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# Associated motion in Mojeño Trinitario: Some typological considerations

**Abstract:** Associated motion is a very little known category. Markers of associated motion encode, on a lexical verb, a motion event in a temporal relation with the event expressed by the lexical verb (and not just the path, as directionals do). The literature on associated motion is scarce, mostly restricted to Australian and Amazonian languages. The paper builds on the general literature on associated motion as a backdrop to the analysis proper of the data from Mojeño Trinitario, an Arawak language spoken in Bolivia. This paper offers a detailed description of the associated motion markers of Mojeño Trinitario, at the morphological, semantic, and discourse levels. The study is mainly based on textual and elicited data collected in the field. The new insights provided in this paper will contribute to the emerging typology of associated motion.

**Keywords:** associated motion, directionals, space, typology, Arawak

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## 1 Introduction

Associated motion is a very little known category. Markers of associated motion encode, on a lexical verb, a motion event in a temporal relation with the event expressed by that lexical verb. They convey in one morpheme what is most often expressed via subordination (“before I go”) or coordination (“do and go”) in the languages of the world. The literature on associated motion is scarce, mostly restricted to Australian and Amazonian languages. Consequently, the typology of this category is under construction.

The Trinitario dialect of Mojeño (Rose, to appear), an Arawak language spoken in Bolivia, shows at least six associated motion markers. The most interesting facet of the category in Mojeño is its heterogeneity, suggesting a complex evolution in its genesis and/or its later development. This may be the reason why, although some of the Mojeño morphemes have been previously

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identified as expressing motion (Marbán 1702; Gill 1957; Olza Zubiri et al. 2002), they were not categorized as members of a unified category having to do with motion.<sup>1</sup> The analysis of Mojeño offered in this paper is primarily based on data collected during a total of nine months of fieldwork undertaken since 2005. The corpus for this study includes six hours of spontaneous text and some specific data on associated motion collected in elicitation sessions (150 sentences). The study also relies on the previous literature on the Mojeño language (Marbán 1702; Gill 1957; Olza Zubiri et al. 2002).<sup>2</sup>

The aim of the paper is twofold: first, it offers a description of the Mojeño Trinitario associated motion markers, informed by the literature on associated motion cross-linguistically; second, it evaluates and discusses the emerging typology of associated motion in light of the Mojeño Trinitario data. The paper is organized as follows.<sup>3</sup> Section 2 reviews the literature on associated motion. Sections 3 to 5 present the system of associated motion in Mojeño Trinitario at the morphological, semantic, and discourse levels, respectively. Section 6 recapitulates some of the previous information to show that this system is heterogeneous, which points to a probably complex genesis and evolution. The conclusion summarizes the contribution of Mojeño Trinitario to the general knowledge of the associated motion category and its semantic sub-categorization in particular.

## 2 Cross-linguistic background on associated motion

### 2.1 Introducing associated motion

Associated motion is a little-known conceptual category; it was introduced by Koch (1984: 23) for “notions having to do with the motion associated with the

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1 The first grammar of Mojeño (as spoken in the seventeenth century) had already identified the morphemes *pori*, *pona*, and *numo* (Marbán 1702). Gill’s (1957) and Olza Zubiri et al.’s (2002) grammars of modern dialects of Mojeño (respectively Trinitario and Ignaciano) also identify most of the associated motion suffixes, with all or part of their meanings. In these grammars, the morphemes are briefly described with a general translation and some illustrative examples.

2 When unspecified, Mojeño Trinitario examples come from data that I have collected myself. Examples that I have collected in elicitation sessions are specified as “elicited examples”, other examples are taken from recordings of spontaneous speech.

3 I would like to thank Marine Vuillermet and Antoine Guillaume for comments on an initial version of this paper. My work on associated motion has largely benefited from regular input from Guillaume’s presentations and informal discussions on the topic. Thanks also to Loretta O’Connor and the editor for help with the final version of the paper.

action denoted by the verb”, in his description of verbal suffixes in Kaytey and other Australian languages. It expresses a motion event that occurs before, during, or after the event expressed by the lexical verb, as illustrated in (1) with examples from Mojeño Trinitario. Associated motion can be expressed through serialization, compound verbs, and complex sentences (Koch and Simpson 1995; Simpson 2001), yet its most interesting manifestation is via a morphological category of associated motion markers, such as those presented in (1). This paper focuses on the grammatical category of associated motion encoded by specialized markers.

Mojeño Trinitario (elicited examples)

(1) a. interrupted motion

*p-ni-jn-a*

2<sub>SG</sub>-eat-REV.MOT-IRR

‘Come and eat (and go away again)!’

b. concomitant motion

*n-ni-k-pooʔi*

1<sub>SG</sub>-eat-ACT-IPFV.MOT

‘I ate (as I was) coming.’

c. subsequent motion

*p-ni-k-num-a*

2<sub>SG</sub>-eat-ACT-SUBS.MOT-IRR

‘Eat before you go.’

## 2.2 An understudied category

The present section aims at reviewing the previous literature on the topic, in order to get a better grasp of the contribution of the Mojeño Trinitario system to the general knowledge on associated motion.

The grammatical category of associated motion was first used almost exclusively in the description of Australian languages (Koch 1984; Tunbridge 1988; Austin 1989; Wilkins 1991). The most comprehensive of these studies is that of associated motion in Mparntwe Arrernte by Wilkins (1991, 2006). This category has later also been identified in indigenous languages of the Americas; these include Olutec, a Mixe-Zoquean language (Zavala Maldonado 2000), and Lowland Chontal, an unclassified language, several South-Western Amazonian languages (Guillaume 2008; Vuillermet 2013; Rose, to appear), and the Mataguayan language Nivacle spoken in the Gran Chaco (Fabre, under review). Guillaume (2012) also offers a large areal study of the category in 31 South-Western Amazonian

languages. The label “associated motion” is now used as well in the description of a few African languages, such as Sereer (Renaudier 2012: 95–98), Wolof, and other Atlantic languages (Voisin 2010 and Voisin 2013). I am not claiming here that the category is absent from all other regions and languages, but I have not found additional explicit mentions of the category in the literature.

The label “associated motion” is in fact rarely used in grammatical descriptions, including those that describe the use of some markers meeting the accepted definition of the category. Associated motion markers are described under other labels (like movement suffixes, or aspect-related satellites) in a number of languages, such as Atsugewi, Zapotec, and Hausa, mentioned in Wilkins (1991), some Western Amazonian languages (Doris Payne 2003), Mandinka (Creissels 2014), and probably many others. They are also found in several Arawak languages, usually identified by means of the cover term “directionals” or by more specific terms such as “intentional” or “departitive” (Judith Payne 1982; Wise 2005; Danielsen 2007). Voisin (2010, 2013) provides nice illustrations of how morphemes traditionally called “directionals” can be properly re-labeled “associated motion markers” in some Atlantic languages.

In the rest of the section, I will summarize the existing literature that explicitly deals with associated motion. It generally focuses on defining associated motion by distinguishing it from directionals or from aspect, describing the semantic sub-categories within an individual language, and discussing the use of the markers in discourse.

### 2.3 What associated motion is not

Markers that fall under the definition of associated motion are often categorized as directionals because they may encode deixis, as directionals do. There is, however, an important distinction between these two categories (for a more detailed discussion, see Guillaume 2006). Associated motion markers express motion on all kinds of verb stems except, on the whole, on motion verbs themselves, and ‘motion’ constitutes the core of their semantics. Thus, in (2a), the lexical event (the event expressed by the verb stem) is ‘eat’ and the associated motion marker *-wa* adds the information that some motion event takes place before the ‘eating’ event. This marker also expresses path (‘come’ rather than ‘go’) as an additional contribution to the semantics of the motion event. In contrast, directionals primarily express path (deixis and orientation) and attach primarily to motion verb stems. In (2b), the verb root ‘lay’ expresses induced motion, with the directional *-doby* not adding the idea of motion but only that of path, in this case a deictic path away from the reference point. Likewise, a

directional on a perception verb root like ‘look’ adds information on the direction of the action – “look up” for instance (Craig 1993), while an associated motion marker on the same verb root adds a motion component to the perception event, resulting in meanings such as “go and look, look while going, look and go” (Voisin 2010: 29). The core semantic component of associated motion is thus ‘motion’. Its secondary component, present in all systems, is the relative timing between the motion event and the event expressed by the lexical verb. Looking again at the Mojeño Trinitario data, in (1a) the motion is interrupted by the action, in (1b) it is concurrent with the action, while in (1c) it is subsequent to the action.

Ese Ejja

(2) a. associated motion

*Ixya-wa-kwe!*

eat-**come**\_do-IMP

‘Come and eat!’

b. directional

*Wana-dobyka-ka-naje xani=yasixe.*

lay-**go**.INTR-3A-PST hole=into

‘They laid (the corpse) into the hole.’

(Vuillermet 2013: 44, 2012b: 419)

Associated motion can also be distinguished from motion with purpose (Guillaume 2006). This is particularly clear in languages such as Olutec (Zavala Maldonado 2000) and Lowland Chontal (O’Connor 2004), which show both a motion with purpose construction and associated motion markers. Most languages in the world express motion with purpose with the help of the lexical verbs ‘go’ or ‘come’, in a more or less grammaticalized construction. Motion with purpose is a term mostly used for this construction in the description of Mesoamerican languages (more particularly in Aissen 1987: 16). Motion with purpose differs from associated motion in that the motion is necessarily prior to the non-motion event, and, importantly, the motion is specifically aimed at the realization of the non-motion event. Motion with purpose does not fit in a paradigm of markers expressing other temporal relations between the motion event and the non-motion event. Olutec, for instance, shows a motion with purpose construction with a motion lexical verb root preceding an action verb in iconic constituent order (3a). This construction expresses the fact that the motion is aimed at the realization of the action. The same language also shows an associated motion construction with a motion lexical verb root suffixed to an action verb with an intervening linker morpheme (3b). Here the motion is

backgrounded as a motion event concomitant to the non-motion event, and the “intention” or purpose of the agent is not suggested. The order of the morphemes expressing the non-motion event and the motion is not necessarily iconic.

Olutec

- (3) a. motion with purpose  
*ʔi=niłkx-küx-i ta=pük-küx-i jeʔ tzoy*  
 3ABS=**go**-3PL-INC 3ERG-grab-3PL-INC that medicine  
 ‘They are going to get that medicine.’
- b. associated motion  
*šiga:rru=k ʔi=juʔk-tak-mi:nʔ-u*  
 cigarette=AN 3ERG=smoke-LNKR-**come**-COMPL  
 ‘He came smoking a cigarette.’  
 (Zavala Maldonado 2000: 141, 149)

## 2.4 A grammatical category

Associated motion can be considered a grammatical category when the concept of associated motion is encoded by a set of morphemes that show common morpho-syntactic properties in a language, such as a distinct slot on the verb, co-occurrence restrictions with certain lexical classes of verb roots, and morphological combinations. When markers are homonymous with verb roots, the overall meaning of a verb root and its associated motion marker does not have to be merely the sum of the meanings of morphemes. The associated motion marker is analyzed as a grammatical category rather than as an element of a compound because the argument structure of the clause is determined by the verb root only.

## 2.5 Semantic sub-categories

Associated motion marker systems may comprise a good number of items. Arrernte displays 14 associated motion markers (Wilkins 1991), and Cavineña has 12 (Guillaume 2008: 212–236). In the South-Western Amazonian languages that are considered to show associated motion markers, Guillaume identified 22 languages with 3 or more markers, and 11 languages with 6 or more markers, and he categorizes those as complex vs. very complex systems (Guillaume 2012).

The systems of associated motion morphemes described so far in the literature are generally presented as networks of systematic (often binary) oppositions, and they show recurrent semantic parameters. This section builds on the

first descriptions of the category in Australian languages (Koch 1984; Wilkins 1991), on the parameters identified by Guillaume with additional data on Tacanan and neighboring languages from South-Western Amazonia languages (Guillaume 2008, Guillaume 2009, Guillaume 2012, and Guillaume to appear), and on descriptive studies of other languages. On the basis of these various sources, I have identified six major semantic parameters, presented below from most common to least common.<sup>4</sup>

### 2.5.1 Timing of the motion event in relation with the lexical event

Koch (1984) distinguished three categories in terms of the timing of the motion event in relation to the lexical event: “prior”, “concurrent”, and “subsequent” motions (see (4)). Prior and subsequent motions are self-explanatory. In most descriptions, “concurrent motion” includes situations where the duration of the lexical event is co-extensive with the motion event, and those where the lexical event is realized at a particular time or at several times within the duration of the motion event (see for example Wilkins 1991: 220–221). In addition to these three categories, I would tend to add a fourth category: “interrupted motion”; it denotes situations where the realization of the lexical event occurs between two stretches of motion and where the motion is encoded by a marker distinct from that of “concurrent motion”. In Mojeño Trinitario (5), the interruption of motion by the lexical event is particularly clear, because motion before and after the lexical event have inverse deictic orientations. Interrupted motion will be discussed again in Section 4.6.1. In Ese Ejja, *-ñaki* also expresses both prior and subsequent motion at the same time, thus encoding a fourth type of timing of the motion event in relation with the lexical event in this language (Vuillermet 2012b: 656–660).

Kaytej

- (4) a. prior motion  
*atne nte athe-yene-ne*  
 shit YOU.ERG excrete-go\_and-IMP  
 ‘You go and shit.’

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<sup>4</sup> Associated motion markers can also convey other semantic categories like number (O’Connor 2004) or transitivity (Guillaume, to appear), but these features are not intrinsically tied to associated motion.

- b. concurrent motion  
*weye akelyakely alarre-rapeynte-ranytye*  
 animal small.RED kill-while\_going-PROG  
 ‘He kills small animals as he goes along.’
- c. subsequent motion  
*alarre-lalpe-nhe*  
 kill-and\_return-PST  
 ‘Did you kill anything before you came back?’  
 (Koch 1984: 27, 29, 30)

Mojeño Trinitario: interrupted motion

- (5) *ñi-ve-jno-yre-po* to *ñ-esaviipe*.  
 3M-get-REV.MOT-FUT-PFV ART.NH 3M-machete  
 ‘He will go to take his machete and come back.’

## 2.5.2 Path information

Most associated motion markers encode deixis (‘coming’ vs. ‘going’) or orientation (‘move past, upward, wander’, etc.). To this I would add ‘reversive (move and move back)’, as illustrated in (5), and the meaning of ‘arriving’, as found in Ese Eja (Vuillermet 2013). Deixis is a feature encoded in almost all systems, yet the single associated motion marker of the Atlantic language Noon is undetermined for deixis (Voisin 2013), as are most Mojeño Trinitario markers (see Section 4.6.2).

Ese Eja

- (6) a. away from speaker  
*Ixya-ki-kwe!*  
 eat-go\_do-IMP  
 ‘Go and eat!’
- b. towards speaker  
*Ixya-wa-kwe!*  
 eat-come\_do-IMP  
 ‘Come and eat!’  
 (Vuillermet 2013)

## 2.5.3 Grammatical role of the moving entity

The associated motion marker can express motion undergone by a subject of an intransitive or transitive clause (S/A) or by an object (O) (Judith Payne 1982; Wilkins 1991; Wise 2005; Guillaume 2009; Vuillermet 2013). All examples up to

now have shown motion associated with the subject of the verb expressing the lexical event. Example (7) from Arrernte shows motion associated with the object of the verb expressing the lexical event. The reference point of deixis is then the subject. When languages show associated motion markers related to both S/A and O, they always show fewer O-related markers than S-related markers. Nivacle (Fabre, under review) constitutes an exception: its three associated motion markers can encode motion of an object (8a), and it has no marker encoding the motion of the subject. They can also encode the motion of another non-subject participant, such as the oblique “you” on the monovalent verb root ‘run’ (8b).<sup>5</sup>

Arrernte: associated motion of the object

- (7) *Tyewe-nhenge therre-le arrentye re-nhe twe-tyintye-rlene-ke*  
 friend-dyadic two-ERG demon 3SG-ACC hit-do\_on\_O\_arrival-CONT-PC  
*kwetere-le.*  
 club-INS  
 ‘Both friends beat the demon with a club when he came.’  
 (Wilkins 1991: 237)

Nivacle

- (8) a. *tsi-’van-ch’e*  
 1O-see-AM.IT  
 ‘S/he sees/saw me leaving.’
- b. *ja-cumaj-’a-julh*  
 1S-run-2-AM.VENT  
 ‘I run/ran towards you [as you were/are coming].’  
 (Fabre, under review)

#### 2.5.4 Aspect of the lexical event

In his effort to distinguish the associated motion category from the aspectual category in Arrernte, Wilkins (1991: 211) stated that “it is important to realize that the associated motion forms contain none of the information that would typically be considered aspectual”. For Wilkins, the aspect of the verb along the

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<sup>5</sup> Nivacle is a language without adposition or case marker. To express non-core relations, applicatives are used in a pervasive way (Fabre, under review).

- (i) *ja-cumaaj-e-i*                      *na jpôyich*  
 1S-run-3-APPL.DIST                  D house  
 ‘I am running towards the house.’

path of motion (punctual or repetitive with an interruption of the motion, or complete concurrence with the motion event) depends on the inherent semantics of the verb stem (Wilkins 1991: 220). Aspectual distinctions are nevertheless part of the meaning of associated motion markers in languages like Cavineña (Guillaume 2009) or Mojeño Trinitario (see Section 4.1). Concurrent motion markers may indeed encode an aspectual distinction concerning the lexical event, a distinction subsumed under the cover terms of perfective vs. imperfective aspect (Guillaume 2012).<sup>6</sup> This is illustrated below in (9) with two Cavineña ‘go temporarily’ markers, glossed ‘GO\_TEMP1’ and ‘GO\_TEMP2’ by Guillaume: *-aje* implies that the lexical event occurs throughout the motion, while *-nati* implies that the lexical event is punctually realized once during the motion event. Moreover, associated motion markers are part of aspectual paradigms in certain languages as, for example, in Ese Eja (Vuillermet 2012a), Nanti (Michael 2008), or Mojeño Trinitario (see Section 4.1). Finally, in some languages, particular associated motion may show restricted combination with aspect.<sup>7</sup> The relation between aspect and associated motion markers is very complex, and it will be discussed again in 4.6.4 with input from Mojeño Trinitario data.

#### Cavineña

- (9) a. associated motion with imperfective event  
*ba-aje-kware kwanubi=kwana=ja emekware*  
 see-GO\_TEMP1-PST animal=PL=GEN tracks  
 ‘As he was going, he was seeing tracks along the way.’
- b. associated motion with perfective event  
*kwanubi=kwana=ja etsau=kwana ba-nati-wa.*  
 animal=PL=GEN bone=PL see-GO\_TEMP2-PFV  
 ‘Having gone further, he saw animal bones.’  
 (Guillaume 2009: 195)

<sup>6</sup> Nivacle (Fabre, under review) seems to show something different. The so-called “anticipatory ventive” associated motion marker seems to express potential realization of the motion, rather than of the action.

(i) *j-ovalh-c’oya*  
 1A-watch-AM.ANT.VENT  
 ‘I watch(ed), waiting for him/her/they to come.’

<sup>7</sup> For instance, in Lowland Chontal (O’Connor 2004), the use of the translocative marker (motion away from Source) is restricted to the perfective aspect and the imperative, while the dislocative (motion to Goal) conflates with the imperfective.

### 2.5.5 Temporary vs. permanent target of motion

The parameter of temporary vs. permanent target of motion has been added by Guillaume (2009) to the previously determined parameters, on the basis of Cavineña data. The author associates temporary target of motion with a scene of low importance followed by some event in a different location (10a), and permanent target of motion with an important scene at a location where either multiple events or a lasting event occur (10b). Please note that in the illustrative examples of temporary target of motion given in Guillaume’s paper, motion is always intended to be reversive motion. This parameter will be discussed again in Section 4.6.5.

Cavineña

(10) a. temporary target

*wipuchitana=tsewe* =tura =∅ *tya-na-ya* *jae*  
 bow=with =3SG.ERG =1SG give-COME\_TEMP-IPFV fish  
 ‘She came and gave me fish with a bow.’

b. permanent target

*jadya=eke* =tuna *tuwa ani-diru-wa*  
 SO=PERL =3PL there sit-GO\_DUR-PFV  
 ‘That’s how they went to settle there.’  
 (Guillaume 2009: 191–192)

### 2.5.6 Speed

The semantic parameter of speed is present in the motion markers of a few Australian languages, namely Adnymathanha (Tunbridge 1988) and some Arandic languages (Koch 1984; Wilkins 1991). For Wilkins (1991: 235), subsequent motion markers with a speed component “require that action and motion be done quickly and, most importantly, that motion follows immediately on the completion of the [lexical] action”. In Ese Ejja (Vuillermet 2012b: 677), the marker *-nana* ‘DO&LEAVE’ can also convey this meaning. I would like to regard this parameter as a sub-component of the timing parameter (presented in Section 2.5.1), where the boundary between lexical action and motion is particularly tight: ‘do and go immediately after’. This parameter will be discussed again in Section 4.6.6 in relation with Mojeño Trinitario data.

Arernte

(11) *angk-artn.alpe-ke*  
 speak-quick.DO&GO\_BACK-PC  
 ‘quickly spoke and then went back’  
 (Wilkins 2006: 47)

## 2.6 Discourse use

The discourse use of associated motion morphemes is an interesting issue in three respects: first, they occur frequently in discourse; second, they show particular collocation patterns; and third, they have been said to have a particular discourse function.

First, several studies indicate that associated motion morphemes are frequent in discourse (David Payne 1983; Wilkins 2006). Payne indicates that so-called “directionals” are not obligatory in Arrenrte yet occur frequently, while Wilkins (2006: 50–51) explains that in Arrenrte “if a main event is associated with a background motion path, and the motion path is known to the speaker, then failure to report this by use of an associated motion form is seen as being ‘uncooperative’ or as resorting to children’s speech”. This is why the associated motion markers are very frequent in the narratives of older, fluent speakers. In a text with 66 verbs, Wilkins (2006: 42) counted 24 verbs carrying an associated motion marker. The author explains that the rate is much lower for younger speakers due to language attrition. “Older speakers themselves identify the associated motion as one of the areas of the language which is in danger of being lost” (Wilkins 2006: 51).

Second, associated motion often appears in collocation with a lexical motion verb. Wilkins (1991: 229) specifies that, in Arrenrte discourse, a full lexical motion verb is often found in the same utterance (not necessarily the same clause) as a non-motion action verb carrying an associated motion marker. The deictic motion lexical verb recapitulates much of the meaning of the associated motion marker, as illustrated in (12). Interestingly, this pattern was later observed in Cavineña (Guillaume 2006) and Lowland Chontal (O’Connor 2004). In Lowland Chontal, out of 234 uses of translocative and dislocative markers in discourse, 91 are preceded by the ‘go’ verb, and 10 by another verb implying a change of location. This pattern seems to be both solid intralinguistically and cross-linguistically.

Arrenrte

(12) *re ayenge tw-irtne-ke Ewyenpere-Atwatye alpe-me-le.*  
 3<sub>SG.A</sub> 1<sub>SG.O</sub> hit-REV-PC East Side Camp go\_back-NPP-SS  
 ‘He hit me on his way going back while he was returning towards East Side camp.’

(Wilkins 1991: 228)

Third, some authors associate associated motion markers with a particular discourse function. It has already been stated that associated motion morphemes express motion as background information: “It is not the main function of associated motion

forms to present and elaborate information about a motion event. [... A]ssociated motion forms help to foreground, identify and characterize the event of the verb stem by making it a figure whose disposition in this space-flow is characterized with respect to a particular motion event acting as a ground” (Wilkins 1991: 251). The “figure/ground” terminology used by Wilkins is derived from Gestalt psychology and was introduced into cognitive linguistics by Talmy (1972) for the study of the expression of spatial relations (Croft and Cruse 2004: 56). The notions “figure” and “ground” can also be used to convey the relation between two events, in particular when this relation is construed as asymmetrical, as in complex sentences (Talmy 1978; Croft 2001). The figure/ground distinction then corresponds to the foreground–background distinction in narrative discourse (Reinhart 1984), which is defined by Croft (2001: 332) as follows: “The foreground–background distinction has primarily been applied to narrative texts, in which the foreground is defined as those events on the ‘timeline’ of the events reported in the narrative that are presented sequentially in the narrative. Other events, including descriptive material as well as ‘out of sequence’ events, are background.”

Several studies seem to converge in suggesting that expressing a motion event with an associated motion marker not only puts this motion event in the background, but also signals the particular function of the foregrounded event. For instance, Wilkins (1991: 235–236) specifies that non-concurrent motion markers in Arrernte function to mark a change in participants (when they are first introduced in a scene or leave a scene) or a shift in scene. Example (13a) renders “the very first appearance of *a demon* in the text, and it is a major turning point in the story” (Wilkins 1991: 235). Example (13b) is a case “where main protagonists have shifted from one scene to another and a new and important event is happening in the new location” (Wilkins 1991: 235).

Arrernte

(13) a. introduction of a new participant

*ikwere-tayeme kenhe kwele, arrentye re arrate-tye.lye-rlenge*  
 3SG.DAT-time but QUOTE demon 3SG.S appear-go&DO-DS  
 ‘But, just at that time, so they say, a demon arrived [lit. come and appear] on the scene.’

b. shift in scene

*ikwere-nge arerne-lye-ty.alpe-rlenge lyeke-le atnelhe*  
 3SG.DAT-ABL put-REFL-GO\_BACK&DO-SS prickle-ERG bottom  
*tanthe-ke*

spear-PC

‘After that when he returned and sat down, a prickle stabbed him in the bottom.’

(Wilkins 1991: 232)

Several studies on Arawak languages also deal with the discourse use of associated motion morphemes (labeled “directionals” in those studies). Judith Payne (1982) states that these morphemes serve in Ashéninka to identify foregrounded action in narrative discourse. They make sequences of events seem to happen faster and underline main events in a story, thus differentiating narrative discourse from other genres. For Ashéninka as well, David Payne (1983: 16) suggests that they increase the activity of the clause, by increasing its telicity. Essentially, they occur when a new setting is established or when there is motion away from an established setting. In summary, several independent discourse studies point to the fact that while associated motion markers construe the motion event as a ground, they simultaneously put the lexical event in the foreground.

### 3 Associated motion in Mojeño Trinitario: morphological considerations

Mojeño Trinitario has six associated motion morphemes. All six morphemes are suffixes on phonological and prosodic grounds; there is no way to identify them as independent words. They are part of the phonological word within which phonological rules apply and part of the prosodic word within which vowel elision applies. In the following elicited example, one can see that a rhythmic vowel deletion rule deletes every odd vowel from the underlying representation of the prosodic word, starting from the first and excepting the final one (Rose 2011). A phonological rule then applies where the place of articulation of underlying/n/progressively assimilates to the following/m/.

- (14) *nechjikvimmo* (elicited example)  
*nu-echoji-ko-vi-numo*  
 1SG-talk-ACT-2SG-SUBS.MOT  
 ‘I am talking to you and then I go.’

Given the complex morphophonemics of the language with numerous rules (fusion, assimilation, dissimilation, weakening) and the pervasive vowel deletion process, associated motion morphemes all show at least two allomorphs, but more often have around four of them. For example, *-pori'i* ‘IPFV.MOT’ is the underlying representation of the allomorphs *-pri'i-* *-poo'i* whose realization depends on the application of vowel deletion. If the first vowel of *-pori'i* is deleted, it is realized as *-pri'i*; if the second vowel is deleted, it is realized as

-*poɔ*ʔ.<sup>8</sup> Allomorphy makes these associated motion suffixes difficult to identify, along with frequent homonymy and possible alternative segmentation (with some other resulting meaning).<sup>9</sup>

Five of the Mojeño Trinitario associated motion morphemes are stem-external suffixes of the verbs.<sup>10</sup> Most often, they attach to active transitive verbs (14). They can also attach to active intransitive verbs (15) including verbs expressing manner of motion (16) as well as stative predicates like denominal verbs (17) or adjectives (18).

(15) elicited example

*n-ichi-k-num-yore*                      *te ñi-peno*      *Leo*  
 1SG-stop-ACT-SUBS.MOT-FUT      at 3M-house Leo  
 ‘I am going to stop for a while at Leo’s place (before I go).’

(16) *ene ta-pom-po*              *t-omuire ty-junopo-pri*<sup>11</sup>  
 and 3NH-follow-PFV 3NH-also 3-run-IPFV.MOT  
 ‘and it (the little dog) followed him, running (all along) as well.’

(17) *na-ko-chane-pri*<sup>12</sup>              *eto*              *paku*  
 3PL-VEZ-people-IPFV.MOT      PRO.3NH dog  
 ‘They went with the dog (lit. They were in the dog’s company while going).’

(18) *mraka-poripo*  
 strong-PFV.MOT  
 ‘It (the wind) comes stronger and stronger.’

The sixth associated motion marker is suffixed to pronouns (personal pronouns or demonstratives) only. The result is a presentative sentence involving a motion meaning.

(19) elicited example

*nuty-opo*  
 PRO.1SG-MOT.PRES  
 ‘I am coming!’

<sup>8</sup> It is realized -*poɔ*ʔ rather than \**por*ʔ because /r/ is not a possible coda, and is replaced by compensatory lengthening of the vowel/o/.

<sup>9</sup> As a consequence, I must admit that my current analysis of the data may misinterpret some examples as including associated motion markers and disregard relevant ones.

<sup>10</sup> See Rose (2014b) on the morphological structure of the Mojeño Trinitario verb.

<sup>11</sup> Since ‘run’ is a manner of motion verb root, -*pri*ʔ here is not crucial in indicating motion, but rather seems to render ‘parallel motion’ (translated as ‘all along’): e.g. The dog runs along with its master.

<sup>12</sup> Verbalization of ‘*chane* ‘people’ means ‘to accompany’.

The morphemes *-pori'i* 'IPFV.MOT' and *-poripo* 'PFV.MOT' also attach to other parts of speech:<sup>13</sup> nouns (20), pronouns (21),<sup>14</sup> quantifiers as in the last word in (22), or numerals (23). The suffix *-numo* is also found on a nominalized verb (see (59)).

- (20) *viti v-yon-ñore je'chugne te 'to na-sam-a-wokovi*  
 PRO.1PL 1PL-GO-FUT truly so\_that ART.NH 3PL-listen-IRR-1PL  
*eno viya-noviono te 'to na-ye'-om-poo'i comunidad.*  
 3PL men-PL in ART.NH 3PL-POSS<sup>15</sup>-PL-IPFV.MOT community  
 'We are truly going so that the men listen to us in each community.'
- (21) *Muena-pripo ma Cristo ónogi.*  
 DEM-PFV.MOT ART.M Christ here  
 'Here comes the Christ!'  
 (New testament 2002: Mark 13:21)
- (22) *te to u-chepo vi-om-paa'i tomuire*  
 on ART.NH 1PL-back 1PL-carry-IRR/IPFV.MOT also  
*om-muu-poo'i*  
 little-CLF:group-IPFV.MOT  
 'Also on our back we can go carrying (things) little by little.'
- (23) *to na-ye'e paku eto-na-pripo,*  
 ART.NH 3PL-POSS dog one-CLF-PFV.MOT  
*eto-na-pripo[...]* *ta-junji-k-poripo*  
 one-CLF-PFV.MOT 3NH-leave-ACT-PFV.MOT  
 'On the way, their dogs left them one after the other.'

The five associated motion markers that are suffixed to verbs do not occur in the same slot in the verb structure. Figure 1 shows that they may occupy three different slots. These three slots can be described in relation with the active and the irrealis suffixes.<sup>16</sup> Example (24) illustrates the root *ni* 'eat' with the active and the irrealis suffixes. Example (25) shows, on the same root, the three slots that can be occupied by associated motion markers: instead of the active suffix

<sup>13</sup> The associated motion markers are analyzed as suffixes on phonological and prosodic grounds. Nevertheless, if the criteria of possible combination with different parts of speech were taken into account, *-pori'i* 'IPFV.MOT' and *-poripo* 'PFV.MOT' would be considered clitics.

<sup>14</sup> Some special forms of *-pori'i* and *-poripo* are found when following pronouns ending in /i/: these show an initial /o/ and are stressed on the antepenultimate syllable.

<sup>15</sup> The nominal root *ye'(e)* is a possessible generic noun used as an intermediary device to express possession with non-possessible nouns.

<sup>16</sup> The active suffix (*-ko~ -fo~ -?o*) is used to mark active stems (Rose 2014b). The irrealis (*a-* or *-a*) covers the domains of negation, imperative, hortative, uncertainty, irrealis conditional, expected future events, and desired events (Rose 2014a).

(when the active suffix is expected but absent); after the active suffix but before the irrealis, or after both the active and the irrealis suffixes (in the Tense–Aspect–Mood slot).<sup>17</sup> Example (26) shows a verb root carrying two associated motion markers, with the first one possibly lexicalized (cf. Section 5.1).

S/A-IRR-CAU-root-RED-CLF-N-PLURAC-ACT/CAU/APL2-APL1/3-IRR-MID/O-PL-TAM-RPT-MD		
-rV	-numo	-pori'i
-pono		-poripo

**Figure 1:** Associated motion suffixes within the verb structure.

(24) Verb form without associated motion suffixes

- a. verb with active suffix

*n-ni-ko*

1SG-eat-ACT

'I eat!'

- b. verb with active suffix and irrealis<sup>18</sup>

*p-ni-gi-a*

2SG-eat-ACT-IRR

'Eat!'

(25) Verb form with associated motion suffixes

- a. *-pono* (realized *-jn*) in the slot of the active suffix

*p-ni-jn-a*

2SG-eat-REV.MOT-IRR

'Come and eat (and go away again)!'

- b. *-numo* (realized *-num*) after the active suffix and before the irrealis suffix

*p-ni-k-num-a*

2SG-eat-ACT-SUBS.MOT-IRR

'Eat before you go.'

<sup>17</sup> Figure 1 associates the suffixes *-pori'i* and *-poripo* with the TAM slot, where several TAM markers can follow each other. The *-pori'i* and *-poripo* suffixes can in fact co-occur with TAM suffixes (following some, and preceding others).

<sup>18</sup> The active suffix *-ko* is realized *-gi[ç]* before the irrealis *-a*.

- c. *-pori'i* (realized *-paa'i*) after the active and the irrealis suffixes  
 wo *nnigpaa'i*<sup>19</sup>  
 wo *nV-ni-ko-a-pori'i*  
 NEG 1SG-eat-ACT-IRR-IPFV.MOT  
 'I did not eat coming.'

(26) elicited example

- y-ve-jno-pri'i*  
 1PL-get-REV.MOT-IPFV.MOT  
 'We are carrying stuff.'

## 4 Associated motion in Mojeño Trinitario: semantic subcategories

The category of associated motion in Mojeño Trinitario is rather simple in comparison with complex systems such as that of Mparntwe Arrernte (Wilkins 1991) or that of Cavineña (Guillaume 2008 and Guillaume 2009). It includes only six morphemes, and only three of these markers are common enough in the data to be easily identifiable formally and semantically. The other three are rare (see Section 5.1) and hence difficult to define. They are all presented in Table 1. The semantic parameters distinguishing the six morphemes are discussed below, and the different markers are introduced individually in Sections 4.1–4.5. Section 4.6 provides a few typological considerations about the semantic sub-categorization of associated motion in Mojeño Trinitario.

It has been stated earlier that the major feature distinguishing between associated motion morphemes is the type of temporal relation between the motion event and the lexical event. In Mojeño Trinitario, three types of temporal relations are distinguished:

- concurrent motion: the lexical event happens during the motion event
- subsequent motion: the lexical event precedes the motion event
- interrupted motion: the lexical event interrupts the motion event

These three temporal relations were exemplified in (1). The second distinguishing feature within the Mojeño Trinitario system is the aspectual characterization of the lexical event. This feature plays a role in the distinction of the two main concurrent motion markers *-pori'i* and *-poripo*.

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<sup>19</sup> The/a/irrealis suffix is not realized here: it is deleted by the vowel deletion rule, but its underlying presence triggers the allomorph *g-* [ç] of the active suffix, just as shown in (24). It is also visible in the vowel harmony process that the associated motion marker *-pori'i* undergoes.

**Table 1:** The associated motion markers of Mojeño Trinitario.

Underlying form	Phonetic realization	Gloss	Relative timing with the event	Additional meaning/productivity	Translation	Ex.
<i>-pori'i</i>	<i>-pri'i</i>	IPFV.	concurrent motion	imperfective aspect	'do all along'	(27)
	<i>-poo'i</i>	MOT				
	<i>-opri'i</i>					
<i>-poripo</i>	<i>-poripo</i>	PFV.	concurrent motion	perfective aspect	'do while going/coming'	(29)
	<i>-pripo</i>	MOT				
	<i>-opóripo</i>					
<i>-opo</i>	<i>-po</i>	MOT.	concurrent motion	motion-presentational	'here comes X'	(45)
	<i>-opo</i>	PRES				
<i>-pono</i>	<i>-pono</i>	REV.	interrupted motion	reversive	'go do and come back/come do and go back'	(50)
	<i>-pon</i>	MOT				
	<i>-pno</i>					
	<i>-jno</i>					
<i>-rV</i>	<i>-jn</i>		concurrent motion	rare, only on intransitive verbs	'do on the way'	(53)
	<i>-rV<sup>20</sup></i>	MOT				
<i>-numo</i>	<i>-numo</i>	SUBS.	subsequent motion	rare	'do before going/coming'	(55)
	<i>-num</i>	MOT				
	<i>-mmo</i>					

#### 4.1 Imperfective/perfective concurrent motion *-pori'i* and *-poripo*

The slight difference between two of the concurrent motion markers, i.e. *-pori'i* and *-poripo*, can be attributed to aspect. The marker *-pori'i* 'IPFV.MOT' is generally used with events stable all along the motion event, as in (27) and (28), while *-poripo* PFV.MOT often expresses that the event expressed by the verb is punctual (29), though not always (30).<sup>21</sup> This distinction can be reduced to the imperfective/perfective dichotomy.

- (27) "jijoyiyowotsja" *n-ke-pri'i*                      *te to 'chene.*  
 jijoyiyowotsja    1SG-say-IPFV.MOT    ON ART.NH path  
 'Keep saying "jijoyiyowotsja" while going on the path (to drive the oxen).

<sup>20</sup> The vowel of the suffix is determined by the final vowel of the root.

<sup>21</sup> Gill (1957: 211) glosses *-poripo* as 'increasing movement'. He suggests that it is similar to *-poo'i* but also expresses that the action increases as it goes along. It is difficult to argue for this 'increase' in all examples. I suspect that this interpretation is essentially related to the aspectual uses of *-poripo*.

- (28) *eto ta-esta-k-poo'i-ji te to ta-siri*  
 PRO.3NH 3NH-whip-ACT-IPFV.MOT-RPT with ART.NH 3NH-nose  
 'He (the cabitucusiri) was coming whipping him [a man] with his nose as it goes.'
- (29) *vi-okpoj-ko-pripo eto sipa*  
 1PL-meet-ACT-PFV.MOT NH rhea  
 'While going we met a rhea (ostrich sp.).'
- (30) *t-yuch-ko-m-po eno tparaakono, t-kopnune-'-om-poripo.*  
 3-go.out-ACT-PL-PFV PL authorities 3-play.music-?-PL-PFV.MOT  
 '(When the Mass is over), the authorities come out and march playing music.'

In examples (31) and (32), the verb root *jicho* 'say' takes each concurrent motion marker. While *-pori'i* 'IPFV.MOT' is used in (31) with *jicho* to introduce a long speech uttered during the motion (here, the dancing event), *-poripo* 'PFV.MOT' in (32) is used with *jicho* to introduce a very short utterance (an interjection), abruptly interrupting the previous whistling along the way. The contrast between the two concurrent motion markers may nevertheless be subtle, as can be seen from examples (33) and (34) with the verb root *ke* 'say, be so',<sup>22</sup> both taken from the same travel song. The only difference is that sentence (33) with *-poripo* 'PFV.MOT' expresses the first signs of the wind on the trip, while sentence (34) with *-pori'i* 'IPFV.MOT', which occurs further down in the text, expresses recurrent signs of an increasingly stronger wind.

- (31) *"p-ke-yre on to p-iimui-s-ra-yre" ñi-jich-poo'i-ji.*  
 2SG-be.so-FUT SO ART.NH 2SG-dance-ACT-NMZ-FUT 3M-say-IPFV.MOT-RPT  
 "'you are going to dance this way", he said while dancing.'
- (32) *t-issi-sio-k-wo-pri'i-ji. ta-jich-poripo "ha".*  
 3-whistle~RED-ACT-MID-IPFV.MOT-RPT 3NH-say-PFV.MOT ha  
 'He was coming whistling. Then on the way he said ha!.'
- (33) *chin chin ta-ke-pripo eto mraka-'i.*  
 chin chin 3NH-say-PFV.MOT PRO.3NH strong-CLF  
 'Now comes the strong wind "chin chin".'

<sup>22</sup> This verb root with a very "light" meaning 'be so, say' is often translated as a single motion verb when used intransitively with an associated motion marker.

- (34) *chin chin ta-ke-pri'i mraka-poripo.*<sup>23</sup>  
 chin chin 3<sub>NH</sub>-say-IPFV.MOT strong-PFV.MOT  
 'The wind keeps coming stronger "chin chin".'

However, the corpus shows occurrences of the two concurrent motion markers *-poripo* and *-pori'i* without motion semantics, but with the aspectual value of progressive/continuous. This is in keeping with the well-known cross-linguistic grammaticalization path from "movement while" to "progressive" (Bybee 1997).

The great majority of occurrences of *-poripo* PFV.MOT do not imply any concrete motion. Rather, they add an aspectual value to the event expressed by the verb, namely, that of "progressive gradual". "Progressive gradual" expresses continuity with a gradual increase ('more and more'), as in (35) and (36).

- (35) *n-juu-ko-poripo, n-koi'e-po diesiocho año*  
 1SG-grow-ACT-PFV.MOT 1SG-have-PFV eighteen years  
 'I was growing up little by little, and I turned eighteen.'
- (36) *ene ty-koi'e-yre-pripo to waka*  
 and 3-have-FUT-PFV.MOT ART.NH COW  
 'And he will (progressively) get (more and more) cows.'

Such uses of *-poripo* linguistically encode the conceptual metaphor by which the spatial domain (the source domain) is mapped onto the temporal and quantity domains (the target domains).<sup>24</sup> The semantic shift between motion (change of location) and gradual increase (change in degree and in time) is transparent: with many actions done while moving, the more you move, the more you realize the action. This is illustrated by examples (37) and (38), where *-poripo* can express both motion and the aspectual meaning.

- (37) *tumma~ma-ko-pripo-ro eto*  
 be.cold~RED-ACT-PFV.MOT-then PRO.3<sub>NH</sub>  
 'The coldness is coming progressively./It is already getting colder.'
- (38) *eto na-ve-'ri'i n-om-ji-k-poripo onji onji onji*  
 PRO.3<sub>NH</sub> 3PL-get-ACT-ASS 3PL-carry-CLF:bulk-PFV.MOT little little little  
 'They get some and take it away little by little.'

<sup>23</sup> This use of *-poripo* 'PFV.MOT' has to do with aspect, as will be discussed in Section 5.3.

<sup>24</sup> Wilkins (1991: 236) also noted a metaphorical use of some Arrernte associated motion markers in reference to time passing.

A smaller number of occurrences of *-pori'i* 'IPFV.MOT' denote events that are not associated with motion, but with a “continuous distributive” sense. In those cases, *-pori'i* seems to express a continuous aspect implying distribution.<sup>25</sup> The following examples show distribution of location (39) and of participants (40).

- (39) *eno-pooko-chu t-k-ousa-no te to ymómoji,*  
 PRO.3PL-self-DM 3-VBZ-village-PL in ART.NH marsh  
*te kogiure, ta-mut-chujcha n-ou-'o-pri'i.*  
 in lake 3NH-all-simply 3PL-live-ACT-IPFV.MOT  
 ‘They live in the marsh, in the lake, they are living everywhere.’

- (40) *En-jo-pri'i 'pona-no y-porape-nviono,...*  
 PRO.3PL-COP-IPFV.MOT other-PL 1PL-brother-PL  
 ‘There are various other “brothers” (who want to create problems).’

The extension from concurrent motion to distributive meaning may derive from situations where the lexical event is repeated all along the motion, as in (41) and (42).

- (41) *Ene v-kij'e-yre ene vi-uumut-yore-poo'i te 'to*  
 there 1PL-go\_TO-FUT and 1PL-meet-FUT-IPFV.MOT in ART.NH  
*comunidade.*  
 community  
 ‘There we are going to go and we are going to have meetings in the communities.’

- (42) *su choko-si s-omuire vi-om-a, ta-ni-g-paa'i*  
 ART.F blonde-CLF 3F-also 1PL-carry-IRR 3NF-eat-ACT-IPFV.MOT/IRR  
*'ñi'u*  
 mosquito  
 ‘We are going to take the blonde one again with us, so that the mosquitos keep eating her.’

In another use, exemplified in Gill (1957) and Ibáñez Noza et al. (2009) but absent in my corpus, *-pori'i* denotes simultaneity between two events, thus expressing a sort of subordinating function, as in (43) and (44). In this function, only the temporal value of *-pori'i* is at work, not its motion value.

<sup>25</sup> I use the term *continuous* rather than *progressive* (Comrie 1976) for the aspectual values of both *-pori'i* and *-poripo*, because they can apply to stative predicates as in (40) and (36).

- (43) *esu t-erekujri-ko ene ti-ugñi-k-poo'i*  
 PRO.3F 3-grate-ACT and 3-listen-ACT-IPFV.MOT  
 'She is grating and she goes listening (listening as she grates).'  
 (adapted from Gill 1957: 158)<sup>26</sup>
- (44) *nuti n-kasae-k-yore, piti p-a-k-metsi-pri'i.*  
 PRO.1SG 1SG-hunt-ACT-FUT PRO.2SG 2SG-IRR-VBZ-Oil-IPFV.MOT  
 'I am going to hunt, meanwhile you are going to cook.'  
 (Ibáñez Noza et al. 2009: 93)

It was mentioned in Section 3 that *-pori'i* and *-poripo* extend to other parts of speech: in most cases, the aspectual meaning of the associated motion markers is then at play.

## 4.2 Motion-presentational *-opo*

The *-opo* morpheme presented in this section is unique in the very sparse and recent literature on associated motion in that it does not attach to a verb, but to a pronoun, as part of a nominal predicate construction. The use of the associated motion marker *-opo* ~ *-po* attached to a personal (45) or demonstrative (46) pronoun creates a presentational sentence with an additional motion meaning, translatable as 'here comes...'. The motion is not backgrounded to the action expressed by a verb, but to a nominal predication (with identity or existential meaning). Without the associated motion markers, the nominal predications in (45) and (46) would be translated as 'he is the hunter' and 'it seems these are people'. Sentence (47) exemplifies the corresponding nominal predication conveying a presentational meaning (without motion).

- (45) *ta-yere-wo-o'i, eñi-po ñi kasador.*  
 3NH-last-MID-ASS PRO3M-MOT.PRES ART.M hunter  
 'Time was passing by, then came the hunter.'
- (46) *kut-chujcha nokro-po 'chane.*  
 be\_like-just DEM-MOT.PRES person  
 'It seems people are coming.'
- (47) *ene jmaro ma v-jañon-ini Pedro Ignacio Muive-ni.*  
 and DEM ART.M 1PL-relative-PST Pedro Ignacio Muiba-PST  
 'And this is our late relative Pedro Ignacio Muiba (showing a statue).'

<sup>26</sup> For one of my consultants at least, this same sentence does not necessarily mean simultaneity, and could be translated: 'She is grating and then stops in order to listen'.

In the translation of all my textual examples of *-opo*, as well as in elicitation, motion is oriented towards the reference point, i.e. “coming”. In Marbán’s (1702) grammar, this associated motion marker seems to convey both directions: *nutiapo* (from *nuti* ‘PRO1SG’) is translated as ‘I am going, I am coming’. Please note that Marbán’s Spanish translation *ya voy* (literally ‘I have gone’) can mean ‘I am coming’ when the speaker has been called beforehand. When I elicited it, the translation suggested was ‘I am coming’ (19).

The motion can be metaphorical, and then even apply to non-agentive participants. In (48), the speaker tells about the idealized life of a successful farmer, and the fiction ends with the farmer’s son finding a wife. In (49), the speaker relates how her daughter informed me (Françoise Rose) of the route to her new house and how I found it.

(48) *ʔjiropuka na-em-yeno-cho-po, ene esu-po su*  
 man-HYP 3PL-CAUS-wife-ACT-PFV there PRO.3F-MOT.PRES ART.F  
*na-chineno-o’i.*  
 3PL-daughter.in.law- ASS

‘If [their child is] a man, they look for a wife, here is their daughter in law!’

(49) *ene eto-po eto to m-peno.*  
 there PRO.3NH-MOT.PRES 3NH ART.NH 1SG-house

‘[When there is a curve in the street, you see it], there appears my house.’

### 4.3 Reversive interrupted motion *-pono*

The morpheme expressing interrupted motion (*-pono* ‘REV.MOT’) expresses motion with a reversive path, as in (50) and (51). I use the label “interrupted motion” because the motion systematically ceases while the action coded in the lexical root is performed.

(50) *n-wachri-jno-yore to elikoptero*  
 1SG-buy-REV.MOT-FUT ART.NH helicopter  
 ‘I am going to go and buy a helicopter (and come back).’

(51) *t-yom-po s-ich-pon-ri’i ñi Maati*  
 3-go-PFV 3F-call-REV.MOT-ASS ART.M Martin  
 ‘She went to call Martin (and came back home).’

Note that *-pono* ‘REV.MOT’ is sometimes rendered as ‘for a short while’. In the elicited sentence below, the speaker offered a translation that suggests the action will last only a short span of time, but the meaning ‘move, do something and move back’ is always present.

(52) elicited example

*p-epaj-pn-a*

1SG-sit-REV.MOT-IRR

‘Sit down a minute [lit. Come sit and go].’

#### 4.4 Concurrent motion *-rV*

The definition of *-rV* ‘MOT’ is still preliminary, as its allomorphs and semantics are not yet fully identified (see Section 5.1 on its very low frequency). It seems to be of the concurrent motion type. My analysis is based on Gill (1957: 205), which presents it as a morpheme restricted to intransitive verb stems, as in (53) and (54).

(53) *n-empto-ru*

1SG-get.lost-MOT

‘I got lost on my way.’

(54) *nuti m-puii-ri-ru*

PRO.1SG 1SG-walk.DUR-PLURAC-MOT

‘I am on a trip.’

(Gill 1957: 205)

#### 4.5 Subsequent motion *-numo*

Another rare morpheme, *-numo* SUBS.MOT (here realized *-num*), is translated in elicitation with the very distinctive semantics of subsequent motion ‘do something before you go/come’. It was already identified by Marbán (1702) and translated as ‘do a thing before another, on the way’ (subsequent or concurrent motion).

(55) elicited example

*p-ee-num-a*

2SG-drink-SUBS.MOT-IRR

‘Drink before you go.’

Old Mojeño

(56) *vi-ni-ko-num-a*

*vi-yan-y-a*

1PL-eat-ACT-SUBS.MOT-IRR 1PL-go-FUT?-IRR

‘Let’s eat before we go.’

(Marbán 1702, transcription adapted)

## Old Mojeño

- (57) *v-imo-o-numo*                      *pay-ono*  
 1PL-SEE-ACT-SUBS.MOT    priest-PL  
 ‘We saw the priests on our way.’  
 (Marbán 1702, transcription adapted)

The marker *-numo* is sometimes rendered as ‘for a short while’ (15), like the *-pono* ‘return path’ motion marker discussed above.

The only two spontaneous examples of *-numo* ‘SUBS.MOT’ (realized/mm/) in my textual corpus do not actually express subsequent motion, but rather an action preceding another action. In (58), it is translated as ‘first’, maybe under the influence of the word *towina*, also translated as ‘first’. In (59), it is found on a nominalization and translated by the past tense only (the plucking took place in the very same house). ‘First’ is the translation given for the cognate *-numa* in Ignaciano, the other dialect of Mojeño (Olza Zubiri et al. 2002: 925). In example (60), *-numa* indicates a succession of two actions; in example (61), it indicates a succession of two participants for the same action. These last examples show no ‘motion’ component, only the ‘temporal sequence’ component.

- (58) *a-sapii-ko-mm-a-tse-ro*                      *towina*  
 2PL-smoke-ACT-SUBS.MOT-IRR-but-then    first  
 ‘Smoke first (then we will build our church).’
- (59) *t-yom-pu-iji*    *ñi-tan-ko-o’i-ji*                      *to [...]*    *s-choj-ru-mmo*  
 3-go-PFV-RPT    3M-search-ACT-ASS-RPT    ART.NH    3-pluck-NMZ-SUBS.MOT  
*esu*    *su*    *María Mona*    *to*    *’mu’ji*.  
 3F            ART.F    María Mona    ART.NH    straw  
 ‘It went to search the (maize) husk that María Mona had plucked.’

## Mojeño Ignaciano

- (60) *ena*                      *achane-ana*    *cáematane-ana-numa*    *tásihapa*    *ti-ni-ca-na-pa*  
 PRO.3PL    people-PL    work-PL-first                      then?    3-eat-ACT-PL-PFV  
 ‘The men worked first and then ate.’  
 (Olza Zubiri et al. 2002: 925)

## Mojeño Ignaciano

- (61) *na-ni-ca-numa*    *ena,*    *véquenehepaine*    *vi-ni-ca*    *viti*  
 3PL-eat-ACT-first    PRO.3PL    right\_after?    1PL-eat-ACT    PRO1PL  
 ‘Let them eat first, and may we eat right after.’  
 (Olza Zubiri et al. 2002: 925)

The apparent diversity of translations of the small number of examples of *-numo*, across natural and elicited data, as well as across sources, leads to a very vague semantic sub-categorization of *-numo*. The central parameter is the temporal sequencing, with achievement of the action of the lexical verb first, followed by either motion, another action, or the same action with other participants.

## 4.6 Typological considerations regarding the semantic sub-categories of associated motion based on Mojeño Trinitario data

In Section 2.5, I reviewed six parameters used in sub-categorizing associated motion cross-linguistically (Koch 1984; Wilkins 1991; Guillaume 2008, Guillaume 2009, Guillaume 2012, and Guillaume to appear). In this section, my aim is to evaluate and discuss each of these typological parameters in light of the Mojeño Trinitario data.

### 4.6.1 Timing of the motion event in relation with the lexical event

It has been stated earlier that the major distinguishing feature of the associated motion morphemes is the type of temporal relation between the motion event and the lexical event. This is usually described in terms of prior, concurrent, and subsequent motion. In my analysis of Mojeño Trinitario, there is no morpheme that encodes prior motion. Still, it deserves looking into whether the morpheme *-pono*, which has been characterized as expressing reversive interrupted motion, can be aligned with prior motion. What I call interrupted motion is in fact considered by some authors a subtype of prior motion with temporary location, when the return trajectory is optional (Guillaume 2009), and by others a subtype of concurrent motion, rendered as ‘passing, on the way’, with the special characteristics that the motion ceases when the lexical event is realized (see for example Wilkins 1991: 220–221). The interrupted motion marker of Mojeño Trinitario does not fit well into Guillaume’s analysis of interrupted motion as prior motion with temporary location since the return path is always recoverable in my Mojeño Trinitario examples. In all examples, motion is actually both prior and subsequent to the lexical event. It can in fact be analyzed as concurrent motion, as Wilkins suggests, with the independent (deictic) feature of a specific path (return path). Still, I wonder whether there is a good reason to consider interrupted motion, across languages, to be a sub-category of concurrent

motion: the timing of the motion event in relation with the lexical event is quite specific and nothing but co-extensive. More particularly in Mojeño, each section of the motion event is in a different direction. In any case, the lack of a prior motion morpheme in the Mojeño Trinitario system is surprising. In Guillaume's (2012) survey of associated motion systems in South-Western Amazonian languages, prior motion tends to be the most common type, i.e. if there is only one type of temporal relation, it is often prior motion. Mojeño Trinitario presents a counterexample to this generalization.<sup>27</sup>

#### 4.6.2 Path information

In the five associated motion suffixes that attach to verb stems in Mojeño Trinitario, neither deixis nor orientation is co-lexicalized. Examples (62) and (63) show that the same associated motion marker can encode motion towards or away from the point of reference. The deixis in these examples is made explicit by the independent full motion verbs, which encode centrifugal *yono* 'go' and centripetal *ute-ko* 'come' deixis.<sup>28</sup> Example (64) is another example of the lack of deixis in *-pono ~ -jno*: it is suffixed to the deitic lexical verb *ute-ko* 'come'.

(62) *ma-te-gi-a*            *te* *pjoka* *mu-emo-jn-a-nu*  
 3M-COME-ACT-IRR    at    DEM    3M-see-REV.MOT-IRR-1SG  
 'May he come here to see me (and go again).'

(63) *p-yan-a*            *p-imo-jn-a*.  
 2SG-go.IRR-IRR    2SG-see-REV.MOT-IRR  
 'Go see him and come back.'

(64) *Kasaee-wokou-nove*            *te* *San Vicente [...]*  
 home\_loving-1PL-always    in    SV  
*porke*    *te* *sache-chujcha* *vi-ute-ko-jno*.  
 because    in    day-just            1PL-COME-ACT-REV.MOT  
 'We've always been home-loving in San Vicente, because we come here in daytime only (and go back there each evening).' [text recorded in Trinidad]

<sup>27</sup> Guillaume's generalization may also result from the analysis of reversible interrupted motion as prior motion with temporary location (Guillaume 2009).

<sup>28</sup> The initial vowel of the *ute* root is deleted after *ma-*, and the active suffix *-ko* is realized *-gi* [ç] before the irrealis suffix *-a*.

The only path information that is expressed in these five Mojeño Trinitario markers is the reversive orientation of the “return path” in *-pono* ‘REV.MOT’.

The sixth associated motion marker, *-opo*, the one found on pronouns only, seems to appear regularly with a centripetal interpretation ‘here comes’ in the texts and in elicitation. The centrifugal translation has not been tested in elicitation session.

The absence of deixis in the associated motion markers of Mojeño Trinitario makes the distinction even clearer between associated motion and directionals or satellites such as English particles *out*, *away*, etc. It also deviates from Wilkins’ definition of the associated motion category as “used to indicate that the verb-stem action happens against the background of a motion event with a specific orientation in space” (Wilkins 2006). In most associated motion systems, deixis is an important parameter. Mojeño Trinitario thus constitutes an interesting marginal case for the typology, along with the Atlantic language Noon (see Section 2.5). Nevertheless, the majority of associated motion systems, which do encode deixis, still differ significantly from directionals in expressing motion (without necessarily being attached to a motion verb stem).

#### 4.6.3 Grammatical role of the moving entity

In Mojeño Trinitario, the moving entity is always the subject. There is no distinctive marker for the expression of motion of the object. The subject does not have to be a voluntary agent of the motion: the associated motion morpheme can express induced motion as in (65), where it attaches to a static positional verb form.

- (65) *ema t-kooto-k-wo-pri’i te to ta-ji’u to kjowo*  
 PRO.3M 3-hold-ACT-MID-IPFV.MOT TO ART.NH 3NH-antler ART.NH stag  
 ‘He held himself to the antlers of the stag (that was running).’

#### 4.6.4 Aspect of the lexical event

Underlying the distinction between two of the concurrent motion markers *-poripo* and *-pori’i* is the perfective/imperfective distinction, which specifies the aspectual nature of the event expressed by the verb that the marker attaches to. This distinction has been determined as a parameter for sub-categorizing associated motion markers by Guillaume (2012).

More interesting is the fact that associated motion markers in Mojeño Trinitario sometimes express aspect without expressing motion. I consider this

to be a case of semantic bleaching: a marker expressing both motion and aspect comes to express aspect only. This extension from concurrent motion to progressive/continuous aspect was discussed and illustrated in Section 4.1. The opposite direction of the semantic shift (from aspect to aspect + motion) is more difficult to conceive, in that the motion component would have to be added from scratch. Moreover, the extension from motion to aspect has already been attested in typological studies such as Bybee (1997), which describes the development from “movement while” to “progressive”. Interestingly, Vuillermet (2012b: 379) notes a comparable homophony for *poki* ‘do while going’ and ‘continuous’ in Ese Ejja, a neighboring Takanan language.

#### 4.6.5 Temporary/permanent target of the motion

The reversive interrupted motion morpheme *-pono* (52) as well as the subsequent motion morpheme *-numo* (15) are sometimes rendered as ‘for a short while’. This is reminiscent of what Guillaume (2009) calls “temporary motion target” in Cavineña (Section 2.5). Yet in Mojeño Trinitario the meanings ‘move, do something and move back’ and ‘and then move’, respectively, are always present, so there is no complete semantic shift to ‘for a short while’. This potential temporary meaning is actually a good argument in favor of the “reversive path” analysis of *-pono*: if *-pono* expressed prior motion only, this semantic extension would not be expected. In Section 2.5, we had noticed that the Cavineña examples of temporary motion target in Guillaume’s paper all implied a return path (Guillaume 2009). The comparison of the temporary meaning ‘for a while’ of the “return path” marker in Mojeño Trinitario with the quasi systematic correlation of temporary motion target in Cavineña with a return path allows us to entertain the hypothesis of a semantic shift from an associated motion marker specifying a reversive path or subsequent motion to one expressing temporary location. This shift may be happening in Mojeño Trinitario in view of the ‘for a while’ rendering. It could already have been completed in Cavineña.

#### 4.6.6 Speed

Speed is not a relevant parameter in Mojeño Trinitario, nor in Western Amazonian languages in general (Guillaume 2012). Vuillermet (2012b: 677) nevertheless reports that a subsequent motion marker of Ese Ejja (spoken in

Amazonian Bolivia) is often interpreted as ‘immediately’ and may even lose its motion component, as illustrated by (66).

Ese Ejja

(66) *Ixya-nana-kwe!*

eat-DO&LEAVE-IMP

‘Eat before you go/eat first (before you go)’ or ‘Hurry to eat!’

(Vuillermet 2012b: 677)

Vuillermet compares the shift in Ese Ejja from ‘subsequent motion’ to ‘immediately after’ with the shift in Mojeño Trinitario from ‘subsequent motion’ to ‘first’. She also suggests that “this could be the first step towards the semantics of a hurried action: while doing one action, one may want to hurry so as to do another action immediately”. She states that, interestingly, the ‘hurried action’ component of the Arrernte system is restricted to subsequent motion, but that hurried action is found in prior motion markers in Adnyamathanha (Wilkins 1991: 233–234, 246). A distinction must be made here between Ese Ejja and the two Australian languages Arrernte and Adnyamathanha. In Ese Ejja, ‘speed’ is only a semantic extension of subsequent motion. In Arrernte and Adnyamathanha, it is part of the core meaning of one of the first elements of the associated motion di-morphemic markers. The first elements express the temporal relation between the action of the lexical verb and the motion<sup>29</sup> as prior motion, subsequent motion, or subsequent motion with hurried action. Again, I would like to suggest that ‘hurried action’ is not fundamentally about speed, but that this meaning is derived from the precision of the relative timing between the lexical event and the motion event expressed by the associated motion affix. In both prior and subsequent motion, this timing can be very short in both ‘go and do immediately after’, and ‘do and go immediately after’.

## 5 Associated motion in Mojeño Trinitario: discourse use

This section describes the discourse use of associated motion markers in Mojeño Trinitario. Three issues will be dealt with, following the introductory typological background given in Section 2.6: frequency, verb collocation, and discourse function.

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<sup>29</sup> The second element expresses the path: either straight motion ‘go’, or return path ‘go back’.

## 5.1 Frequency

Associated motion morphemes in Mojeño Trinitario are in general infrequent in discourse. Two of the markers (*-numo* and *-rV*) are extremely rare in discourse. The morpheme *-numo* ‘SUBS.MOT’ is uttered only twice in six hours of recordings. Yet its use is still productive: it is very easy to elicit examples from consultants and obtain a transparent translation. The morpheme *-rV* ‘MOT’ is also quite rare, and is moreover difficult to identify due to allomorphy and homonymy. Its rarity in the corpus and the difficulty to elicit it very likely point to low productivity.

The morpheme *-pono* ~ *-jno* ‘REV.MOT’ is more frequent (21 occurrences in six hours of recordings). It attaches remarkably often to the root *ve* ‘to get’, resulting in the meaning ‘to bring/to take away’ (67). This use represents 14 of the 21 occurrences. It is arguably a case of lexicalization, because *ve-jno* may combine with another associated motion marker, as exemplified in (26).<sup>30</sup>

- (67) *ñi-ve-jno-yre-po*                      *to*                      *ñ-esaviipe*  
 3M-get-REV.MOT-FUT-PFV      ART.NH                      3M-machete  
 ‘He will go to get his machete and come back.’

The other two morphemes, *-pori’i* IPFV.MOT and *-poripo* PFV.MOT, are more common in discourse. The latter is, however, most often found with an aspectual meaning that does not imply motion, or together with the verb root *ke* ‘to be so, to say’ to express the lexicalized meaning of ‘to come’ (68). Note that while these morphemes are more common, they are still not highly frequent: there are 41 tokens of *-pori’i* IPFV.MOT in my textual corpus, consisting of almost two thousand sentences.

- (68) *ta-ke-pripu-iji*                      *manje’e*      *ma-sam-pu-iji*      *eto.*  
 3NH-be.SO-PFV.MOT-RPT      mmmh      3M-listen-PFV-RPT      PRO3NH  
 ‘It arrived...he heard it.’

The low frequency of the associated motion markers in the Mojeño Trinitario discourse clearly differs from what has been described in other languages. In Section 2.6, I mentioned the example of a sample text of Arrernte in which over a third of the verbs carry associated motion markers (Wilkins 2006: 42). I speculate that the low frequency of associated motion markers in Mojeño Trinitario

<sup>30</sup> Wilkins (1991: 250) also notes that “certain combinations of verb and associated motion inflection occur together so regularly that they are almost to be regarded as separate lexemes” in Arrernte.

could be due to the attrition of the system, similarly to what seems to be happening with younger speakers of Arrernte (see Section 2.6).

## 5.2 Collocation

The goal of this section is to evaluate the claim in the literature that an action verb carrying an associated motion marker is very often accompanied by a full motion verb in discourse (see Section 2.6). This analysis examines only the more common Mojeño Trinitario markers *-pono*, *-poripo*, and *-pori'i*.

Among the 21 occurrences of *-pono* in spontaneous data, 11 were found without a verb of motion in the surrounding discourse (see (50) for an example); 8 were found on a verb with *yono* ‘go’ preceding it (among which (63), one with *ute-ko* ‘come’ (62), and one with *ke* ‘say/be so’, sometimes interpreted as expressing motion. Collocation with a motion verb is therefore not systematic when *-pono* is used. There is no preference for a verb expressing the same motion event as the associated motion marker, here ‘go do and come back’ or ‘come do and go back’.

The context of occurrences of *-poripo* and *-pri'i* was examined closely in two texts (*Dog Face* and *The Cricket*, see below in 5.3), totaling 29 occurrences. A motion verb was found in these markers’ surrounding context for only 5 occurrences, and this concerned 4 different motion verbs (*yono* ‘go’, *uch-ko* ‘go out’ twice, *iimui-ko* ‘dance’, and *ke* ‘say/be so’, here interpreted as expressing motion). Collocation with a motion verb can be seen in (30) and (41), taken from other texts.

These counts show that collocation with particular motion verb roots is not a common discourse pattern in Mojeño Trinitario. An examination of the verbs involved in the collocation pattern indicates that there are no verb roots in Mojeño Trinitario that carry the same meanings as the associated motion markers, such as for instance ‘go/come’ (as a polysemous verb root) or ‘do first and go’.

## 5.3 Discourse function

As indicated in Section 2.6, several studies suggest that associated motion markers encode a motion event as a ground (i.e. as an event operating in the background) for the figure event expressed by the lexical verb to which the associated motion marker attaches (this event operates in the foreground). This

discourse function of associated motion markers will be examined against our Mojeño Trinitario data.

First, associated motion markers are not used in Mojeño Trinitario in the expression of every motion event. Motion is encoded by an independent verb when it is meant to be on a timeline of events within a narrative; it is expressed by associated motion morphemes when it is construed as a ground for another event. For instance, the first sentence in example (69) shows a manner of motion verb (*junopo* ‘run’) and an induced motion verb (*omo* ‘carry’): both motion events are expressed symmetrically as main events. In contrast, in the second sentence of (69), the verb form (*kootokwo* ‘hold on to’) expresses an action indicating the position of the boy in relation with the stag, the topic of this paragraph. The concurrent motion *-pori’i* ‘IPFV.MOT’ indicates that the boy moves while holding on to the stag; this motion is induced by the motion of the stag expressed in the preceding clause by the verbs for ‘run’ and ‘carry’. The associated motion event thus acts as a ground for the lexical event. The same pattern can be observed in (70), and it is also visible in (30), (41), (42), (62), and (63). This brings to mind the collocation pattern identified by Wilkins (1991: 229) and discussed in the preceding section. Further, when used in collocation with a full motion verb, the motion expressed by the associated motion marker is given information. It is not meant to make the story progress.

(69) *ty-junopo-po t-omo te ta-chochoku to kjokre*  
 3-run-PFV 3NH-carry PREP 3NH-bank ART.NH river  
*ema ty-kooto-k-wo-pri’i te to ta-ji’u to kjowo*  
 PRO.3M 3-hold-ACT-MID-IPFV.MOT to ART.NH 3NH-antler ART.NH stag  
 ‘It (the stag) ran and carried him to the river bank. He (the boy) was holding on to the antlers of the stag (that was moving).’

(70) *ty-pui-ko-m-po ty-pioo-ri-ko-m-poo’i te kaya*  
 3-walk-ACT-PL-PFV 3-shout-PLURAC-ACT-PL-IPFV.MOT in street  
 ‘They used to walk and go shouting in the streets.’

Second, even in the absence of a preceding motion verb in the context, the associated motion marker encodes the motion as a ground, and by doing this, construes the lexical event expressed by the verb it attaches to as a figure. It thus highlights a particular discourse function of the basic propositional content of the clause. Indeed, my analysis of occurrences of Mojeño Trinitario associated motion markers in my textual corpus leads to a conclusion rather similar to that of Judith Payne (1982), who sees associated motion markers as tools to build the

narration by highlighting major events. My study focuses on the distribution of the markers *-pori'i* 'IPFV.MOT' and *-poripo* 'PFV.MOT', which are used in narrative texts, or in narrative sub-sections of texts of other genres. Their distribution is examined in detail in two of the texts with the greatest number of occurrences. The text *Dog Face* is an epic narration recounting the journey of a hero, a normal man who is getting lost in the forest and is meeting all kinds of nonhuman monsters. Associated motion morphemes are all used in scary parts of the story: when the man forgets to leave signs to find his way back, when his hunting dogs leave him (23), when the dog-face character smells his presence, in his encounters with other monsters (see (28) and (71)), and when key assertions are tragically uttered by the characters (72). To sum up, associated motion morphemes are especially used in the points of highest tension in the text, called climaxes in the dramatic structure terminology.

- (71) *ene s-ke-pripu-iji esu su n(a)-ogienuu'o*  
 and 3F-be.SO-PFV.MOT-RPT PRO.3F ART.F 3PL-chief  
 'And then came their female chief (of the people with dog faces).'
- (72) *ñi-jich-poripu-iji ñi ñ-iya: oni v-ke-yre...*  
 3M-say-PFV.MOT-RPT ART.M 3M-father there 1PL-be.SO-FUT  
 'On the way, he told his father: "We will go there...".'

The *Cricket* text is a story built on the concatenation of identical frameworks: each time a new character is introduced, he/it eats the previous one; he/it is then eaten by the character that is introduced next. The markers *-pori'i* 'IPFV.MOT' and *-poripo* 'PFV.MOT' occur whenever a new character is introduced. First, the characters already on scene hear the sound of an animal/human and guess that someone is coming closer, as in (73) or (74). In both examples, the motion is expressed as a ground for the sound made by the new character, whose approach is foregrounded in the narrative. I feel this pattern is creating some suspense, making the arrival longer than by the plain use of 'he/it arrives' in which the new character would be entering the scene directly. The introduction of the new character is thus foregrounded by the use of the associated motion marker, which has a presentational function. Again, these presentations are moments of high drama, yet the arrivals do not constitute the main events, which are the 'eating' events. The use of associated motion morphemes thus participates in building the dramatic structure. More "suspense" is added to the basic storyline by underlining changes of scene or introduction of new participants. This function is more specific than just "underlining the main events" (which was their main function for Judith Payne).

- (73) *na-samo'cho-pu-iji* [...] *to vichi*,  
 3<sub>PL</sub>-listen-PFV-RPT                      ART.NH cricket  
*ta-ke-pripu-iji*                      *to vichi, chii, chii, chii...*  
 3<sub>NH</sub>-Say-PFV.MOT-RPT                      ART.NH cricket    *chii chii chii*  
 'They listened to the sound of the cricket, the cricket  
 came saying "chii chii chii...".'
- (74) *ta-yere-wo-o'i, ñi-ke-pripu-iji ñi jii'i*,  
 3<sub>NH</sub>-last-MID-ASS    3<sub>M</sub>-be.SO-PFV.MOT-RPT    ART<sub>M</sub> rooster  
*ñi 'jii'i ñ-omuire, ko, ko, ko[...]*                      *ñi-ke-pri'i-ji*  
 ART.M                      rooster    3<sub>M</sub>-also                      cock-a-doodle-doo                      3<sub>M</sub>-Say-IPFV.MOT-RPT  
*eñi.*  
 PRO.3<sub>M</sub>  
 'After some time, came the rooster, the rooster too, it [lit. he] came  
 saying "cock-a-doodle-doo".'

Text analysis shows that associated motion markers are used when motion is backgrounded, either because it is given information, as in (69) and (70), or because it is used to introduce a new participant (for example, by putting the noise of the animals in the foreground in (73) and (74)). Motion acts as a ground for other events when it is expressed by associated motion markers.

## 6 Associated motion in Mojeño Trinitario: a heterogenous system

A final interesting remark on the associated motion category in Mojeño Trinitario is that it is not expressed by a uniform paradigm, since the markers:

- do not show a canonical prosodic pattern, as opposed, for example, to articles, which are all CV in the language
- do not have an internal structure in common, as opposed, for example, to demonstratives, which all consist of a/p/, a CV person index, and a CV distance/aspect syllable
- do not occur on the same parts of speech: while five of them are generally found on verbs, *-opo* attaches to pronouns only, and *-pori'i* 'IPFV.MOT' and *-poripo* 'PFV.MOT' also attach to other parts of speech (Section 3)
- do not occur in the same slot in the verb structure, as opposed, for example, to person indexes (Figure 1); cross-linguistically, the associated motion

category is often restricted to a single slot in the verb structure, while in some Takanan languages, associated motion markers are assigned to several slots (see, for example, Vuillermet 2012b on Ese Ejja)

- do not form a system with regular (often binary) semantic oppositions, as is claimed for certain other languages with associated motion markers (Table 1)
- are sometimes used without expressing motion, with some temporal or aspectual value instead (Sections 4.6.4 and 4.6.5)
- show very different frequencies of use (Section 5.1)

The conclusion is that these six morphemes do not form a neat paradigm with systematic oppositions that would suggest a unique process of grammaticalization from the same type of elements, at the same time. It rather looks like an ad hoc system that very likely resulted from various processes of grammaticalization.

At the same time, the paradigm has possibly undergone attrition, since of the three associated motion markers reconstructed for Proto-Arawak (75), only \**ape* ‘arriving, approaching, motion’ seems to have potential reflexes in Mojeño Trinitario. These are seen in concomitant motion markers *-pori’i* ‘IPFV.MOT’ and *-poripo* ‘PFV.MOT’ (merged forms of *-po* with the aspectual and assertive suffixes *-ripo* and *-ri’i*).

Proto-Arawak

(75) * <i>-ape</i>	directional, ‘arriving, approaching, motion’
* <i>-ane</i>	directional, ‘leaving’
* <i>-ake</i>	directional, ‘go to do X’
(David Payne 1991: 380–381) <sup>31</sup>	

Mojeño may have inherited associated motion markers from Proto-Arawak but local influence may also have played a role in their maintenance and in the development of additional markers in the category. Previous studies have shown that expressions of spatial features such as directionals are particularly common in Western Amazonia (Doris Payne 2003) and the Guaporé-Mamoré region (Crevels and van der Voort 2008). The presence of the category of directionals has in fact been used in arguments on the status of these regions as linguistic areas. Now, with regard to associated motion in particular, Guillaume (2012)

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**31** Three markers (called directionals) have been reconstructed for Proto-Arawak, with reflexes used as associated motion morphemes in at least some Arawak languages, as the translations suggest.

presents a survey of associated motion systems in South-Western Amazonia. Within this area, there is a core region with languages that show complex associated motion systems, surrounded by a region with languages that show less complex systems of associated motion, and further away languages are found without any associated motion morphemes at all. Guillaume suggests that the category has very likely diffused geographically, noting that associated motion systems are rather uncommon cross-linguistically, making the prevalence and occasional complexity of this category almost astonishing in a region characterized by such great linguistic diversity as South-Western Amazonia (Guillaume's study examines languages from seven families as well as eight isolates). Further research may determine in what respect neighboring languages could have influenced Mojeño Trinitario.

## 7 Conclusion

This paper has focused on associated motion in Mojeño Trinitario. Against the background of the general literature on the topic, it has analyzed data from Mojeño Trinitario, thereby contributing to a working typology of associated motion.

First, this paper has added novel data to the existing literature. Analysis of the data from Mojeño Trinitario has revealed the following: the possibility of attaching associated motion markers to pronouns; the minor importance of path information, including the lack of deictic information altogether; the absence of a prior motion morpheme in the system; the low frequency of associated motion markers in discourse; and the absence of a significant pattern of verb collocation. Moreover, Nivacle data from Fabre (under review) presented here show that, contrary to current thinking, a language can have associated motion markers mostly or exclusively concerned with the motion of the object. These features should be taken into account in ongoing development of a typology of associated motion.

Second, it has been seen that some semantic features of the associated motion system in Mojeño Trinitario raise issues for previously proposed semantic parameters. In this respect, I have suggested that 'interrupted motion' could be considered to involve a specific type of temporal relation between the motion event and the lexical event, i.e. a type independent from concurrent or prior motion. Further, I have proposed that 'temporary location' is not a primary parameter for associated motion but rather results from the semantic bleaching of 'interrupted motion' or 'subsequent motion'; and similarly, following

Vuillermet (2012b), that the ‘speed’ parameter (found in ‘hurried action’ markers) is not fundamentally about speed but may find its source in the tight relative timing between the lexical event and the motion event. The semantic shifts suggested by the variability of some Mojeño Trinitario markers argue that any typology of associated motion markers should distinguish semantic components that are primary from those that are semantically derived, i.e. in advanced stages of grammaticalization.

As a final point, the associated motion system in Mojeño Trinitario has been shown to be quite heterogeneous, which suggests that an investigation of the diachrony of associated motion system may be called for. First, the system is not optimally organized on a semantic level in the sense that it does not show binary or regular semantic oppositions. Some markers show relatively advanced cases of bleaching into aspect markers. Second, the system does not optimally constitute a single morphological paradigm with consistent properties. Finally, the discourse use (especially the frequency) of the markers is quite diversified. The properties of this “fuzzy system” provide significant new input for the emerging typology of associated motion systems. The particularities of the Mojeño Trinitario system may be due to the age of the system, since associated motion markers are reconstructed for Proto-Arawak, or to attrition, since the language is now endangered (Crevels 2002). It could also be an ad hoc system formed by various waves of grammaticalization, perhaps under the influence of neighboring languages. Further research should focus on possible diachronic paths leading to and deriving from associated motion morphemes, in Mojeño Trinitario as well as cross-linguistically.

## Abbreviations

1/2/3 = first/second/third person; A = agent of transitive verb; ABL = ablative; ABS = absolutive; ACC = accusative; ACT = active; ADL = adlative; AM = associated motion; AN = animate enclitic; ANT.VENT = anticipatory ventive; APPL.DIST = distal applicative; ART = article; ASS = assertive; CAUS = causative; CLF = classifier; COMPL = completeive; D = deictic classifier; DAT = dative; DEM = demonstrative; DM = discourse marker; DUR = durative; ERG = ergative; F = feminine (singular); FUT = future; GEN = genitive; HYP = hypothetical; IMP = imperative; INC = incompleteive; INTR = intransitive; IPFV = imperfective; IRR = irrealis; IT = itive; LNKR = linker; M = masculine (singular); MID = middle; MOT = motion; MOT.PRES = motion-presentational; N = noun; NEG = negation; NH = non-human; NPP = non-past progressive; NMZ = nominalizer; O = object of a transitive verb; P = patient of transitive verb; PST = past; PC = past completeive; PERL = perlativ; PFV = perfective; PL = plural; PLURAC = pluractional; POSS =

possession; PRO = pronoun; PROG = progressive; RED = reduplication; REFL = reflexive; REV = reversive; RPT = reportative; SG = singular; SS = same subject; SUBS.MOT = subsequent motion; S = argument of intransitive verb; TEMP = temporary motion target; VENT = venitive; VBZ = verbalizer.

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