid**-ACT   ART.NH   water
        'The horse is in the water.' [elicited]

(335)   tyoomuu'owkowyoo'i
        *ty-oo-**muu**-'o-**wkow**=yo=o'i*
        3-be-CLF:group-ACT-1PL=FUT=IPFV
        'He is going to be among us.' [T29.063]

The use of a classifier for a peripheral participant on an intransitive verb root does not necessarily trigger applicativization. The verb *siopo* 'enter' is usually an intransitive verb followed by a preposi-tional phrase expressing the goal of motion, as in (336). This peripheral participant can be co-expressed with a classifier in the verb, as in (337). This verb can also incorporate a classifier for the goal of motion, thereby undergoing transitivization, with the goal subsequently being expressed as an object without a preposition, as in (338).

(336)   enoporichu no wchichanoviono nomuire tsiopompo te 'to eskuela.
        eno=po=richu   *no*   *w-chicha-noviono*   *n-omuire*   *t-siopo-m=po*
        3PL=PFV=RESTR   ART.PL   1PL-son-PL.KIN   3PL-also   3-enter-PL=PFV

        te   *'to*   *eskuela*
        PREP.NH   ART.NH   school
        'There are some of our children who have also already started (lit. entered) school.'
        [T31.011]

(337)   nsiopueko (te) to une
        *n-siopu-**e**-ko*   *te*   *to*   *une*
        1-enter-**CLF:liquid**-ACT   PREP.NH   ART.NH   water
        'I enter (into) the water.' [elicited]

(338)   ssiopjechripo smeno
        *s-siop-**je**-ch=ripo*   *smeno*
        3F-enter-**CLF:**interior-ACT=PFV   woods
        'She has entered the woods.' [Path.S.039]

A comparison of (337) with (338) shows that the use of a classifier for a peripheral participant on an intransitive verb root does not automatically change its valency. This is exemplified in (339) for another motion verb, *anu* 'pass, cross', which can also be applicativized with a classifier, as in (340).

(339)   tyammuekono te pjo puente
        *ty-am-**mue**-k-ono*   *te*   *p-jo*   *puente*
        3-pass-**CLF:fabric**-ACT-PL   PREP.NH   DEM-NH   bridge
        'They pass the bridge.' [Path.C.014]

(340)   ñammeko pjo puente
        *ñ-am-**me**-ko*   *p-jo*   *puente*
        3-pass-**CLF:fabric**-ACT   DEM-NH   bridge
        'He passes the bridge.' [Path.C.009]

6.6.2 Applicativization in transitive verbs

A classifier on a transitive verb can associate with a peripheral participant that can be expressed as a noun phrase in object position. This is again a case of applicativization. If the applied object is expressed as a noun phrase, the noun phrase expressing the patient of the verb is demoted. In contrast, if the applied

object is not expressed as a noun phrase, the patient of the verb does not have to be demoted. This applicative construction is attested with *-je* 'interior', and *-me* 'fabric'.

The verb *suk-cho* 'plant' is a transitive verb whose object is a patient, i.e., the things that are planted, and may take an optional prepositional phrase, normally understood as a location, as in (341a). Example (341b) shows that the same verb can incorporate a classifier that indicates a location (i.e., the place where the patient is going to be planted), and in such cases, the noun phrase expressing the location shows the behavior of an object (in particular, it is not preceded by a preposition), and the patient is demoted by omission. The transitivity of the construction is visible in the choice of the semantically specific *na-* prefix for human plural to index a third person subject.

(341)   a. tamutu masukcho te to muésane.
           ta-mutu   *ma-suk-cho*   *te*   *to*   *mu-ésane*
           3NH-all   3M-plant-ACT   PREP.NH   ART.NH   3M-field
           'He plants everything in his field' [T21.50]

       b. nasuk**je**chyore to smeno.
           *na-suk-**je**-ch=yore*   *to*   *smeno*
           3PL-plant-**CLF:interior**-ACT=FUT   ART.NH   forest
           'They are going to plant (crops) in the forest.' [T21.023]

Consider another example, involving verb *epko-ko* 'cover', which is a transitive verb that takes as an object the thing to be covered, as in (342). A classifier can be added to the verb to indicate an instrument, i.e., the thing used for covering, as in (343), where the classifier *-me* on this verb indicates a fabric item, here understood as a tablecloth. In this example, the applied object (i.e., the peripheral participant) is not expressed as a noun phrase, and so the noun phrase *to mesa* may express the patient without being demoted.

(342)   nepkoko to ñijora
        n-epko-ko   *to*   *ñi-jora*
        1SG-cover-ACT   ART.NH   3M-wound
        'I covered (put a bandage) on his wound.' [elicited]

(343)   Prurensia sepkomeko to mesa.
        Prurensia   *s-epko-**me**-ko*   *to*   *mesa*
        Florencia   3F-cover-**CLF:fabric**-ACT   ART.NH   table
        'Florencia covered the table with a tablecloth.' [elicited]

Just as with intransitive verbs, the use of a classifier to indicate a peripheral participant on transitive verbs does not systematically trigger an applicative construction. The manner of motion verb *etere-ko* 'jump' is a labile verb, which can function either intransitively, as in (344), or transitively, as in (345). When it takes a classifier to indicate a peripheral participant (here, the goal of motion), it can either trigger applicativization or not. In (346), a classifier categorizing the goal is incorporated in the verb and this transitivizes the verb. This is visible through the use of a semantically specific third-person subject prefix (*mu-* for 3M) and the absence of a preposition before the noun phrase. By contrast, in (347), where another classifier categorizing the goal is incorporated, applicativization is not triggered, and the verb remains intransitive, as evidenced by the goal being expressed by a prepositional phrase and the use of the third-person subject prefix *t-*.

(344)   netereko te une
        n-etere-ko   *te*   *une*
        1SG-jump-ACT   PREP.NH   water
        'I jump into the water.' [elicited]

(345)   muetereko to vanku
        mu-etere-ko   *to*   *vanku*
        3M-jump-ACT   ART.NH   bench
        'He jumped over the bench.' [elicited]

(346)   mueteremeko to vanku
        *mu-etere-**me**-ko*   *to*   *vanku*
        3M-jump-**CLF:fabric**-ACT   ART.NH   bench
        'He jumped onto the bench.' [elicited]

(347)   eñi teterepueko te pog'e
        eñi   *t-etere-**pue**-ko*   *te*   *pog'e*
        3M   3-jump-**CLF:ground**-ACT   PREP.NH   earth
        'He jumped to the ground.' [elicited]

6.6.3 Semantics of the classifier-marked applicative construction

The applicativization process triggered by a classifier typically promotes a peripheral argument expressing a ground or location, as in (341), but applied objects with other semantics are attested. For example, classifiers indicate an instrument in (343), a goal in (346), a source in (348), a median point in a motion event in (340), and a reason in (349).

(348)   wkuch**ku**'yoo'i te to mapeno.
        *w-k-uch-**ku**-'=yo=o'i*   *te*   *to*   *ma-peno*
        1PL-CAUS-go_out-**CLF:path**-ACT=FUT=IPFV   PREP.NH   ART.NH   3M-house
        'We are going to take him out of this, to his house.' [T19.093]

(349)   eñi ñisemopikpo
        eñi   *ñi-semo-**pi**-k=po*
        M   3M-be.angry-**CLF:fili**-ACT=PFV
        'He got mad (at these words).' [T20.046]

It is important to note that the seven classifiers attested in the corpus to trigger applicativization are not restricted to a particular semantic role with respect to the applied object. This makes them different from typical applicative constructions, like the other applicative constructions of Mojeño Trinitario, which involve dedicated applicative morphemes that specify the semantics of their applied objects, i.e, *-(i)n*, which specifies benefactive applied objects; *-'u*, which specifies goal applied objects; and *-i'o ~ -iyo*, which specifies fronted arguments expressing instrumental, location, cause, or manner meanings.

(350)   nwachririsno su meme
        *n-wachri-ri-s-**no***   *su*   *meme*
        1SG-buy-PLURACT-ACT-**APPL**   ART.F   1SG-mother
        'I went shopping for my mother.' [elicited]

(351)   Calixta siso'ucho to 'santi to sukriono
        *Calixta s-iso-'**u**-cho*   *to*   *'santi*   *to*   *sukri-ono*
        Calixta 3F-weed-**APPL**-ACT   ART.NH   field   ART.NH   plant-PL
        'Calixta weeded the field for the plants.' [elicited]

(352)   pjoka kaecha nisiyo pjo nésane
        pjoka   *kaecha*   *n-is-**iyo***   *pjo*   *n-ésane*
        DEM   shovel   1SG-weed-**APPL**   DEM   1SG-field
        'With this shovel, I weed my field.' [elicited]

Instead, each classifier retains, in its applicative use, its categorizing semantics in terms of the physical properties of the classified referent, i.e., they still involve some 'lexical' meaning. They are therefore

selected depending not on the semantic role of the applied object, but rather on the physical properties of the referent of the applied object, as exemplified in (349). In this example, the classifier *-pi* is not selected because it specifies that the applied object is a cause, but rather because the applied object pertains to the category of entities that are thin, long, and flexible, as speech is conceived by speakers of the language.

Interestingly, the semantic interpretation of applied objects is not necessarily identical to that typical of peripheral participants for the verbs in question. There is therefore some semantic difference between applicative and non-applicative constructions. This is consistent with the fact mentioned above that the use of a classifier to indicate a peripheral participant does not necessarily trigger applicativization: that way, a particular verb can govern participants with different roles, depending on the construction used. The semantic contrast between applicative and non-applicative constructions boils down to the specificity of the semantic relationship between the noun phrase and the predicate.

In fact, prepositional phrases can be interpreted differently in Mojeño Trinitario, depending on context, as illustrated by the different possible translations of the semantically vague preposition *te*, in (353). In contrast, different classifiers restrict the possible interpretations of semantic relationship between the verb and the noun phrase that they categorize. Example (354) shows the same verb as in (353), this time incorporating a classifier for a noun phrase that is promoted to the object position, as evidenced by the fact that it is not introduced by a preposition. Similarly, we can see that the verb is transitivized, as evidenced morphologically by the semantically specific third-person prefix for the subject. In this case, applicativization by the classifier restricts the possible interpretation of the applied object as a ground or location, in contrast to the vaguer semantics of the corresponding prepositional phrase in (353).

(353)   tjunopo **te** to smeno
        t-junopo   ***te***   *to*   *smeno*
        3-run   **PREP.NH**   ART.NH   woods
        'S/he runs **in/to/from** the woods.' [elicited]

(354)   ñijumpo**je**cho to smeno
        *ñi-jumpo-**je**-cho*   *to*   *smeno*
        3M-run-**CLF:interior**-ACT   ART.NH   woods
        'S/he runs **inside** the woods.' [elicited]

Narrowing the semantic role of a peripheral participant categorized by a classifier is also evident in the following examples, which involve *etere-ko* 'jump', a labile verb. In its intransitive use, an oblique noun phrase is interpreted as either the goal, as in (355), or as the source of the motion, as in (356), while in its transitive, the object is a theme, corresponding to the boundary that is passed over by jumping, as exemplified in (357). A classifier categorizing the peripheral participant can be incorporated into this verb, either triggering applicativization, as in (359), or not, as in (358). In both cases, the classifier associates with a noun phrase that is interpreted as having the role of a peripheral participant, the goal of motion. In (359), applicativization allows a peripheral participant to be presented as a central element of the event, instead of merely as a boundary to be crossed (see next section for the pragmatic effect of this type of promotion).

(355)   netereko te une
        n-etere-ko   *te*   *une*
        1SG-jump-ACT   PREP.NH   water
        'I jump into the water.' [elicited]

(356)   ema teterekpo taye'e
        ema   *t-etere-k=po*   *ta-ye'e*
        3M   3-jump-ACT=PFV   3NH-PREP
        'He jumped from there' [T18.040]

(357)   muetereko to vanku
      mu-etere-ko   *to*   *vanku*
      3M-jump-ACT   ART.NH   bench
      'He jumped over the bench.' [elicited]

(358)   eñi teterepueko te pog'e
      eñi   *t-etere-**pue**-ko*   *te*   *pog'e*
      3M   3-jump-**CLF:ground**-ACT   PREP.NH   earth
      'He jumped to the ground.' [elicited]

(359)   mueteremeko to vanku
      *mu-etere-**me**-ko*   *to*   *vanku*
      3M-jump-**CLF:fabric**-ACT   ART.NH bench
      'He jumped onto the bench.' [elicited]

Importantly, it is not the case that a given classifier regularly associates the same semantic role to an applied object, regardless of the verb root. For example, the classifier *-je* construes the entities that it categorizes as closed containers (its prototype being a stomach). When found in its applicative use on the intransitive verbs *junopo* 'run' in (360) and *siopo* 'enter' in (361), it associates with a noun phrase that is interpreted differently in the two examples: as a location in (360), and an 'allative' in (361).

(360)   ñijumpo**je**cho to smeno
      *ñi-jumpo-**je**-cho*   *to*   *smeno*
      3M-run-**CLF:interior**-ACT   ART.NH   woods
      'S/he runs **inside** the woods.' [elicited]

(361)   ssiop**je**chripo smeno
      *s-siop-**je**-ch=ripo*   *smeno*
      3F-enter-**CLF:interior**-ACT=PFV   woods
      'She entered the woods.' [Path.S.039]

The meaning of the verb root therefore plays a role in the interpretation of the semantic role of the applied object in the classifier-marked applicative construction. For instance, classifiers associate with a cause in the case of 'be angry', as in (349); with an instrument in the case of 'over' (343); with a goal in the case of 'enter', as in (361); with a source in the case of 'go out', as in (348); and with a median point in the case of 'cross', as in (340). The semantic roles associated with the applied object are thus ones that are highly salient in the conceptualization of the event. In other cases, the applied object is probably interpreted by default as a location, as in (354) and (341).

The semantic contribution of the classifier used as an applicative marker partly explains the selection of this construction. The pragmatic effect of the construction is another explanation, as discussed in the next section. Note that the semantic effect of the classifier in the classifier-marked applicative construction parallels the more general use of classifiers, since they are often used to narrow down the possible interpretations of the structure they fit in.

6.6.4 Pragmatics of the classifier-marked applicative construction

As is typical of optional applicative constructions, there is a pragmatic contrast between the applicative construction and its non-applicative counterpart. A typologically well-known discourse effect of applicatives is that applied objects are construed as central participants in the event conceptually associated with the verb. Applied objects thus exhibit a more prominent discourse status than when their referents are expressed as obliques.

One consultant described non-applicative constructions as 'plain descriptions', while their applicative counterparts with an associated noun phrase are described as 'putting an emphasis on the location'. In the case of example (362), for example, the consultant said that the location is presented as worthy of attention: there is an emphasis on the location, be it that the horse went in the water voluntarily or that

someone forced it into it. In contrast, the location is not perceived as particularly remarkable in (363). Similarly, in (364), the person is interpreted as sitting in the mud willingly — for example, due to an absence of another place to sit — while in (365) the person is interpreted as having sat in the mud unexpectedly. In both pairs of examples, the peripheral participant is made central, meaningful, and worthy of attention through applicativization.

(362) to kwoyu tow**e**ko to une
    to   *kwoyu*   *t(a)-ow-**e**-ko*   *to*   *une*
    ART.NH   horse   3NH-be-**CLF:liquid**-ACT   ART.NH   water
    'The horse is in the water.' [elicited]

(363) to kwoyu tyow'o **te** to une
    to   *kwoyu*   *ty-ow-'o*   ***te***   *to*   *une*
    ART.NH   horse   3-be-ACT   **PREP.NH**   ART.NH   water
    'The horse is in the water.' [elicited]

(364) neja**j**ko to tyuraji
    *n-eja-**j**-ko*   *to*   *tyuraji*
    1SG-sit-**CLF:amorph**-ACT   ART.NH   mud
    'I sit in the mud.' [elicited]

(365) nejako **te** to tyuraji
    n-eja-ko   ***te***   *to*   *tyuraji*
    1SG-sit-ACT   **PREP.NH**   ART.NH   mud
    'I sit in the mud.' [elicited]

These interpretations result from two facts: first, the applied object is made "central" in the conceptualization of the event through applicativization; second, the fact that the applied object is expressed overtly and with an associated classifier, foregrounds it in discourse. Just like in their non-applicative use, classifiers with an applicative function can also occur without an associated noun phrase. In (366), for example, the classifier -*pi* is used anaphorically with respect to a stretch of direct speech (some insults), that has been reported immediately prior in the conversation. The use of the applicative construction makes the insults central to the event of angriness, but the absence of an overt noun phrase referring to the insulting words in the very same sentence still maintains the words in the background, by only pointing to them anaphorically.

(366) eñi ñisemopikpo
    eñi   *ñi-semo-**pi**-k=po*
    M   3M-be.angry-**CLF:fili**-ACT=PFV
    'He got mad (at these words).' [T20.046]

The discourse functions of classifiers with or without a noun phrase in applicative constructions therefore parallel those of classifiers and/or noun phrases in the basic qualifying use of classifiers, but in the applicative construction, the applied object is always presented as semantically central to the event expressed by the predicate.

7
A multilocus and multifunctional classifier system among nominal categorization devices

The classification systems uncovered in Amazonian languages differ significantly from the systems of nominal categorization that were previously known, be they gender systems in European languages, numeral classifier systems in Asian languages, or noun class systems in African languages (Aikhenvald 2000; Grinevald & Seifart 2004; Krasnoukhova 2012; Seifart & Payne 2007; van der Voort 2018). For this reason, they were first seen as intriguing. They now benefit from more ample coverage, even though works that cover all the aspects of a classifier system, such as the present book, are still rare.

In this section, I do not aim to address theoretical issues associated with the Mojeño Trinitario classifier system, but rather to briefly highlight important characteristics of the Mojeño Trinitario classifier system with respect to noun categorization devices among the world's languages, and within Mojeño Trinitario itself, using a few key works from the existing literature on Amazonian classifiers as a basis of comparison.

7.1 A multilocus classifier system

In her monograph on classifiers, Aikhenvald (2000) devotes a chapter to what she calls "multiple classifier languages". It starts as follows: "The same, or almost the same, set of morphemes can be used in more than one classifier environment. These morphemes may have different grammatical properties, or be more or less obligatory depending on what classifier environment they are in. We label them 'multiple classifier' systems" (Aikhenvald 2000:204). These are contrasted with languages in which there are different classifier types, either coexisting classifier sets in different environments, or even different classifier sets in the same environment. The term "multiple classifier system", however clearly defined in Aikhenvald's book, is possibly ambiguous between these various situations. For example, Grinevald & Seifart (2004) and van der Voort (2018) use the term "multiple classifier language" for those languages with coexisting sets. For this reason, I propose to rather use the transparent term "multilocus classifier system", which refers unambiguously to systems of classifiers where one and the same set of classifiers is used in different environments.

In this regard, Chapter 5 of this book described in detail the Mojeño Trinitario situation of the same set of classifiers being distributed over 4 general morphosyntactic contexts. This distribution is recapitulated in Table 25. On this basis, the Mojeño Trinitario classifier system is clearly a multilocus classifier system, as found in many other Arawak languages (Dunn & Rose to appear).

locus	CLF
on numerals (NUM / numeral-like elements)	✓
on adjectives	✓
on nominals (N/DEM)	✓
in verbs (including denominal verbs)	✓

Table 25. The multilocus dimension of Mojeño Trinitario classifiers

7.2 A multifunctional classifier system

Krasnoukhova (2012:193, 204) coined the term "multifunctional classifier system" for systems of nominal classification which combine some characteristics of noun classes and some of classifiers. Most notably, "one noun is not necessarily assigned to one particular semantic category and can be reassigned to a number of classes at the speaker's will". A key remark is that these classifiers in these systems have a derivational function that is not typical of either of these better-known types of nominal classification. In such systems, the classifying elements are used with different functions, to different degress depending on the language: semantic categorization, derivation, and agreement. This type of classifier system

is common in both Southwest Amazonian and Northwest Amazonian languages. Table 26 (based on a table in Krasnoukhova 2012:206) lists all the properties of a multifunctional classifier system, and also shows, as in the original table, to what degree a multifunctional classifier system is similar to, or different from, both prototypical noun classes (column NC) and other types of classifier systems (column CLF).

As developed in Chapter 6, Mojeño Trinitario classifiers have several functions: qualification, derivation, reference management and identification, and applicativization. Moreover, the Mojeño Trinitario classifier system also shows all the other properties that Krasnoukhova (2012) associates with multifunctional classifier systems. In Table 26, the column for Mojeño Trinitario shows "+" on all rows, where the typical properties associated with multifunctional classifier systems are listed. In contrast, neither noun classes nor classifiers are perfect fits for the category presented in this book. Only for some of the properties do the Mojeño Trinitario elements under study correspond to one or the other prototypes: these are squared with a bold line. Other properties match with neither noun classes nor prototypical classifiers: the respected cells are shaded in the MT column.

		NC	MT	CLF
semantic function	1. Nouns can be assigned to various classes at speaker's will	−	+	+
	2. Form largish number of classes	−	+	+
	3. Constitute an open system	−	+	+
derivational function	4. Can derive noun stems			
	4a. Derive new noun stems from nouns stems or roots	−	+	−
	4b. Nominalize and/or form noun stems from verbal stems or roots	−	+	−
	5. Can form a full NP when occurring on a modifying constituent	−	+	+/−
agreement function	6. Can occur on predicates to mark core arguments			
	6a. On any predicate to mark core arguments	+	+	+/−
	6b. Or only on a subclass of predicates			
	7. Can participate in agreement within the NP	+	+	−
	Problematic feature: 8. Classify all nouns	+	+	−

Table 26. The multifunctional dimension of Mojeño classifiers (following Krasnoukhova 2012)

Based on this comparison between the properties of Mojeño Trinitario classifying elements with both prototypical noun classes and classifiers, I have chosen the term "classifier", since it fits better with the free selection by the speaker, and the flexibility of their use in discourse, which is quite distinct from a prototypical agreement system. This classifier system can be described as multilocus and multifunctional. Many other Arawak classifier systems are certainly multifunctional (Dunn & Rose to appear), with derivational and anaphoric functions often being mentioned. A detailed investigation of the discourse functions of classifiers like the one of Mojeño Trinitario is still to be undertaken in other Arawak languages.

7.3 Classifiers as semi-grammatical elements

Krasnoukhova presents the multifunctional classifier systems as systems of nominal classification that "combine certain typical characteristics of noun classes (a highly grammaticalized nominal classification device) with some typical characteristics of classifiers (a 'lexico-grammatical device') in the words of Grinevald (2000:61). In the lexical–grammatical continuum proposed by Grinevald (2000), measure terms and class-terms are at the lexical end of the continuum, gender and noun classes at the grammatical end, and classifiers mid-way. In that work, "lexical […] means (a) part of the lexicon and its word-building dynamics and (b) semantically compositional, while 'grammatical' means part of the morpho-syntax of the language".

    In this section, I want to summarize a few chacracteristics of Mojeño Trinitario classifiers that make them 'semi-grammaticalized'. Their lexical properties are the following:

- – the use of classifiers is optional (except on numerals);
- – the selection of a classifier for a referent is flexible;
- – some classifiers have very specific meanings.

Other properties of Mojeño Trinitario classifiers are more typical of grammatical elements:

- – most classifiers have very general meanings;
- – they are bound morphemes, fully integrated intro the word phonologically and prosodically;
- – on verbs, they associate with core participants on an absolutive basis;
- – on verbs, they may have some valency-changing effects (applicativization);
- – they can be used for word class changing derivation;
- – they are used for discourse management.

    It is this intermediary status that makes classifiers extremely interesting for linguists, as they can be investigated on different levels: phonology, morphology, semantics, syntax, and discourse. Such a comprehensive study has been realized in the present book.

7.4 Classifiers among nominal categorization devices in Mojeño Trinitario

Sections 7.1–7.3 briefly situated Mojeño Trinitario classifiers among nominal categorization devices cross-linguistically. The present section situates Mojeño Trinitario classifiers among the nominal categorization systems of the language itself.

    Apart from classifiers, the other main nominal categorization device in Mojeño Trinitario is the person-marking system, which is based on a paradigm of *(C)V* formatives (see Section 2.7) that are used in personal pronouns, demonstratives, person prefixes and suffixes, and articles. It is particularly rich in gender/number categories for third person, distinguishing between human plural, human singular feminine, human singular masculine (with two forms depending on the gender of the speaker), and nonhuman (with a distinction between singular and plural in the demonstratives only). Personal pronouns, demonstratives, person prefixes, and articles vary for these gender/number categories, according to the referent of the noun phrase they associate with.[62] Articles always agree with the head of a noun phrase, which is often, but not always, a noun. This agreement constrains the selection of the article, in accord with whether the associated noun denotes a human or nonhuman referent, and for many human-denoting nouns, whether the noun specifically denotes male or female referent.[63] Pronouns, demonstratives, and person prefixes agree with a noun phrase they associate with, or in absence of such a noun phrase, with the referent that they situationally or anaphorically point to.

    In Mojeño Trinitario, the two distinct systems of classifiers and person markers are, broadly speaking, independent. First, on the syntactic level, the presence and behavior of one type of categorization device has no effect on the presence and behavior of the other type of categorization device. The two systems are not in complementary distribution, and in fact both types of markers can co-occur on the same nominal or verbal roots. A noun can take both an article and a classifier, as well as a possessive marker. A verb can take both person indexes and classifiers.

    Second, on the semantic level, the semantic extension of classifiers and person markers shows very little overlap: rather, they complement each other. While the person formatives mainly express humanness, gender, and number, these semantic features are almost entirely absent from the semantics of the classifiers (with the exception of the *-na* human classifier with regards to gender/animacy, and the *-muri* group classifier with respect to number). One could expect person markers and classifiers on the verbs to collaborate in specifying semantically the referents of the verb arguments. However, the classifiers on the verbs usually associate with third-person subjects of intransitive verbs (S), objects of transitive

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[62] Person suffixes are not relevant here, because they do not have third-person forms.

[63] Still, with some nouns, different articles may be selected, depending on the semantics of particular referents. This is the case with nouns like *chicha* 'offspring' that can refer to humans or nonhumans, and nouns like *'chane* that are specific to humans but can refer to either men or women.

verbs (O), or obliques. In contrast, the semantic features of gender and number are marked only by the semantically specific third-person markers that associate with subjects of transitive verbs (A), a function with which classifiers do not associate. Other person markers are not semantically specific: third-person S are systematically encoded with the nonspecific *ti-* third-person marker, and third-person O and obliques are not overtly marked on the verb. Person markers and classifiers thus complement each other in supplying semantic specifications for different classes of arguments: A for person markers versus S, O, and obliques for classifiers.

The two systems do, however, interact when classifiers derive new nominal stems. As morphological heads of the derived item, they determine the gender value of the article (see more discussion in Rose & Van linden 2022). This is the case in (367), where the 'ground' classifier triggers the nonhuman form of the article. If the nominal root were the head, the article would show masculine gender, agreeing with *Pedro*.

(367) to Perupa'i
       to   *Peru-pa'i*
       ART.NH   Pedro-CLF:ground
       'Pedro's land' [elicited]

This being said, the two systems can sometimes nicely complement each other in the interpretation of utterances in discourse. The following example shows how the article specifies humanness (and gender), while the default classifier on numerals is not informative (in absence of a head noun). The referent of the numeral *éto-na* 'one-CLF:GNR' must be interpreted as human masculine in the first occurrence, and as nonhuman in the second, based on the form of the article.

(368) ene takepo ñikepuiji ñi étona "… nkopakoyre tayampane to étona"
       ene   *takepo*   *ñi-ke=pu=iji*   **ñi**   *éto-na*
       and   after   3M-say=PFV=RPT   **ART.M**   one-**CLF:GNR**

       n-kopa-ko=yre   *ta-yampane*   **to**   *éto-na*
       1SG-kill-ACT=FUT   3NH-do_not_matter   **ART.NH**   one-**CLF:GNR**
       'And after that, one of them said: "[…] I am going to kill whatever it is"' [T19.020]

To conclude this book, this section has briefly characterized the classifier system of Mojeño Trinitario within the cross-linguistic typology of nominal categorization devices. First, it is multilocus, since a unique set of 32 suffixes is used in different loci: on numerals, where they are almost obligatory, on nouns, on verbs, and on adjectives, i.e., the four major loci of Arawak multilocus classifier systems classifiers (Dunn & Rose to appear). The present study has shown that classifiers on verbs can categorize not only the subjects of intransitive verbs and the objects of transitive verbs, but also peripheral participants. Second, the corpus study confirms that the Mojeño Trinitario classifer system is multifunctional. The main functions of classifiers are qualification, derivation, and discourse functions such as foregrounding, backgrounding, and reference tracking. This study might also be the first one to demonstrate the discourse functions of classifiers in Amazonian languages in the light of measures such as referential distance and topic persistence. This book has also argued that other frequently mentioned functions of classifiers, such as agreement and individuation, are not relevant in the language. It has also detailed the rarely described development of classifiers into applicative markers. Third, it has been demonstrated that the system is semi-grammaticalized, showing a significant degree of optionality and flexibility. Finally, it functions with very little functional overlap with the other main nominal categorization device of the language, the person/gender/number paradigm of formatives found in personal pronouns, demonstratives, person indexes, and articles.

Other important contributions of this book include a detailed discussion on the distinction between classifiers and incorporated/compounded nouns, as well as the acknowledgement of their very similar distribution; a detailed semantic characterization of each classifier, with a definition, provision of sets of core members and peripheral members in each case, and examples of their use; a discussion of the semantic parameters relevant for the system; and valuable quantitative information on the distribution of classifiers, according to their forms and their loci.

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Appendix: Coding of classifiers in the seven-text sample

ID	text	sentence	CLF	CLF host	CLF function	PRO	DET	N	function	human-ness	animacy	RD	TP
001	12	009	-'e	v	disc		dem	yes	o	bodypart	a	20	0
002	12	012	-omo	n	deriv		art	yes	o	nh	i	20	5
003	12	013	-ji	v	disc		art	yes	o	nh	i	1	4
004	12	014	-omo	n	deriv		art	yes	o	nh	i	1	1
005	12	014	-omo	n	deriv		art	yes	gen	nh	i	1	2
006	12	014	-ji	v	disc				o	nh	i	1	2
007	12	015	-omo	n	deriv	yes	art	yes	o	nh	i	3	0
008	12	016	-ku	v	disc				o	bodypart	a	16	0
009	12	016	-je	v	disc				o	bodypart	a	16	0
010	12	016	-ku	v	disc				o	bodypart	a	1	0
011	12	016	-je	v	disc				o	bodypart	a	1	0
012	18	015	-si	v	disc				o	bodypart	a	20	0
013	18	017	-si	v	disc				o	bodypart	a	4	0
014	18	022	-si	n	deriv		art	yes	gen	nh	a	20	0
015	18	025	-mu'i	kuti	dub			NA		nh	n/a	NA	NA
016	18	026	-si	n	deriv		art	yes	obl	nh	a	7	3
017	18	031	-gi	n	qualif		art	yes	gen	nh	i	20	0
018	18	032	-ju'e	n	qualif			yes	pred	nh	i	20	3
019	18	036	-si	n	deriv		art	yes	st	nh	a	11	0
020	19	104	-gie	n	deriv		art	yes	o	nh	i	20	0
021	18	038	-si	n	qualif		art	yes	obl	nh	i	20	0
022	18	039	-ji	n	qualif		art	yes	si	nh	i	20	0
023	18	044	-'o	v	disc				o	h	a	2	7
024	18	045	-e	v	disc				obl	nh	i	1	1
025	18	049	-na	num	default	yes	art	yes	o	nh	a	20	6
026	18	054	-e	v	disc		art	yes	obl	nh	i	10	0
027	19	001	-na	num	default	yes	art	yes	o	h	a	1	8
028	19	007	-muri	adj	qualif		dem	yes	pred	h	a	20	0
029	19	020	-na	num	default		art		st	h	a	20	1
030	19	025	-na	num	default		art	yes	st	nh	a	20	0
031	19	025	-na	num	default		art	yes	st	nh	a	20	0
032	19	027	-na	num	default		art		st	h	a	20	0
033	19	034	-'i	v	disc				si	nh	i	20	0
034	19	036	-na	num	default		art		st	h	a	20	0
035	19	046	-mu'i	dem	dub		art		o	h	a	20	0
036	19	050	-na	num	default		art		st	h	a	20	2
037	19	053	-mo	v	disc				si	nh	i	20	0
038	19	053	-mo	v	disc	yes			si	nh	i	1	0
039	19	053	-'i	v	disc				si	nh	i	20	0
040	19	054	-na	num	default		art		st	h	a	4	3

041	19	058	-'i	v	disc				si	nh	i	5	0
042	19	060	-je	v	disc		art	yes	obl	nh	i	20	0
043	19	062	-ji	v	disc				obl	nh	i	3	1
044	19	067	-'i	adj	deriv	yes			o	nh	i	1	1
045	19	070	-'o	n	qualif			yes	pred	h	a	20	0
046	19	088	-na	num	default				pred	h	a	20	0
047	19	093	-ku	v	disc				obl	nh	i	20	0
048	19	098	-pue	v	disc				obl	nh	i	20	1
049	19	101	-pue	v	disc				obl	nh	i	5	0
050	19	104	-gie	v	disc		art	yes	o	nh	i	20	0
051	19	107	-pue	v	disc				obl	nh	i	20	1
052	19	107	-ji	v	deriv		art		o	nh	i	20	1
053	19	108	-na	num	default			yes	obl	nh	i	20	0
054	19	110	-ji	n	qualif		dem	yes	o	nh	i	20	1
055	19	112	-gie	v	disc		art		o	nh	i	20	1
056	19	114	-na	num	default		art		obl	nh	i	20	0
057	19	114	-pi	v	disc				si	nh	i	1	0
058	19	155	-'ugi	v	disc				si	bodypart	a	20	1
059	19	162	-pue	v	disc			yes	obl	nh	i	20	0
060	19	163	-'ugi	adj	qualif				voc	bodypart	a	20	0
061	19	163	-miro	adj	qualif				voc	bodypart	a	20	0
062	19	168	-ji	v	disc				obl	nh	i	20	1
063	19	170	-e	v	disc				obl	nh	i	20	1
064	19	171	-e	v	disc		art	yes	obl	nh	i	1	1
065	19	171	-e	v	disc				obl	nh	i	1	0
066	19	179	-pa'i	v	deriv				obl	nh	i	20	2
067	19	190	-pue	v	disc				obl	nh	i	20	2
068	21	004	-ji	n	deriv			yes	pred	nh	i	20	0
069	21	005	-gie	adj	qualif				pred	nh	i	20	1
070	21	005	-gie	adj	qualif				si	nh	i	1	0
071	21	007	-na	num	default				o	nh	i	20	0
072	21	008	-ji	n	deriv + nz			yes	si	nh	i	20	0
073	21	008	-na	num	default		art	yes	o	nh	i	3	0
074	21	009	-ji	v	disc		art	yes	o	nh	i	3	1
075	21	009	-ji	v	disc				o	nh	i	1	0
076	21	010	-muri	po-	qualif	yes	art	yes	o	h	a	20	5
077	21	010	-na	num	default	yes	art	yes	o	h	a	20	5
078	21	010	-na	num	default				pred	h	a	1	4
079	21	011	-ji	v	disc				o	h	a	5	0
080	21	011	-na	num	default				obl	nh	i	20	0
081	21	011	-ji	v	disc		art	yes	o	nh	i	2	7
082	21	012	-ji	n	deriv			yes	pred	nh	i	20	0
083	21	013	-ji	v	disc				o	nh	i	1	4
084	21	013	-ji	v	disc				o	nh	i	1	1
085	21	014	-ku	v	disc				o	nh	i	1	0
086	21	020	-ku	v	disc		PRO	yes	o	nh	i	20	1

087	21	020	-ku	v	disc				o	nh	i	1	0
088	21	021	-ku	v	disc		art	yes	o	nh	i	20	1
089	21	022	-ku	v	disc				o	nh	i	1	0
090	21	023	-je	v	appl				o	nh	i	3	7
091	21	029	-pue	v	disc				obl	nh	i	20	3
092	21	029	-ji	v	disc				o	nh	i	20	3
093	21	030	-na	num	default			yes	o	nh	i	20	0
094	21	030	-pue	v	disc				obl	nh	i	3	0
095	21	031	-na	num	default			yes	o	nh	i	2	0
096	21	032	-ku	v	disc		art	yes	si	nh	i	5	0
097	21	033	-ku	v	disc				si	nh	i	2	1
098	21	034	-ku	v	disc				si	nh	i	1	0
099	21	035	-pue	v	disc				obl	nh	i	14	0
100	21	035	-pue	v	disc				obl	nh	i	1	0
101	21	037	-muri	po-	qualif			yes	st	h	a	1	2
102	21	039	-pa'i	v	deriv + nz				obl	nh	i	12	0
103	21	044	-ku	v	disc				obl	nh	i	6	0
104	21	045	-pa'i	v	deriv + nz		art	yes	si	nh	i	1	0
105	21	049	-pa	n	deriv			yes	o	nh	i	20	0
106	21	053	-pa	n	deriv			yes	o	nh	i	20	0
107	21	056	-na	num	default		art		o	nh	a	20	1
108	21	057	-na	num	default			yes	obl	nh	i	20	1
109	21	057	-na	num	default			yes	obl	nh	i	1	0
110	21	058	-na	num	default			yes	obl	nh	i	2	0
111	21	060	-na	po-	default			yes	obl	nh	i	20	0
112	21	071	-na	num	default				pred	h	a	1	2
113	21	071	-na	num	default				pred	h	a	1	1
114	21	071	-na	num	default				pred	h	a	1	0
115	21	075	-ji	n	deriv		art	yes	o	nh	i	20	0
116	21	077	-ji	n	qualif		art	yes	si	nh	i	20	6
117	21	077	-pa	v	disc				o	nh	i	1	5
118	21	078	-pa	v	disc	yes	art	yes	si	nh	i	1	2
119	21	081	-pa	n	qualif		art	yes	o	nh	i	20	1
120	21	081	-pa	n	qualif			yes	o	nh	i	1	1
121	21	081	-pa	n	deriv		art	yes	obl	nh	i	17	0
122	21	082	-pa	n	deriv		art	yes	o	nh	i	4	0
123	21	082	-ji	n	qualif	yes	art	yes	o	nh	i	10	0
124	21	082	-pa	n	deriv		art	yes	gen	nh	i	2	0
125	21	083	-pa	n	qualif		art	yes	si	nh	i	1	1
126	21	083	-pa	n	qualif		art	yes	si	nh	i	1	0
127	21	089	-'i	v	disc				o	nh	a	1	2
128	23	002	-pi	n	deriv + nz			yes	obl	nh	i	20	0
129	23	009	-muri	dem	qualif				o	nh	i	1	1
130	26	020	-'a	n	deriv		dem	yes	o	nh	i	20	0
131	26	026	-na	num	default			yes	obl	nh	i	20	0
132	26	030	-na	num	default			yes	obl	nh	i	5	0

```
133 26 040 -muri adj  qualif                o    nh        i   20  0
134 26 043 -omo  n    qualif        art yes o    nh        i   20  0
135 29 003 -pa   n    deriv             yes o    nh        i   20  0
136 29 003 -pue  v    disc              o    nh            i    1  0
137 29 013 -muri v    disc              si   h             a    1  3
138 29 014 -si   v    deriv             si   h             a   20  1
139 29 015 -muri v    disc              o    h             a    1  0
140 29 015 -'o   adj  deriv             o    h             a   20  0
141 29 017 -si   adj  deriv       art   o    h             a   20  1
142 29 030 -mu'i v    disc              o    nh            a   20  1
143 29 036 -me   v    disc              o    nh            i    1  5
144 29 036 -me   v    disc              o    nh            i    1  4
145 29 038 -mo   n    qualif          yes si  bodypart     a   20  0
146 29 041 -mo   v    disc        dem yes si   nh          i   20  2
147 29 041 -pa   v    deriv             obl  nh            i   20  0
148 29 042 -mo   v    disc              si   nh            a   20  5
149 29 043 -me   v    disc              o    nh            a    1  4
150 29 045 -muri v    disc              o    nh            a    1  0
151 29 046 -mo   v    disc              si   nh            a    2  1
152 29 046 -me   v    disc              si   nh            a    1  1
153 29 049 -'i   v    disc        dem yes o    nh          a   20  4
154 29 050 -'i   v    disc              o    nh            a    1  2
155 29 052 -'i   v    disc              o    nh            a   12  0
156 29 061 -na   v    disc              si   h             a    1  5
157 29 063 -muri v    disc              o    h             a    4  0
158 29 064 -muri v    disc              obl  h             a    1  1
159 29 070 -muri po-  qualif      dem yes st   h           a   20  4
160 29 071 -mu'i n    qualif          yes obl  nh          i   20  0
161 29 073 -muri v    disc              o    h             a    1  1
162 29 075 -muri v    disc              o    h             a    6  0
163 29 076 -pi   dem  deriv       dem       o    nh        i    1  2
164 12 014 -na   num  default         yes o    nh          i   20  0
165 19 006 -na   num  default     art       st   h         a   20  0
166 19 020 -na   num  default     art       o    nh        a    5  1
167 19 044 -na   num  default     art       st   h         a   20  4
168 29 069 -muri po-  default     art   yes obl  h         a   20  5
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Série Monografias, 7

Mojeño Trinitario classifiers:
a multilocus and multifunctional system

by *Françoise Rose*

This book offers a comprehensive synchronic description of the classifiers of Mojeño Trinitario, an Arawak language spoken in lowland Bolivia. It relies on a systematic investigation of a corpus of texts collected by the author in the field, allowing a quantitative investigation of the morphosyntactic and discourse environments of classifiers in natural speech. The book starts off by identifying what Mojeño Trinitario classifiers are, and describing some of their formal characteristics. The language features a set of 32 classifiers, which are suffixes, most often of the *CV* shape. Even though the morphosyntactic environments in which classifiers occur are also available to full nouns in compounding processes, classifiers can be distinguished from nouns, because they do not have the capacity to head a noun phrase. The book goes on by describing in detail the semantic extension of classifiers, both at the level of each individual classifier as well as at the level of the system as a whole. Most of the Mojeño Trinitario classifiers express physical properties of the referent they classify, especially shape. Then, the morphological distribution of classifiers on different parts of speech is analyzed. They are found on numerals, nouns, adjectives, and verbs. On verbs, they categorize either the subject, the object, or a peripheral participant. The book furthermore examines the functions of Mojeño Trinitario classifiers: qualification, derivation, and discourse functions, as well as an emergent applicative function. Finally, some crucial typological aspects of the system are that (i) the same set of classifiers is used on different types of hosts, (ii) they are generally not obligatory, except on numerals, (iii) there is no unique association between classifiers and nouns or referents. This nominal classification system is analyzed as a multilocus and multifunctional classifier system, and also happens to be a good representative of Arawak classifier systems.