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## Associated motion and associated posture in Tacana (Takanan family, Amazonian Bolivia)

### 1 Abstract

This paper is a typologically-informed description of 19 verbal affixes that express, as part of their primary meanings, notions of motion or posture in Tacana, an endangered and poorly described language from the Takanan family. I will argue that these affixes express associated motion (AM), a now well-established typological concept (Guillaume 2016; Guillaume & Koch 2021a), and what I will call associated posture (AP), a term that some linguists, following Enfield (2002), have started to use, by analogy to that of associated motion. Five of the 15 AM affixes ('going', 'coming', 'going back', 'coming back', 'wandering') and the four AP affixes ("sitting", 'standing', 'lying' and 'hanging') are noteworthy for taking part in the obligatory verbal inflectional morphology, expressing, in addition to AM and AP, imperfective aspect (progressive, habitual, iterative or generic), in complementary distribution with other non-spatial TAM affixes. The other ten AM affixes, which occupy distinct and non-obligatory morphological slots, together form a remarkably complex system of contrasting values in terms of major typological AM parameters (moving argument, temporal relation, path and aspect). Such elaborated types of systems are typical of other Takanan, Western Amazonian and Central Australian languages, but exceedingly rare elsewhere in the world (Ross 2021).

### Keywords

grammar of space, motion, posture, imperfective aspect, morphology, Amazonian languages

### 2 Introduction

This paper describes a highly elaborated system of 19 verbal affixes that express associated motion (henceforth AM) or 'associated posture' (henceforth AP) in Tacana, a highly endangered and very poorly known language from the Takanan family, spoken in the Amazonian Lowlands of Northern Bolivia. Three examples of the types of affixes to be discussed are provided in (1a,b) for AM and (1c) for AP:

(1) Tacana (Takanan) (Guillaume, fieldwork data 2009-2013)

- |  |   |
|--|---|
| <p>a. <i>ba-ti-</i><br/>see-GO&amp;DO-<br/>'go and then see'</p>                                   | <p>b. <i>e-id'ebati-u</i><br/>VPF-laugh-IPFV.GOING<br/>'be laughing while going away'</p> |
| <p>c. <i>e-id'ua-netia</i><br/>VPF-wait_for-IPFV.STANDING.1/2A<br/>'be waiting while standing'</p> |   |

The paper adds substantially to the growing body of studies on the grammatical expression of motion and posture in Amazonian / South American languages. In the Takanan context, the paper is the first detailed study of AM and AP in Tacana<sup>1</sup> and in a language from the Takanik branch (following Girard 1970's classification), complementing extensive research on these

<sup>1</sup> Brief mentions and incomplete / preliminary analyses of some of the AM affixes can be found in Ottaviano & Ottaviano (1965; 1967; 1989) and Guillaume (2013a; 2017a; 2016: 163–165).

categories in Cavineña, from the Kavinik branch (Guillaume 2000; 2006; 2008; 2009), and Ese Ejja, from the Chamik branch (Vuillermet 2009; 2012; 2013); published descriptions of AM and AP are still lacking for the remaining two languages of the family, Araona and Reyesano (Maropa) from the Takanik branch.

Beyond Takanan and Amazonian / South American languages, the paper also makes a contribution to the field of typology. First, it provides new data to the emerging typology of the recently recognized and established (descriptive and) comparative concept of **associated motion** (AM), which refers to **grammatical morphemes** that, like the Tacana affixes in (1a,b), are “**associated with the verb** and that ha[ve] among [their] possible functions the **coding of translational motion.**” (Guillaume 2016: 92; see also Koch 1984; Wilkins 1991; Guillaume 2006; Guillaume & Koch 2021a; 2021b and papers and references therein).

Second, the paper offers significant evidence in support of the recognition of another (descriptive and) comparative concept of ‘**associated posture**’ (AP), for **grammatical morphemes** that, like the Tacana affix in (1c), are **associated with the verb** and that have among their possible functions the **coding of postural meanings**. Unlike AM, the phenomenon of AP has no established label or agreed on definition in descriptive or comparative / typological linguistics, although what it refers to has been regularly reported in works on the grammaticalization of posture verbs into verbal tense-aspect markers such as, for instance, the studies by Bybee et al. (1994: 127–133), Kuteva (1999) or Newman (2002a; 2002b), which show that in some languages, as in Dutch (2) or Mbay (3), the grammaticalized tense-aspect markers can retain the literal postural meanings of the source verbs.

- (2) Dutch (Indoeuropean): progressive auxiliaries (Lemmens 2005: 184)

*Ik zat te lezen / ik stond te wachten / ik lag te slapen.*  
 I sat to read-INF / I stood to wait-INF / I lay to sleep-INF  
 ‘I was (sitting and) reading/(standing and) waiting/(lying and) sleeping.’

- (3) Mbay (Nilo-Saharan): auxiliaries combining progressive and postural meanings (Keegan 2002: 346)

a. *Ngon ndi ton ngon-ji-n.*  
 child sits licking small-hand-his  
 ‘The child is licking his finger (seated).’

b. *Ngon-kə-mandə dā ndom wunjə-wunjə.*  
 young-woman stands dancing rhythmically  
 ‘The young woman is dancing in a lively and rhythmical fashion.’ [standing]

c. *Ngon to il ngon-ji-n.*  
 child lies sucking small-hand-his  
 ‘The child is sucking on his finger.’ [lying]

The term and concept of ‘associated posture’, used by analogy to that of ‘associated motion’, first appeared in the 2000s, in works on multiverbal constructions, starting with Enfield’s (2002) description of posture verbs in Lao serial verb constructions, as illustrated in (4), and continuing with studies such as those by Ameka (2006: 136) in a study of serial verb constructions in Ewe, by Aikhenvald (2018: 71) on a typology of serial verb constructions and Obert (2019: 188–190) in a study of complex predicates in Dâw.

(4) Lao (Tai-Kadai): associated posture in SVC (Enfield 2002: 245)

- |  |   |
|--|---|
| a. <i>nòòn<sup>2</sup></i> <i>beng<sup>1</sup></i> <i>thoo<sup>2</sup>lathat<sup>1</sup></i><br>lie look television<br>'watch television <u>lying down</u> '   | c. <i>jùùn<sup>3</sup></i> <i>beng<sup>1</sup></i> <i>thoo<sup>2</sup>lathat<sup>1</sup></i><br>stand look television<br>'watch television <u>standing up</u> ' |
| b. <i>nang<sup>1</sup></i> <i>beng<sup>1</sup></i> <i>thoo<sup>2</sup>lathat<sup>1</sup></i><br>sit look television<br>'watch television <u>sitting down</u> ' |   |

But more relevant data for the recognition of AP (like AM) as a label for a verbal grammatical category, as proposed in this paper, were only discussed in this perspective in the 2010s, informally and/or in the context of (unpublished) workshop or conference presentations by linguists who were studying languages with fully grammaticalized systems of both AM and AP, such as the Takanan languages Ese Ejja, Tacana and Araona – see in particular the presentations by Vuillermet & Grinevald (2016), Guillaume (2017b), Vuillermet (2017a) – these two in the context of a workshop dedicated to the exploration of AM and AP<sup>2</sup> – and Tallman (2020). The (unpublished) presentation by Vuillermet & Grinevald (2016) is the first attempt to systematically compare the expression of both categories in Ese Ejja, where AM and AP are expressed by two sets of tense-aspect and posture verbal suffixes, having grammaticalized out of the same set of posture verbs (*ani* 'sit', *neki* 'stand', *jaa* 'lie' and *ba'e* 'hang, float'<sup>3</sup>); note that in Vuillermet's earliest works, these suffixes are described without any dedicated label (Vuillermet 2009; 2012: 634ff). The first set, listed in (5a) and illustrated in (6), is non-inflectional (non-obligatory), and patterns together, in the same non-inflectional slot, with a set of 14 AM suffixes, five of which are listed in (5b).

(5) Ese Ejja (Takanan): non-inflectional suffixes

- |  |   |
|--|---|
| a. AP & imperfective<br><i>-ani</i> 'do sitting/IPFV'<br><i>-neki</i> 'do standing/IPFV'<br><i>-jaa</i> 'do lying/IPFV'<br><i>-ba'e</i> 'do hanging/floating/IPFV' | b. AM<br><i>-ki</i> 'go to do'<br><i>-wa</i> 'come to do'<br><i>-poki</i> 'do going'<br><i>-jebe</i> 'do returning'<br><i>-na</i> 'do and return'<br>etc. |
|--|---|

(6) Ese Ejja (Takanan)

... *ba-ka-neki-naje*.  
watch-3A-stand/VPF-PST  
'(the Ese Ejja) were all watching (standing).' (Vuillermet 2012: 639)

The second set of Ese Ejja AP verbal suffixes, listed in (7a), and one, *-ki* 'stand/PRS', exemplified in (8a), is inflectional (obligatory) and patterns together, in the same inflectional slot, with a set of non-spatial tense-aspect suffixes, some of which are listed in (7b) and one, *-naje* 'PST', exemplified in (8b); see also (6), where the same inflectional non-spatial suffix is combined with a non-inflectional AP suffix from the first set.

<sup>2</sup> "Espace & événements : mouvement et posture associés", June 19-20, 2017, University of Chicago Center in Paris (<http://drehu.linguist.univ-paris-diderot.fr/eempa-2017/index.php?langue=en>)

<sup>3</sup> The grammaticalization of a 'hanging' verb, as we will also see in Tacana, is fairly common among lowland Latin American languages, as further discussed in §6.

(7) Ese Ejja (Takanan): inflectional suffixes

- |  |                             |
|--|-----------------------------|
| a. AP & present                            | b. non spatial tense-aspect |
| - <i>ani</i> - <i>aña</i> ‘do sitting/PRS’ | - <i>naje</i> ‘PST’         |
| -( <i>e</i> ) <i>ki</i> ‘do standing/PRS’  | - <i>a=pwa</i> ‘REM.PST’    |
| - <i>jaa</i> ‘do lying/PRS’                | - <i>je</i> ‘FUT’           |
| - <i>ba'e</i> ‘do hanging/floating/IPFV’   | - <i>kwe</i> ‘IMP’          |
|  | etc.                        |

(8) Ese Ejja (Takanan)

- |  |  |
|--|--|
| a. <i>Besa-ki</i> .<br>bathe-stand/PRS<br>‘I am bathing (standing).’<br>(Vuillermet 2012: 635) | b. <i>Majoya besa-naje oya</i> .<br>then bathe-PST 3ABS<br>‘Then they bathed.’<br>(Vuillermet 2012: 521) |
|--|--|

The Tacana data to be presented in this paper show an even tighter parallelism between AP and AM, with the patterning in the same inflectional (obligatory) slot of four affixes of AP & imperfective aspect, listed in (9a) and exemplified in (10a), five affixes of AM & imperfective aspect, listed in (9b) and exemplified in (10b) and nine non-spatial tense-aspect, five of which are listed in (9c) and one exemplified in (10c); note that Tacana, like Ese Ejja, also has a distinct set of (ten) non inflectional AM affixes which occupy distinct morphological slots, as with *-ti* in (1a), and which will also be described in this paper.

(9) Tacana (Takanan): inflectional affixes (Guillaume, fieldwork data 2009-2013)

- |   |   |
|---|---|
| a. AP & imperfective                                      | b. AM & imperfective                            |
| <i>e</i> -...- <i>ani</i> / - <i>inia</i> IPFV.(SITTING)  | <i>e</i> -...- <i>u</i> IPFV.GOING              |
| <i>e</i> -...- <i>neti</i> / - <i>netia</i> IPFV.STANDING | <i>e</i> -...- <i>siu</i> IPFV.COMING           |
| <i>e</i> -...- <i>sa</i> IPFV.LYING                       | <i>e</i> -...- <i>buyu</i> IPFV.GOING_BACK      |
| <i>e</i> -...- <i>bade</i> IPFV.HANGING                   | <i>e</i> -...- <i>beyu</i> IPFV.COMING_BACK     |
|   | <i>e</i> -...- <i>niuneti(a)</i> IPFV.WANDERING |
| c. non spatial tense-aspect                               |   |
| - <i>a</i> ‘PST’  |   |
| -( <i>a</i> ) <i>na</i> ‘REC.PST’                         |   |
| -( <i>i</i> ) <i>dha</i> ‘REM.PST’                        |   |
| -( <i>i</i> ) <i>na</i> ‘HAB.PST’                         |   |
| - <i>ke</i> ‘IMP’   |   |
| etc.  |   |

(10) Tacana (Takanan) (Guillaume, fieldwork data 2009-2013)

- |   |  |
|---|--|
| a. <i>e-id'ua-netia</i><br>VPF-wait_for-IPFV.STANDING.1/2A<br>‘be waiting while standing’ | b. <i>e-id'ebati-u</i><br>VPF-laugh-IPFV.GOING<br>‘be laughing while going away’ |
| c. <i>mimi-ana</i><br>speak-REC.PST<br>‘spoke recently’                                   |  |

The remainder of the paper is organized as follows. Section 3 provides a number of basic facts on the Tacanan language and its speakers, the data for the study, the morphological structure of the Tacana verbal predicate, and the main morphological characteristics of the AM and AP affixes. Section 4 is dedicated to a detailed description of inflectional AM affixes (in §4.1) and AP affixes (in §4.2) while non-inflectional AM affixes are the topic of section 5. The paper ends with a summary and a conclusion in section 6.

### 3 Basic facts on Tacana and its speakers, the data for the study and the expression of AM and AP

Tacana is one of the five extant languages of the small Takanan family from the Amazonian lowlands of Bolivia and Peru, together with Araona, Cavineña, Ese Ejja, and Reyesano (aka Maropa). The language is critically endangered, being only spoken by a few dozen elderly people, and basically undescribed, except in the form of a tagmemic grammar (Ottaviano & Ottaviano 1965; 1967), a dictionary of ca. 5000 entries (Ottaviano & Ottaviano 1989) and a short non-published grammar sketch (Guillaume 2013b).

This study is for the most part based on firsthand data (narrative texts and elicitations) from the Tumupasa dialect that I collected in Tumupasa (province of Iturrealde, Bolivian department of La Paz) during four months of fieldwork (four field trips) between 2009 and 2013; in my Field Linguist's Toolbox database, these data amount to ca. 4000 sentences (3274 from texts, 729 from elicitation). Firsthand data are complemented by secondhand data published by the Summer Institute of Linguistics (SIL), consisting of a number of bilingual (Tacana - Spanish) narrative texts (Ottaviano 1980; 981 sentences in Toolbox), the entries and illustrative sentences of their bilingual (Tacana - Spanish) dictionary (Ottaviano & Ottaviano 1989) and the monolingual (Tacana) text of their full translation of the New Testament in Tacana (Anonymous 1981; 1036 pages of text). Of the SIL data, only the (non religious) narrative texts have been systematically explored. No systematic controlled elicitation was conducted with native speakers on the topic of motion and posture, which means that the study relies primarily on my own interpretation of the available data.

Tacana verbal predicate structure is considered polysynthetic and to a large degree agglutinative, as is the case with all other languages of the Takanan family (Guillaume To appear). As shown by Table 1, which presents the structure of simplex (finite) verb predicates,<sup>4</sup> there are distinct slots for compounded lexemes (-1, +1) and many affixes (prefixes, suffixes and circumfixes) that express a wide range of meanings and functions having to do with valency-change, person indexation (essentially 3<sup>rd</sup> person), space, manner, TAM, etc. (-3, -2 and +2 to +9).

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<sup>4</sup> Verbal main clauses can be headed by two types of predicates without semantic differences: a simplex (finite) verb predicate, where the verbal lexeme takes the inflectional morphology, and a (complex) non-finite verb predicate, where the verbal (or non-verbal) lexeme does not take the inflectional morphology, which is optionally carried by a generic auxiliary (light verb), either intransitive *pu* 'be' or transitive *a* 'do'; for examples of the latter construction with *pu* 'be', see *daño -pu-* 'damage' in (38a), *jaitiana -pu-* 'pass' in (61a), *bed'a-bed'a -pu-* 'float' in (66), *jemi-(b)ute -pu-* 'remove down' in (74a), *sena -pu-* 'have dinner' in (77b) and *aloja -pu-* 'put oneself up' in (102); for examples with *a* 'do', see *tije -a-* 'go behind' in (46a,b) and *nai -a-* 'rain on' in (76c). For examples of (complex) non-finite verb predicates without an overt generic auxiliary, see *neti* 'stand' in (59b), *sana* 'lie' in (64b), *kwina-yu* 'arrive-REITR' and *manu-sena-yu* 'die-ARRIVE\_HERE&DO-REITR' in (90a) and *icha-ti* 'put-GO&DO' and *jemi-pe-jeu* 'remove-COMPL-COME&DO' in (104).

Table 1. Structure of simplex (finite) verbal predicate structure

|           |  |   |
|-----------|--|---|
| <b>-3</b> | <b>TAM</b>   | AM & AP: <i>e-</i>  |
| -2        | Valency-change                                       |   |
| -1        | Compounded noun                                      |   |
| <b>0</b>  | <b>Verb Root</b>                                     |   |
| +1        | Compounded verb                                      |   |
| +2        | Valency-change                                       |   |
| +3        | ‘Adverbial-like’                                     | AM: <i>-ti, -(sa)seu, -(sa)sena, -na, -be, -wanana, -niuneti(a), -tsu, -(j)use/- (j)usia</i>          |
| <b>+4</b> | <b>3<sup>rd</sup> person indexation</b>              |   |
| +5        | ‘Temporal distance’ <i>-iti-</i>                     |   |
| +6        | ‘Back’ <i>-iba</i> , ‘Reiterative’ <i>-yu, -icha</i> |   |
| +7        | ‘Adverbial-like’                                     | AM: <i>-jeu</i>   |
| <b>+8</b> | <b>TAM</b>   | AM: <i>-u, -siu, -buyu, -beyu, -niuneti(a)</i><br>AP: <i>-ani / -inia, -neti / -netia, -sa, -bade</i> |
| +9        | ‘Reiterative’ <i>-yu, -icha</i>                      |   |

Slots can be distinguished according to whether they are obligatorily filled or not. In this study, the former type of slot (-3, +4 and +8, indicated with shaded cells in Table 1), is called inflectional (in the sense of Bybee 1985: 81–82) and the latter non-inflectional (-2, -1, +1, +2, +3, +5, +6, +7 and +9); the term ‘derivational’ is avoided, despite the non-obligatory status of the corresponding slots, for the reason that many of the non-inflectional elements – and precisely the AM suffixes in slots +3 and +7, discussed in this paper – do not display the kinds of distributional (lexically determined) restrictions and semantic opacity that are generally expected for derivational morphemes.

Among the space-related types of verbal predicate elements, one finds a remarkably elaborated inventory of affixes (19 in total) which express translational motion (AM) or postural meanings (AP), in addition to aspectual meanings. They are listed in the 3<sup>rd</sup> column of Table 1 according to their position in the predicate structure and their morphosyntactic status (inflectional versus non-inflectional), and in Table 2, in terms of their semantic values (organized according to the main typological parameters of variation in AM systems, as set up in descriptive and comparative / typological studies; see Guillaume 2016; Guillaume & Koch 2021a) and morphosyntactic status (inflectional in shaded cells).<sup>5</sup>

<sup>5</sup> Short (and incomplete) preliminary accounts of the Tacana AM affixes were presented in Guillaume (2013a; 2017a; 2016: 163–165).

Table 2. Inventories of AM and AP affixes in tacana (Tumupasa dialect)

|             | Motion/posture of S/A              |   | Motion of O               |                                      |
|-------------|------------------------------------|---|---------------------------|--------------------------------------|
|             | prior                              | concurrent  | prior                     | subsequent                           |
| <u>AM</u>   |                                    |   |                           |                                      |
| itive       | <b>-ti</b><br>GO&DO                | <b>-na</b><br>DO.IPFV.GOING                           | —                         | —                                    |
|             | <b>-(sa)seu</b><br>ARRIVE.THERE&DO | <b>e-...-u</b><br>DO.IPFV.GOING                       |                           |                                      |
|             |                                    | <b>e-...-buyu</b><br>DO.IPFV.GOING.BACK               |                           |                                      |
| ventive     | <b>-jeu</b><br>COME&DO             | <b>-be</b><br>DO.IPFV.COMING                          | —                         | —                                    |
|             | <b>-(sa)sena</b><br>ARRIVE.HERE&DO | <b>e-...-siu</b><br>DO.IPFV.COMING                    |                           |                                      |
|             |                                    | <b>e-...-beyu</b><br>DO.IPFV.COMING.BACK              |                           |                                      |
| non-deictic | —                                  | <b>-wanana</b><br>DO.ONCE.PASSING                     | <b>-tsu</b><br>COME(O)&DO | <b>-(j)use/- (j)usia</b><br>DO&GO(O) |
|             |                                    | <b>-niuneti(a)</b><br>DO.IPFV.WANDERING               |                           |                                      |
|             |                                    | <b>e-...-niuneti(a)</b><br>DO.IPFV.WANDERING          |                           |                                      |
| <u>AP</u>   |                                    |   |                           |                                      |
| (sitting)   |                                    | <b>e-...-ani / e-...- inia</b><br>DO.IPFV.SITTING     |                           |                                      |
| standing    |                                    | <b>e-...-neti / e-...-netia</b><br>DO.IPFV(.STANDING) |                           |                                      |
| lying       |                                    | <b>e-...-sa</b><br>DO.IPFV.LYING                      |                           |                                      |
| hanging     |                                    | <b>e-...-bade</b><br>DO.IPFV.HANGING                  |                           |                                      |



The AM inventory contains 15 forms in total. 13 forms relate to the motion of the subject (with an intransitive or transitive verb) and two forms to the motion the object (with transitive verbs). Five forms express prior motion (move&do), nine forms concurrent motion (do moving) and one form subsequent motion (do&move). As for the AP inventory, it consists of four forms: three forms that relate to the posture of the subject ('standing', 'lying', 'hanging'), grammaticalized out of the lexical posture verbs 'stand', 'lie' and 'hang', and a fourth form, grammaticalized out of the lexical posture verb 'sit', but which has lost any of its original postural meanings (see Table 3).

The AM inventory is not uniform in terms of the distribution of the forms in the morphological slots of the predicate structure, the morphosyntactic status (inflectional versus non-inflectional) and the exponence (simple versus double). First, there are **five inflectional circumfixes**, which all consist of the same dummy<sup>6</sup> prefix *e-* (with allomorph *y-* [j])<sup>7</sup> in slot -3 and distinct suffixes in slot +8, such as *e-...-siu* 'DO.IPFV.COMING' in (11).<sup>8</sup>

(11) Inflectional AM

... *uchi=kwana e-mimi-ta-siu* *beu.*  
 dog=PL VPF-speak-3S.PL-IPFV.COMING PTC  
 '... venían hablando los perros.' ha019  
 '... the dogs were coming speaking (among each other).'

Second, there are **ten non-inflectional suffixes**, nine of which occur in slot +3, such as *-ti* 'GO&DO' (12a), and one, *-jeu* 'COME&DO', in slot +7 (12b); note that one of them, *-niuneti(a)* 'DO.IPFV.WANDERING', is also used inflectionally, in slot +8, with the obligatory prefix *e-* in slot -3.

(12) Non-inflectional AM

- a. *Enekita beu ba-ti-ta-ana.*  
 truly PTC see-GO&DO-3A-REC.PST  
 'Y ya fue a verlo.' co069  
 'And he went to see him.'
- b. ... *mama=detse=ja etse chaku-ta-jeu-kwa* *beu.*  
 mother=DL=ERG 1DL search\_for-3A-COME-ABIL PTC  
 '... los papás nos pueden venir a buscar.' ps057

<sup>6</sup> The prefix *e-* does not have any clearly identifiable semantic meanings; see more details in footnote 18.

<sup>7</sup> The allomorph *y-* occurs before verb stems beginning with the vowel *a*; *e-* occurs elsewhere.

<sup>8</sup> The Tacana consonant phonemes are *p, b, t, d* [d], *d'* [d̥], *dh* [ð], *ts* [tʃ], *ch* [tʃ], *s* [s], *sh* [ʃ], *k, kw* [kʷ], *r* [r], *m, n, j* [h], *w* [w/β] and *y* [j]. The vowel phonemes are *a, e, i* [i/j] and *u* [u/w]. Stress falls on the 3<sup>rd</sup> mora (i.e., vowel or semi-vowel [j] or [w]) counting from the left. The illustrative examples that come from my fieldwork corpus include the verbatim free translation in local Bolivian Spanish that was provided by the native speakers who helped me transcribe and translate the texts. Similarly, I have also provided the Spanish translation of the examples that come from Ottaviano & Ottaviano' (1980) text collection, where a Spanish translation is provided. The English translations for all these examples correspond to my own interpretation of their meaning, taking into account the speakers' or Ottaviano & Ottaviano's Spanish translations, but also my understanding of the morphology, the context, etc.; as a result, Spanish and English translations sometimes do not fully match. Finally, the illustrative examples that come from Ottaviano & Ottaviano's monolingual (Tacana) text of their full translation of the New Testament (Anonymous 1981) only include an English translation, which is that of the corresponding verse(s) in the New International Version (NIV) of the Bible, chosen for practical reasons, being available and easily searchable on the internet ([www.biblegateway.com](http://www.biblegateway.com), copyrighted by Biblica, Inc.®); I was not able to identify the original (most likely Spanish) version of the Bible that Ottaviano & Ottaviano used with their Tacana translators. The codes that follow the translation lines (e.g., ha019 in (11)) correspond to the place of the example in my (Field Linguist's Toolbox) database. The extension '\_ott' to the example code (e.g., es060\_ott in (14)) indicates that it comes from Ottaviano & Ottaviano' (1980) text collection. The indication 'situational' means that I collected the example through participant observation, as in e.g. (62b).

‘... our parents might come to look for us.’

The AP inventory is fully uniform and fully parallel with the above-mentioned three AM circumfixes. The forms are made of the **same inflectional prefix** *e-* in slot -3 and **four distinct inflectional suffixes** in slot +8, as with *e-...-sa* ‘DO.IPFV.LYING’ in (13).

(13) Inflectional AP

*Enekita beu, se=kwana e-manu-ta-sa.*  
 really PTC fish=PL VPF-die-S3.PL-IPFV.LYING  
 ‘En verdad dice que los pescados iban muriendo.’ ch107  
 ‘The fish were dying.’

As will be shown below, the nine inflectional AM and AP markers form a paradigm which, in addition to specifying AM and AP semantics, are used to also express imperfective aspect (progressive, iterative, habitual or generic). The AM and AP markers in turn take part of the wider inflectional TAM system of the language, in complementary distribution with other (non-spatial) markers in slots -3 and +8.

From a **diachronic perspective**, the suffix parts of the four AP circumfixes stand out in having straightforwardly recognizable etymological sources in independent lexical verbs of posture ‘sit’, ‘stand’, ‘lie’ and ‘hang’; as for the prefix *e-* and most AM suffixes, whether inflectional or non-inflectional, their historical sources are either unknown or at best much less transparent than that of the AP suffixes. As shown in Table 3 and illustrated in (14) to (17), the related lexical verbs of posture are both reconstructible to Proto-Takanan and still in use nowadays in Tacana; note that they are also still used in the other four Takanan languages.

Table 3. Correspondences between Tacana AP affixes, independent posture verbs and their reconstructed form in Proto-Takanan

| Tacana suffixes                           | Corresponding Tacana verbs <sup>9</sup>                               | Reconstructed Proto-Takanan verbs |
|---|---|-----------------------------------|
| - <i>ani</i> / - <i>inia</i>              | <i>ani</i> ‘sit, stay, live, be’ (itr)                                | * <i>ani</i> <sup>10</sup>        |
| -( <i>n</i> ) <i>eti</i> / - <i>netia</i> | <i>neti</i> ‘stand, stop moving’ (itr)<br><i>netia</i> ‘stand O’ (tr) | * <i>neti</i> <sup>11</sup>       |
| - <i>sa</i>                               | <i>sa</i> ‘lie’   | * <i>sa</i> <sup>12</sup>         |
| - <i>bade</i>                             | <i>bade</i> ‘hang, be stranded in an enclosure’ (itr)                 | * <i>bade</i> <sup>13</sup>       |

(14) ‘sit (itr)’

*Jade, ani-(b)ute-ke! Tu=y-ani=su =pa beju, yawikwase=neje*  
 let's\_see sit-go\_down-IMP 3SG=VPF-sit=TMP =REP PTC hot\_drink=ASSC  
*napa-piru-ta-iti-a.*  
 water-START-3A-TDM-PST  
 ‘¡Muy bien, siéntate!’ ‘Cuando se sentó, ella empezó a regarle con agua poco a poco.’  
 es060\_ott, es061\_ott  
 “‘Well, sit down!’” (she said to him). When he had sat (down) / was sitting, she started

<sup>9</sup> A detailed study of the full range of meanings of the lexical posture verbs remains to be conducted.

<sup>10</sup> (Girard 1971: 50)

<sup>11</sup> (Girard 1971: 106)

<sup>12</sup> (Girard 1971: 116); note that \**sara* is a more likely etymon, considering the shape of the reflexes in Cavineña (*jara* [hala]) and Ese Ejja (*jaa* [haa]).

<sup>13</sup> (Girard 1971: 59)

to bathe him with hot water.’

- (15) a. ‘stand (itr)’<sup>14</sup>

*Dapia=we neti-ke!*  
there=RESTR stand-IMP  
‘¡Ahí nomás párate!’ ch068  
‘Stand over there! (the duende [a mischievous spirit] ordered the man)’

- b. ‘stand (tr)’

[*Mesa te=su*] *deja=ja* [*d’ije e-sa*] *netia-ta-iti-a*.  
3SG.GEN garden=LOC man=ERG corn VPF-lie stand (tr)-A3-TDM-PST  
‘El hombre levantó el maíz caído en su chaco.’ (Ottaviano & Ottaviano 1989: 86)  
‘In his garden, the man raised up the corn plants that were lying.’

- (16) ‘lie (itr)’

*Tu=biasu beu, sa. Tu=biasu beu, sana-idha [jida, iba].*  
3SG=on\_top\_of PTC lie 3SG=on\_top\_of PTC lie-REM.PST that jaguar  
‘Encima de él se echó. Encima de él se echó ese tigre.’ ti013-014  
‘(The jaguar jumped on him from behind and knocked him down on the ground.) He lay on top of him. He lay on top of him, that jaguar.’

- (17) ‘hang’<sup>15</sup>

*Piada =pa beu bade-ti-(i)dha, [mawi echa=su].*  
one =REP PTC hang-GO&DO-REM.PST almendrillo branch=LOC  
‘Se quedó colgado (de la cola) en gajo de almendrillo.’ ch015  
‘(He shot two howler monkeys.) One of them (fell and) hung / stayed hanging (by the tail) on the branch of an almendrillo tree.’

In anticipation to the description of the grammaticalized imperfective meanings of these verbs (as part of AP circumfixes), it is worth noting that depending on the accompanying morphology / construction used, the meanings expressed by the posture verb roots can be either **dynamic / inchoative** (enter into the posture), as in (14) to (17), or **stative** (be / stay / live in the posture / be located somewhere in the posture / exist in the posture), as in (57) with *neti* ‘stand (itr)’, (64b) with *sa* ‘lie’ and (55) and (101a) with *bade* ‘hang’. Also note that in its stative use, *ani* ‘sit’ does not have any postural meanings, as in (86c), (97) and (18).

- (18) *Kepia [mike kwara] y-ani [mike tata]?*  
where 2SG.GEN mother VPF-sit 2SG.GEN father  
‘¿Dónde está tu madre y tu padre?’ au045  
‘Where is your mother? (And where is) your father? (the child, who had never seen his grandparents, asked his mother)

Among the main formal properties that distinguish the grammaticalized versus the lexical posture verbs, one can list the following ones:

<sup>14</sup> A frequent meaning expressed by *neti* is ‘stop moving’, as in (59b).

<sup>15</sup> The ‘hang’ posture verb in Tacana (and in the other Takanan languages) covers a range of meanings that is broader than that of the English verb ‘hang’, including notably situations where an entity is stranded in an enclosure (e.g. in a burrow in the ground).

- fixed position in the verbal predicate structure (slot +8; see Table 1);
- lack of independent stress (see footnote 8);
- obligatory presence of the prefix *e-* (slot -3; see Table 1)
- identical vocalic cluster reduction (*aa*→*a*) in the case of the *-ani* allomorph of the ‘sitting’ form when attaching to a root or stem ending in *a*, as seen in (24b), (48c), (49a), etc.;
- allomorphy with no corresponding lexical verb in the case of the ‘sitting’ form (*-inia*, used with transitive verbs when the subject is a speech act participant);
- allomorphy restricted to speech act participants subjects in the case of the ‘standing’ form (*-netia* ; as a lexical posture verb, *netia* does not have this restriction, as seen in (15b), where it has a 3rd person A);
- loss of initial consonant *n* yielding the variant form *-eti* in the case of the ‘standing’ form (in free variation with *-neti*);
- part of a larger paradigm of inflectional markers whose members have no corresponding lexical verbs (including AM suffixes as well non-spatial suffixes ; see Table 4).

As for differences in semantics and discourse use, one can mention the various extensions into non-postural or even non-spatial meanings that characterize all AP markers (described in §4.2.2, §4.2.3 and §4.2.4) and their clear backgrounding function, which can be observed in their frequent use in what is known as “echo constructions” in works on AM (Guillaume & Koch 2021b: 15), where an AM- or AP-marked verb redundantly “echo” a motion or posture that has already been introduced earlier by a separate lexical posture verb (or that is already encoded by a preceding AM- or AP-marked verb), as in (19) for AM, and (20) for AP, or a preceding AM- or AP-marked verb.<sup>16</sup>

(19) *Beu =pa puti-a, zorro =mu beu, e-id'ebati-u.*  
 PTC =REP go-PST fox =CONTR PTC VPF-laugh-IPFV.GOING  
 ‘Ya se había ido el zorro, se va riendo.’ bu022  
 ‘The (mischievous) fox had already gone off (escaping one more time from the stupid jaguar) and he was laughing.’

(20) *Dukei=base e-neti ena=su e-(ja-)id'i-ti-neti.*  
 deer=DEPREC VPF-stand stream=LOC VPF-MID-drink-MID-IPFV.STANDING  
 ‘Ahí está el venado dentro del agua está tomando.’ hv027  
 ‘(Let’s be quiet!) There is a deer (standing) in the water, drinking (while standing).’

Another correlate of the discourse backgrounding function of AP markers is the fact that Tacana native speakers hardly ever make explicit the postural specifications when translating sentences with AP-marked verbs in Spanish, as is the case with all the examples of AP provided in this paper, whether or not in “echo constructions”.

The historical origin of the prefix *e-* and most AM suffixes, whether inflectional or non-inflectional, is much less transparent, and at best, only three (out of 15) AM suffixes, all of them from the non-inflectional set, have a plausibly lexical source (formally and semantically) still used in the language nowadays: *-jeu* ‘COME&DO’ (from verb *jeu* ‘come and get O’), *-tsu* ‘COME(O)’ (from verb *tsu* ‘encounter O’) and *-(j)use/- (j)usia* ‘DO&GO’ (from verb *jusia* ‘throw O’); as commented just below and in §5 (footnote 40), *-tsu* and *-(j)use/- (j)usia* could arguably be analyzed as compounded lexical verbs. As argued in Guillaume (2013a), non-inflectional *-ti* ‘IPFV.GOING’, *-na* ‘IPFV.GOING’, *-be* ‘IPFV.COMING’ and inflectional *e-* ‘IPFV’ and *-u*

<sup>16</sup> More examples of redundant AM “echo constructions” can be seen in (24a), (87b), (89a), (90a) (with a separate lexical posture verb) and (24a) (with a preceding AP-marked verb, namely *e-pu-u* ‘IPFV-be-IPFV.GOING’). More examples of redundant AP “echo constructions” can be seen in (56b) and (59b), (64b) and (66) (with a separate lexical posture verb) and (66), (67b), (72c) and (76b) (with a preceding AP-marked verb).

‘IPFV.GOING’ can be traced back to affixes with the same forms in Proto-Takanan. As for reconstruction of the history of the other forms, if ever possible, as well as the reconstruction of the source constructions in which all the AM and AP morphology arose (including the prefix *e-* within the circumfixes) will require more work.

Before turning to the description of grammatical AM and AP systems, it is worth mentioning that **verb compounding** (in slot +1 of the verbal predicate structure; see Table 1) is yet another means in Tacana to further modify the meaning of a lexical verb root in terms of posture or motion (or path) semantics. With regards to the use of posture verbs in this construction, this involves essentially the three **transitive caused-posture verbs** *netia* ‘stand O’, *wana* ‘lay O’, and *badiana* ‘hang O’, which are used to (more-or-less clearly) specify the posture (standing vs. lying vs. hanging) of the O argument referent of certain transitive verbs (e.g., ‘put’, ‘cut’, ‘strike’, ‘tie’, ‘throw’, ‘cook’, ‘close’, ‘leave’).<sup>17</sup> An illustration of these three verbs with the transitive verb *rubiu* ‘put O in’ is provided in (21a-c), where they express the resulting posture of the manipulated O argument at the end of the ‘putting in’ event; as for the intransitive posture verbs *neti* ‘stand’, *sa* ‘lie’ and *bade* ‘hang’ (or, for that matter, *ani* ‘sit’), I don’t have any clear examples of their use in the compounding construction.

- (21) a. *Rubiu-netia-ta-idha*                    *shita*                    *etsuti=su*.  
 put\_in-stand(tr)-3A-REM.PST sugarcane house\_corner=LOC  
 ‘Lo metió en un rincón la caña (tiene que ser parado la caña)’. n3.0032 (elicited)  
 ‘He stood the sugarcane in a corner of the house.’
- b. *Rubiu-wana-ta-idha*                    *shita*                    *etsuti=su*.  
 put\_in-lay-3A-REM.PST sugarcane house\_corner=LOC  
 ‘Lo metió en un rincón la caña (tiene que ser echado la caña). n3.0031 (elicited)  
 ‘He lay the sugarcane in a corner of the house.’
- c. *Rubiu-badiana-ta-idha*                    *d'ije*                    *tsewe=su*.  
 put\_in-hang(tr)-3A-REM.PST corn hook=LOC  
 ‘Lo dejó colgado el maíz en el gancho (en una bolsa).’ n3.0035 (elicited)  
 ‘He hung the (bag of) corn on the hook.’

With regards to motion verbs, the most frequently used in the compounding constructions are the two pairs of **path motion verbs** ‘go up’ vs. ‘go down’ and ‘make O enter’ and ‘go out’. The first pair consists of *tsua* ‘go up’ – as in (56b), compounded with *neti* ‘stand’ with the resulting meaning ‘stand up / go up and stand’ – and *bute* ‘go down’ (form *ute* in the compounding) – as in (14), compounded with *ani* ‘sit’ with the resulting meaning ‘sit down’, and in (70c) and (74a), compounded with *jemi* ‘remove O’ with the resulting meaning ‘remove O in a downward direction’. The second pair consists of *nubia* ‘make O enter’ – as in *icha-nubia* ‘put O inside’ (*icha* ‘put O’) – and *kwina(na)* ‘go out, be born, arrive’ (form *kwina* in the compounding) – as in *icha-kwina* ‘put O outside’. (With a different analysis than that proposed in this paper, a third pair could be *tsu* ‘encounter O’ and *jusia* ‘throw O’; see §5, especially footnote 40.)

Although a detailed study of verb compounding in Tacana is yet to be conducted, it remains clear that this construction displays strong distributional restrictions (limited number of verb roots that can participate in either slot) and frequent semantic unpredictability / non-compositionality that indicate that neither the first nor the second of the verbs involved are grammaticalized, and verb compounding will not be further discussed in this paper; for a detailed description of verb compounding in another Takanan language, Ese Ejja, see Vuillermet (2017b).

<sup>17</sup> Note that *netia* ‘stand O’ (but not *wana* ‘lay O’ or *badiana* ‘hang O’) has also grammaticalized as an inflectional AP marker, in which case, like the two other inflectional AP markers, it refers to the posture of the subject (S/A) argument.

Having introduced the basics of Tacana verb morphology and its different sets of AM and AP affixes, we now turn to a more detailed description of their respective semantic and formal properties, starting with the inflectional AM and AP circumfixes in §0 and finishing with the non-inflectional AM suffixes in §4.2.

#### 4 Inflectional AM and AP circumfixes

The AM and AP imperfective circumfixes are repeated in Table 4 in the wider context of the full Tacana verbal TAM inflectional system in independent clauses, which also includes (like the ‘sitting’ AP marker) non-spatial forms that encode tense (default, recent, remote, future), (potential) modality and (directive) mood. Although not reported in Table 4, person and number of the subject (S or A) of the clause also participate in the system, although in a more restrictive fashion. First, there is a suffix *-ta* in slot +4, obligatory in transitive verbs with a third person singular or plural subject – see for instance (12a,b) –, and nearly obligatory in intransitive verbs with a third person plural subject – see for instance (11) and (13); for more details, see Guillaume (2018). Second, two of the AP circumfixes (‘sitting’ and ‘standing’ forms) have a special form (ending in *a*) when used with a transitive verb with a speech act participant (1<sup>st</sup> or 2<sup>nd</sup> person) subject and a distinct form (without the *a* ending) in all other situations (intransitive verb with a 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> subject and transitive verbs with a 3<sup>rd</sup> person subject).

Table 4. Inventory of inflectional TAM affixes and particles in tacana (Tumupasa dialect)

|                            | particle  | prefix<br>(-3)          | suffix<br>(+8)          | gloss            |
|----------------------------|-----------|-------------------------|-------------------------|------------------|
| <u>Declarative mood</u>    |           |                         |                         |                  |
| default past               |           |                         | <i>-a</i>               | PST              |
| recent past                |           |                         | <i>-(a)na</i>           | REC.PST          |
| remote past                |           |                         | <i>-(i)dha</i>          | REM.PST          |
| habitual past              |           |                         | <i>-(i)na</i>           | HAB.PST          |
| semantically empty         |           | <i>e</i> <sup>-18</sup> |                         | VPF              |
| imperfective & going       |           | <i>e</i> -              | <i>-u</i>               | IPFV.GOING       |
| imperfective & coming      |           | <i>e</i> -              | <i>-siu</i>             | IPFV.COMING      |
| imperfective & going back  |           | <i>e</i> -              | <i>-buyu</i>            | IPFV.GOING_BACK  |
| imperfective & coming back |           | <i>e</i> -              | <i>-beyu</i>            | IPFV.COMING_BACK |
| imperfective & wandering   |           | <i>e</i> -              | <i>-niuneti(a)</i>      | IPFV.WANDERING   |
| imperfective (default)     |           | <i>e</i> -              | <i>-ani / -inia</i>     | IPFV(.SITTING)   |
| imperfective & standing    |           | <i>e</i> -              | <i>-(n)eti / -netia</i> | IPFV.STANDING    |
| imperfective & lying       |           | <i>e</i> -              | <i>-sa</i>              | IPFV.LYING       |
| imperfective & hanging     |           | <i>e</i> -              | <i>-bade</i>            | IPFV.HANGING     |
| potential                  |           |                         | <i>-kwa</i>             | POT              |
| <u>Directive mood</u>      |           |                         |                         |                  |
| imperative                 |           | <i>(me-)</i>            | <i>-ke</i>              | 2                |
| prohibitive                | <i>be</i> | <i>(me-)</i>            | <i>-ji</i>              | 2                |
| restricted hortative       |           | <i>me-</i>              | <i>(-ja)</i>            | 1                |
| extended hortative         |           | <i>pa-</i>              | <i>(-ja)</i>            | 1, 3             |

<sup>18</sup> The prefix *e*- (glossed VPF, for Verb PreFix) does not have any clearly identifiable semantic meanings. It is obligatory with verbs that carry AM or AP inflectional suffixes (with imperfective aspectual readings) and with posture verbs in existential / locative clauses – see e.g. (18) with *ani* ‘sit’, (20) with *neti* ‘stand’, (66) with *sa* ‘lie’ and (101a) with *bade* ‘hang’. It is also the only way to express future tense – as e.g. (76c), (80b) or (84). But it is not a future tense marker because it can also be used in the past – see e.g. (69b) or (99b) – nor an imperfective aspectual marker, as shown by the two past tense examples, which

It is remarkable that in this system, with the exception of a habitual past tense marker (*-ina*), the expression of imperfective aspect<sup>19</sup> is exclusively carried out by the AM and AP morphology. Also note that the AM and AP imperfective circumfixes are not specified for tense, as can be seen from their equally frequent use in past contexts, as in (11) for AM and (13) for AP, and present contexts, as in (26a,b) for AM and (48b) for AP. Uses in future contexts are fairly rare in the data, but not unattested, as illustrated in (105) for AM and (22) for AP.

- (22) *Tueda yama beu, e-chudu-inia.*  
 that 1SG.ERG PTC VPF-pick\_up-IPFV(.SITTING).1/2A  
 ‘Ese yo voy a ir recogiendo.’ ps044  
 ‘I’m going to pick them up (the fish, scattered on the ground).’

In the Tacana studies published by SIL (tagmemic grammar and morphological entries of their dictionary), part of the AM and AP inflectional system was already documented, although the description suffers from a few problems. First, their inventory of forms, reproduced in Table 5, was incomplete – the three AM suffixes *-buyu*, *-beyu* and *-niuneti(a)*, and the two AP allomorphs *-inia* and *-netia* are missing. This is despite the fact that these suffixes and allomorphs are attested in their Tacana data (narrative texts, entries and illustrative sentences of the dictionary and translation of the New Testament). Secondly, the obligatory co-occurrence of the suffixes with the prefix *e-* is not mentioned (i.e., only the suffix part is mentioned). Finally, note that in the SIL studies, one suffix (*-u*) is transcribed slightly differently, with a preceding glottal stop.

Table 5. Inventory of AM and AP inflectional markers according to Ottaviano & Ottaviano (1967; 1989)

| morphemes       | glosses / definition  |
|-----------------|---|
| <i>-ʔu</i>      | ‘direction away’ <sup>20</sup>  |
| <i>-siu</i>     | ‘direction toward’, <sup>21</sup> ‘move towards the speaker’ <sup>22</sup>                                |
| <i>-ani/-ni</i> | ‘state of sitting’, <sup>23</sup> ‘continue the action (generally in a sitting position)’ <sup>24</sup>   |
| <i>-neti</i>    | ‘state of standing’, <sup>25</sup> ‘continue the action in a vertical or standing position’ <sup>26</sup> |
| <i>-sa</i>      | ‘state of lying’, <sup>27</sup> ‘continue the action (in a horizontal position)’ <sup>28</sup>            |
| <i>-bade</i>    | ‘state of hanging’, <sup>29</sup> ‘continue the action (in a suspended position)’ <sup>30</sup>           |

In terms of aspect, path and motion semantics, Ottaviano & Ottaviano’s glosses or definitions in Table 5 properly account for the progressive function of at least the AP forms (‘continue the action’), the deictic (itive vs. ventive) contrast that distinguishes the AM form *-u* from *-siu*, and the motional function of AM *-siu*. In terms of postural semantics, however, the ‘sitting’ semantics of *-ani/-ni* (my *e-...-ani / e-...-inia* DO.IPFV(.SITTING)) are not supported by the data, which, as already mentioned, only provides evidence for the encoding of three distinct posture: ‘standing’ vs. ‘lying’ vs. ‘hanging’. The ‘sitting’ form, contrary to Ottaviano & Ottaviano’s definition

display perfective aspect. Note finally that there is a similar dummy prefix *e-* (glossed NPF, for Noun PreFix), possibly historically related, that marks a class of bound nouns that denote body parts (or parts of entities), as with *bu* ‘face’ in (61a), or kinship terms, as with wife in (64a).

<sup>19</sup> Imperfective is used here in the sense of Comrie (1976) or Bybee et al. (1994), for a broad category that encompasses the more specific meanings of progressive, iterative, habitual and generic and that is typically used to view situations from within, with explicit reference to their internal structure.

<sup>20</sup> (Ottaviano & Ottaviano 1967: 193)

<sup>21</sup> (Ottaviano & Ottaviano 1967: 193)

<sup>22</sup> ‘*moverse hacia él que habla*’ (Ottaviano & Ottaviano 1989: 106)

<sup>23</sup> (Ottaviano & Ottaviano 1967: 193)

<sup>24</sup> ‘*seguir acción (generalmente en posición de sentado)*’ (Ottaviano & Ottaviano 1989: 55)

<sup>25</sup> (Ottaviano & Ottaviano 1967: 193)

<sup>26</sup> ‘*seguir acción en posición vertical o parado*’ (Ottaviano & Ottaviano 1989: 86)

<sup>27</sup> (Ottaviano & Ottaviano 1967: 193)

<sup>28</sup> ‘*seguir acción (en posición horizontal)*’ (Ottaviano & Ottaviano 1989: 103)

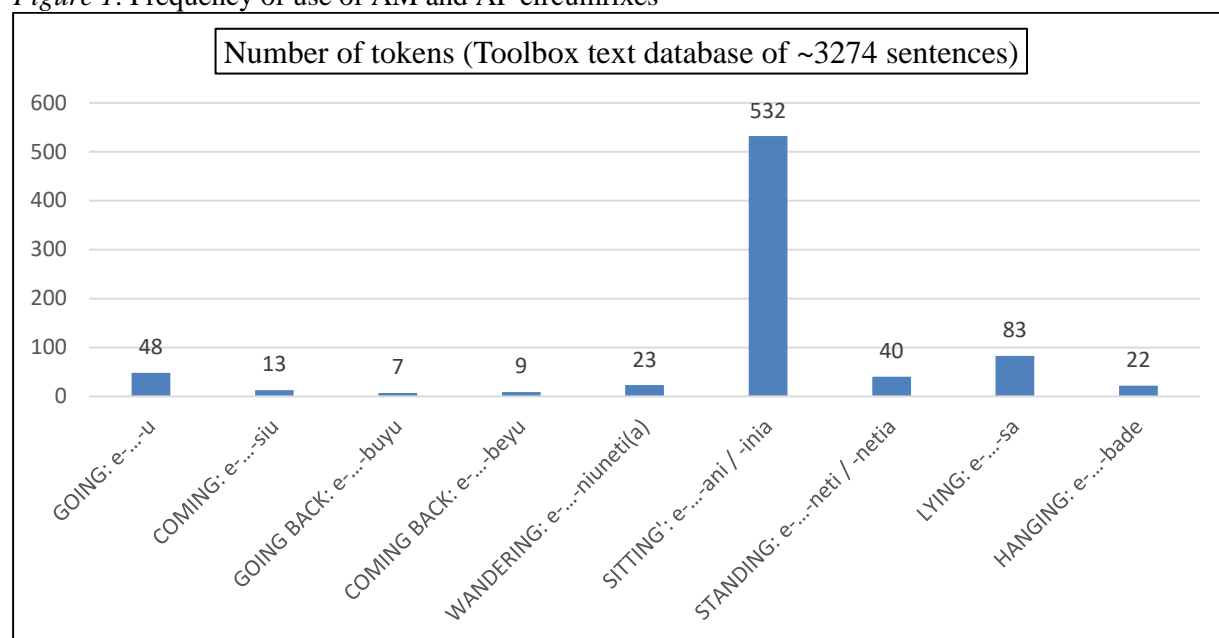
<sup>29</sup> (Ottaviano & Ottaviano 1967: 193)

<sup>30</sup> ‘*seguir acción (en posición suspendida)*’ (Ottaviano & Ottaviano 1989: 9)

(‘generally in a sitting position’), and despite its ‘sitting’ verb etymology (see §3), is never found to be explicitly encoding a sitting posture (or, for that matter, any other kinds of spatial semantics). It is here analyzed as a default non-spatial / ‘pure’ imperfective marker, used to encode imperfectivity on the verb whenever neither the posture nor the motion of the verb subject (S or A) is deemed relevant.

Within the nine-term inflectional sub-paradigm of imperfective AP and AM circumfixes, the semantically less marked ‘sitting’ form is correlated with its overwhelmingly higher frequency in discourse, as compared to the other more semantically marked forms. As shown in Figure 1, which displays the results of a count in my own corpus of narratives (the ~3274 sentences of my Field Linguists’s Toolbox database), the ‘sitting’ form is found in 532 sentences, which corresponds to 79% of the total number of inflectional AP forms (677), 68% of the total number of inflectional AP and AM forms (777). By contrast, the spatial imperfective AP and AM forms which have the highest number of tokens in my texts reach at best 11% of the total number of inflectional AP and AM forms for the ‘lying’ form *e-...-sa* ‘DO.IPFV.LYING’ (83) and 6% for the itive AM form *e-...-u* ‘DO.IPFV.GOING’ (48).

Figure 1. Frequency of use of AM and AP circumfixes



Note however that in this paper, because of its diachronic origin in the posture verb ‘sit’ and of its identical formal properties with the other AP forms in synchrony, the non-spatial imperfective marker *e-...-ani / e-...-inia* will still be referred to as a member of the AP set, and assigned a gloss that indicates, between parentheses, its ‘sitting’ etymology (IPFV.(SITTING)).

In the next two sections, the AM and AP systems are further described and illustrated, AM in §4.1 and AP in §4.1.

#### 4.1 AM circumfixes (inflectional)

The set of inflectional AM markers consists of the following five circumfixes: *e-...-u* ‘IPFV.GOING’, *e-...-siu*, ‘IPFV.COMING’, *e-...-buyu* ‘IPFV.GOING\_BACK’, *e-...-beyu* ‘IPFV.COMING\_BACK’ and *e-...-niuneti(a)* ‘DO.IPFV.WANDERING’. Drawing from the terminology of AM descriptive and comparative / typological studies (see Guillaume 2016; Guillaume & Koch 2021a), their central AM meanings can be described as follows: they encode the motion of the subject of the verb (S or A) with either a concurrent or prior (purposive) temporal relation and imperfective aspect (progressive, iterative, habitual, generic). They differ in terms of the



path (direction) of the encoded motion, whether it is itive (straight), ventive (straight), itive (back), ventive (back), indirect / random / aimless (straight).

The AM circumfixes are not very frequent in the data and do not occur with equal frequency. As shown in Figure 1, they are found on the verb of only 100 clauses of the ~3274 sentences (3%) in my Field Linguist's Toolbox database, among which almost half correspond to the *e-...-u* 'DO.IPFV.GOING' form (48 examples, 48%).

The following three sections provide a detailed description of the forms and meanings of the five inflectional AM circumfixes in their use as canonical AM markers: section 4.1.1 for the pair 'going/coming straight' forms, section 4.1.2 for the pair of 'going/coming back' forms and section 4.1.3 for the 'wandering' form. In a fourth section (4.1.4), we further explore the AM circumfixes in terms of their more peripheral (non AM) use as 'pure directionals' with certain motion verbs.

#### 4.1.1 GOING (STRAIGHT) & COMING (STRAIGHT)

The two AM circumfixes *e-...-u*<sup>31</sup> 'IPFV.GOING' and *e-...-siu* 'IPFV.COMING' encode a straight motion that is either (1) temporally co-extensive (concurrent) with the verb event or, less commonly, (2) prior to the verb event. The two circumfixes only differ in terms of deixis, the first form encoding itive motion (away from the deictic center)<sup>32</sup> and the second encoding a ventive motion (towards deictic center). The concurrent relation is the most common in the data and is illustrated first.

Examples *e-...-u* 'IPFV.GOING' with a concurrent motion reading are provided below with two different types of verb events, intransitive 'laugh' in (23a) – repeated from (19) – and 'fall' in (23b) (motion of S) – see also 'laugh' in (51b) –, and transitive 'look for (the footprints) of' in (24a) and 'grab' in (24b) (motion of A).

- (23) a. *Beu =pa puti-a, zorro =mu beu, e-id'ebati-u.*  
 PTC =REP go-PST fox =CONTR PTC VPF-laugh-IPFV.GOING  
 'Ya se había ido el zorro, se va riendo.' bu022  
 'The (mischievous) fox had already gone off (escaping one more time from the stupid jaguar) and he was laughing.'
- b. *Senda=je e-uru-u tumi =mu.*  
 path=PERL VPF-fall-IPFV.GOING motacú\_palm =CONTR  
 'Por la senda fue cayendo el motacú.' ye056  
 'The motacú nuts were falling (from the hunter's bag) along the path.'
- (24) a. ... *enekita puti-(i)dha [jida deja] beu edid'i=je =pa e-pu-u,*  
 really go-REM.PST that man PTC path=PERL =REP IMPFV-be-IPFV.GOING  
*e-watsi-chaku-ta-u =pa.*  
 VPF-foot-look\_for-3A-IPFV.GOING =REP  
 'Dice que ha ido el hombre por el camino.' '(Por el camino, el hombre) iba buscando la huella de su pie (de su mujer).' os032-033  
 'The man was already really on his way.' 'He was going away searching for the footprints (of his wife).'

<sup>31</sup> As mentioned above, in the data by the SIL missionaries, the *-u* part of the circumfix is translated as *hu* where *h* refers to a glottal stop in their orthography, as can be seen, for instance, in (30) and (41b). Although such a pronunciation with a glottal stop is not attested in my own corpus, it could well have been present 30-40 years ago when the SIL data was collected (between the 1960s and the early 1980s) and have been a remnant of a consonant phoneme present in the etymology; note that the Tacana phoneme inventory does not include any glottal stop (see footnote 8).

<sup>32</sup> It is possible that a more precise meaning of this itive form (and other itive AM morphemes) is rather 'not towards the DC'; this issue needs more work.

- b. *Se =mu chupia beu, muri-da=su e-dajaja-(a)ni.*  
 fish =CONTR there PTC dry-ASF=LOC VPF-fall-IPFV(.SITTING)  
*Tueda etse e-ina-u beu.*  
 that 1DL VPF-grab-IPFV.GOING PTC  
 ‘El pescado allá cae en lo seco. Eso uno va agarrarlo ya.’ ps030-031  
 ‘There, the fish falls on the ground (lit. in the dried). And one (lit. we two) goes picking it (the fish) up.’

Examples of *e-...-siu* ‘IPFV.COMING’ with a concurrent reading are provided below with the intransitive verb events ‘speak’ in (25a) – repeated from (11) –, ‘shout’ in (25b) and the transitive verb events ‘look for’ in (26a) and ‘eat’ in (26b).

- (25) a. ... *uchi=kwana e-mimi-ta-siu beu.*  
 dog=PL VPF-speak-3S.PL-IPFV.COMING PTC  
 ‘... venían hablando los perros.’ ha019  
 ‘... the dogs were coming speaking (among each other).’
- b. *Kwade-ke [tueda epuna], [ekwana=tije e-tsiatsia-siu=putsu].*  
 send\_away-IMP that woman 1PL=BEHIND VPF-shout-IPFV.COMING=TMP.SS  
 ‘Send her (that woman) away, for she keeps crying out [lit. shouting] after us.’ (Matthew 15.23, LB72)  
<https://www.biblegateway.com/passage/?search=Matthew+15&version=NIV>
- (26) a. ... *ema [kema ewane] e-chaku-siu e-dia=puji.*  
 1SG 1SG.GEN wife VPF-look\_for-IPFV.COMING VPF-eat=PURP  
 ‘... vengo buscando (a mi mujer), para comerla.’ os037  
 ‘... I’m coming searching (for my wife) in order to eat her.’
- b. *Edid’i=je yama pudu e-dia-siu.*  
 path=PERL 1SG.ERG tamal VPF-eat-IPFV.COMING  
 ‘Por el camino vengo comiendo tamal (está comiendo seguido).’ n4.0338 (elicited)  
 ‘I’m coming eating (continuously) tamal on the path.’

In their use as concurrent AM markers, the AM circumfixes specify that the verb event has imperfective (aspectual) readings, which can be of different types, including **progressive**, as in (23a) and (24a) for the itive marker and (25a,b) and (26a,b) for the ventive; **iterative**, as in (23b) and (24b) for the itive and (25b) for the ventive; **habitual / generic**, as in (24b) – see also (51b).

The encoding of a motion that is temporally co-extensive (concurrent) with the verb event, illustrated above, is the most frequent reading in the available corpus. However, in a few cases, most of them elicited, a different reading is obtained, in which (1) the imperfective reading only applies to the motion component, (2) the motion is temporally prior to (rather than concurrent with) the verb event, and (3) the motion bears a purposive relation to the verb event (“motion-with-purpose”; Guillaume & Koch 2021b: 12), which is not yet performed at narrative time and which might not be performed at all. As shown by the examples below, this reading is found with at least the intransitive verbs ‘bathe’ (27a,b), ‘plant’ (reduplicated) (28), transitive ‘see’ (29) and ‘kill’ (30), this last one being one of the very rare examples of the prior motion reading in a narrative text.

- (27) a. *e-nawi-u*  
 VPF-bathe-IPFV.GOING

‘está de ida a bañarse.’ n3.0081 (elicited)  
 ‘He is on his way there to bathe.’

b. *e-nawi-siu*

VPF-bathe-IPFV.COMING  
 ‘viene a bañarse.’ n3.0081 (elicited)  
 ‘He is on his way here to bathe.’

(28) *Tuneda e-bana~bana-ta-u te=su.*  
 3PL VPF-sow~sow-S3.PL-IPFV.GOING garden=LOC  
 ‘Ellos están de ida a sembrar al chaco.’ n2.0010 (elicited)  
 ‘They are on their way there to sow the garden.’

(29) *Tata=ja te e-ba-ta-u.*  
 father=ERG garden VPF-see-3A-IPFV.GOING  
 ‘Papá está de ida a ver el chaco (todavía no ha llegado).’ n4.0099 (elicited)  
 ‘Daddy is on his way there to see the garden. (He has not arrived yet.)’

(30) *Du apu-da=su tu=mewa piapujisu e-manuame-ta-'u.*  
 howler\_monkey dark-ASF=LOC 3SG=ALONE sometimes VPF-kill-3A-IPFV.GOING  
 ‘Algunas noches, él solito iba a matarlos.’ ma106\_ott  
 ‘Sometimes, he would go alone by night to kill howler monkeys.’

Interestingly, in this prior AM reading, different types of imperfectivity seem again to be expressible by the AM markers, such as progressive in (27a,b), (28) and (29) and habitual in (30), with the difference that here, imperfectivity applies to the motion only, not the verb event; in (30), my analysis is that the habitual reading that applies to ‘kill’ is not encoded by the AM marker but inferred by the habitual reading that applies to the motion and reinforced by the presence of the adverbial element ‘sometimes’.

Possibly related to this ‘motion-with-purpose’ reading is the use, which is highly frequent in both textual and elicited data, of the AM circumfixes with the locative verb *pu* ‘be (located)’, inflected with the habitual past tense *-ina* in (31) and with *e-...-u* and *e-...-siu* in (32a,b) – see also (24a) above and (37a) further below–; note that *pu* is a polyfunctional form, which is also used as a verb meaning ‘do (itr)’ or ‘say’ (itr)’, as in (81a) as well as a copula / generic auxiliary / light verb, as in the purpose clause in (32a).

(31) *Tueda escuela=su pu-ina.*  
 3SG school=LOC be-HAB.PST  
 ‘El estaba en la escuela.’ na205  
 ‘He was in the school.’

(32) a. *Beu etseju e-pu-u, cena e-pu=puji.*  
 PTC 1DL.EXCL VPF-be-IPFV.GOING have\_dinner(Sp) VPF-be=PURP  
 ‘Me estoy acordando ya estamos de ida a cenar.’ su076  
 ‘We are on our way to have dinner.’

b. ... [*pia kwara*] =di *e-pu-siu* *beu nasa...*,  
 other mother =ALSO VPF-be-IPFV.COMING PTC plantain  
*nasa=metse,* [*aicha e-(ja-)turuka-ti=puji*].  
 plantain=ASSC.FLANKING meat VPF-MID-exchange-MID-PURP  
 ‘... ahí venía esa otra señora, con su plátano para cambiar carne.’ ye159  
 ‘... there the other woman was coming with plantain in order to exchange it for meat’

## 4.1.2 GOING BACK & COMING BACK

The next pair of AM circumfixes, *e-...-buyu* ‘IPFV.GOING\_BACK’ and *e-...-beyu* ‘IPFV.COMING\_BACK’, are very scarce in the available data (fewer than ten examples are available for each marker in my own corpus of texts; see Figure 1), and good examples of them are not always available to illustrate unambiguously the details of their use and their semantics. As far as I can say, they display the same deictic (itive versus ventive) contrast as *e-...-u* and *e-...-siu* and can express the same range of AM meanings in terms of the temporal relation between the motion they encode and the verb event (either concurrent or prior / ‘motion-with-purpose’). However, they differ from *e-...-u* and *e-...-siu* in having what appears to be returning / reversive semantics.

An example of *e-...-buyu* ‘IPFV.GOING\_BACK’ encoding concurrent AM (returning motion temporally co-extensive with the verb event) is provided in (33) with the intransitive verb event ‘cry’; note that in this example, the translation in Spanish, with the ventive motion verb *venir*, does not reflect its itive semantics, which are, however, clearer in other examples provided below, such as (36) and (37a); note also that no good example is available with a transitive verb.

- (33) ... *id'aba-ta-idha* [*mesa uchi janana*], *tu=tije*,  
 hear-3A-REM.PST 3SG.GEN dog baby 3SG=BEHIND  
*e-pa-buyu*.  
 VPF-cry-IPFV.GOING.BACK  
 ‘... lo escuchó a su perrito trás de el venir llorando.’ pe012  
 ‘(The man) heard his little dog crying as (the dog) was going back home (behind him).’

Three examples of *e-...-beyu* ‘IPFV.COMING\_BACK’ encoding concurrent AM are given below with the intransitive verb events ‘cry’ in (34a) and ‘shout’ in (34b) and with the transitive verb event ‘carry on shoulder’ in (35).

- (34) a. *e-pa-beyu*  
 VPF-cry-IPFV.COMING.BACK  
 ‘Venía llorando.’ n2.0178 (elicited)  
 ‘He was coming back home crying’
- a. *E-tsiatsia-beyu* *ema*.  
 VPF-shout-COMING.BACK 1SG  
 ‘Vengo gritando.’ rn040\_ott  
 ‘(As he was returning home, the injured man was shouting,) “I’m coming (back home) shouting (of pain)”.’
- (35) ... *beidaji=neje miada e-mapa-beyu*.  
 happy=ASSC 2SG.ERG VPF-carry\_on\_shoulder-IPFV.COMING.BACK  
 ‘(...when he finds it [the lost sheep]), he (lit. you) joyfully puts it on his shoulders and goes home.’ Luke 15.4-6 LB388  
<https://www.biblegateway.com/passage/?search=Luke+15&version=NIV>

These examples also show that in their concurrent AM meanings, like *e-...-u* and *e-...-siu*, *e-...-buyu* and *e-...-beyu* can express **progressive** aspect, as in (33), (34a), what seems to be **iterative** aspect in (34a) and **habitual** aspect, as in (35).

An example of *e-...-buyu* ‘IPFV.GOING\_BACK’ encoding ‘motion-with-purpose’ (prior imperfective motion with a purposive relation to the verb event) is given in (36); no example is available of this reading with *e-...-beyu*.

- (36) *E-nawi-buyu* =*jia* [*kema tata*], [*mesa e-wane=neje*].  
 VPF-bathe-IPFV.GOING.BACK =DUBIT 1SG.GEN father 3SG.GEN NPF-wife=ASSC  
 ‘Será que se fueron a bañar, él con su mujer?’ es094\_ott  
 ‘Could it be that he went (lit. was on his way) to bathe with his wife?’

As with *e-...-u* and *e-...-siu*, *e-...-buyu* and *e-...-beyu* are also found frequently used with the locative verb *pu* ‘be (located)’, yielding a reading that seems to be that of ‘motion-with-purpose’, as illustrated in (37a,b).

- (37) a. *Kepia mikwana e-pu-u?*  
 where 2PL VPF-be-IPFV.GOING  
*Beju ekwanaju e-pu-buyu-icha ete=su.*  
 PTC 1PL.EXCL VPF-be-IPFV.GOING\_BACK-REITR house=LOC  
 ‘¿Dónde están de ida? [...] Ya nos estamos de ida otra vez a la casa.’ au105, au108  
 ‘Where are you going (the bear man asked his wife and children)? [...] We are on our way back home, once again (they responded to him).’
- b. *Dasu, ema beu, tipei-da e-pu-beyu.*  
 then 1SG PTC fast-ASF VPF-be-IPFV.GOING\_BACK  
 ‘Por eso rápido me estoy viniendo.’ mu028  
 ‘(I’m very hungry.) This is why I’m coming back home very fast.’

### 4.1.3 GOING RANDOMLY / AIMLESSLY, WANDERING

The fifth AM circumfix, *e-...-niuneti(a)* ‘DO.IPFV.WANDERING’, contrasts with the preceding four in encoding a motion whose direction is explicitly not direct (not unidirectional) between its starting and ending points, but meandering aimlessly through multiple locations. In terms of its temporal relation with the verb event, the motion is always concurrent (temporally co-extensive); in the data, it is never found with the prior motion-with-purpose reading (i.e. meaning ‘be on one’s way wandering to do the verb event’). It is illustrated below with different types of verb events, intransitive ‘damage’ (in a non-finite verb predicate construction, together with the generic auxiliary *pu* ‘be’; see footnote 4) and ‘be (located)’ in (38a), ‘grumble’ in (38b), ‘sway’ in (38c) (motion of S), transitive ‘teach’ in (39a), and ‘look for (the footprints of)’ in (39b) (motion of A).<sup>33</sup>

- (38) a. ... *jida [daño e-pu-niuneti]=wekwana,* [*pamapa te=je*],  
 that damage VPF-be-IPFV.WANDERING=3PL all garden=PERL  
*daja e-pu-niuneti...*  
 thus VPF-be-IPFV.WANDERING  
 ‘... este (tigre) anda haciendo daño, por todos los chacos, así está andando.’ ti126

<sup>33</sup> Note that the suffix part of *e-...-niuneti(a)* has two variants, a short variant (*-niuneti*), as in (38a,b,c) and (39a), and a long variant (*-niunetia*), as in (39b), that corresponds to the short variant followed by the vowel *a*. For lack of sufficient data on this morpheme, it is not known what conditions the use of one form or the other; note that the distribution of the two variants does not follow that of the AP circumfixes variants *-ani* vs. *-inia* (‘sitting’) and *-neti* vs. *-netia* (standing); see §4.2.1 and §4.2.2.

‘... this (jaguar) is walking around doing damage in all the gardens, he is walking around in this way.’

b. *E-tisitisi-niuneti* *kuchi*.  
 VPF-grumble-IPFV.WANDERING pig  
 ‘El chanco se va gruñendo.’ (Ott&Ott89 p14)  
 ‘The pig is going around grumbling.’

c. *E-dhutedhute-niuneti*.  
 VPF-sway-IPFV.WANDERING  
 ‘(El borracho) se va bamboleando.’ (Ottaviano & Ottaviano 1989: 35)  
 ‘The drunk man is swaying while wandering.’

(39) a. *Daja ema e-buetsua-ta-niuneti*, [ejije, duje].  
 thus 1SG VPF-teach-3A-IPFV.WANDERING forest inside  
 ‘Así me enseñaba (el duende) dentro de la montaña.’ du046  
 ‘This is how he (the duende) would teach me while wandering inside the forest.’

b. *Ebake=je e-chaku-ta-niunetia*.  
 top=PERL VPF-search\_for-3A-IPFV.WANDERING  
 ‘Por arriba (en los árboles) el (tigre) lo está buscando (al zorro).’ bu024  
 ‘In the top (of the trees) (the jaguar) was searching for (the fox).’

In terms of aspect, *e-...-niuneti(a)* can express at least the **progressive**, as in (38b,c) and (39b), and the **habitual**, as in (38a) and (39a).

Although *e-...-niuneti(a)* is relatively frequent in the data – after *e-...-u* ‘IPFV.GOING’, it is the second most common AM circumfix in my own corpus of texts (see Figure 1) –, the relatively high number of occurrences of this morpheme is actually strongly biased by its very frequent use with the verb *pu* ‘be (located)’, as illustrated in (38a) and (40) – in my corpus of texts, this use accounts for two-thirds of the attested tokens (15 examples out of the 23).

(40) *Pisa-ji e-pu-ta-niuneti*.  
 sting-PROP VPF-be-S3.PL-IPFV.WANDERING  
 ‘Andan con flechas.’ cq040\_ott  
 ‘They walk around with arrows.’

#### 4.1.4 AM versus pure directional meanings

There are instances of the AM circumfixes in the corpus where they arguably do not encode AM. This is notably the case when they are used with certain motion verbs and, in addition to imperfective aspect, only contribute a path specification – itive (straight), ventive (straight), itive (back), ventive (back) or indirect (straight) – to the motion that is already encoded by the verb event. In this function, the AM circumfixes can be said to have a ‘pure’ directional (and imperfective aspect) function; note that a possible alternative view on this phenomenon, which preserves an AM interpretation, would be to say that the motion encoded by the AM circumfixes is added redundantly to the motion encoded by the verb (Belkadi 2021).

With intransitive motion verbs, the pure directional use of inflectional AM circumfixes is found with (at least) the manner of motion verbs *ase* ‘walk’ in (41a) and *jududu* ‘run’ (41b) and the path of motion verbs *nubi* ‘enter’ (42), *tsua* ‘go up’ (43), ‘arrive’ in (44a,c), *anipetu* ‘cross’ and *siapati* ‘return’. Note that not all intransitive motion verbs yield pure directional meanings, as with *uru* ‘fall’ in (23b), in which the marker *e-...-u* expresses AM (repeated falling of nuts

along a path). Note also that no examples are found of AM circumfixes with the deictic verbs *puti* ‘go’, *kwa* ‘go’ (synonymous) or *pue* ‘come’, which is logical since the inflectional AM circumfixes are deictic in nature.

(41) Intransitive manner of motion verbs *ase* ‘walk’ and *jududu* ‘run’ (see also an example in (45b) below)

- a. ... [*ena biaje=kita*]=*we*                      *y-ase-siu*  
       water ON\_TOP\_OF=INTENS=RESTR VPF-walk-IPFV.COMING  
       *Jesús ba-ta-(a)na=wekwana.*  
       Jesús see-3A-REC.PST=PL  
       ‘They (the disciples) saw Jesus approaching the boat, walking on the water.’ (John 6.19, LB408)

(<https://www.biblegateway.com/passage/?search=John+6&version=NIV>)

- b. ... *e-jududu-ta-'u*...<sup>34</sup>  
       VPF-run-3S.PL-IPFV.GOING  
       ‘(...the sound of their wings was like the thundering of many horses and chariots) rushing (into battle). (Revelation 9.9 LBinternet 588)

(<https://www.biblegateway.com/passage/?search=Revelation+9&version=NIV>)

(42) Intransitive path of motion verb *nubi* ‘enter’

- Beu, id'eti e-nubi-u=su*                      *beu pue-yu ete=su beu.*  
   PTC sun VPF-enter-IPFV.GOING=TMP PTC come-REITR house=LOC PTC  
   ‘Cuando ya está entrando el sol uno se viene a la casa.’ em078  
   ‘When the sun sets (lit. is entering going away), one comes back home.’

(43) Intransitive path of motion verb *tsua* ‘go up’

- Jesús cielo=su e-tsua-buyu*                      *chama-ta-(a)na=wekwana.*  
   Jesus sky=LOC VPF-go\_up-IPFV.GOING.BACK watch-3A-REC.PST=3PL  
   ‘They (the disciples) watched Jesus going back into Heaven.’ (LB487, my translation; this sentence is not the translation of a Bible verse but the title of a drawing from the book, showing Jesus’ disciples watching Jesus going up in the sky)

(44) Intransitive motion verb *kwina* ‘arrive’

- a. [*Mesa alojamiento=su e-kwina-buyu=je*]                      *beu*  
   3SG.GEN accomodation=LOC VPF-arrive-IPFV.GOING\_BACK=PERL PTC  
   *batasiu-piru-idha [jida mesa, tata] =mu.*  
   spit-START-REM.PST that 3SG.GEN father =CONTR  
   ‘Llegando / al llegar a su alojamiento (no habian llegado todavía), comenzó arrojar ese su papá.’ su093  
   ‘As he was arriving back in his accomodation, his father started to vomit.’

- b. *Tueda be, e-ba-ta aicha-ji e-kwina-beyu.*  
   3SG PTC VPF-see-3A meat-PROP VPF-arrive-IPFV.COMING\_BACK  
   ‘También lo ve[n] que llegaba con carne.’ ye139  
   ‘They (the owners of the plantain grove) saw him (the hunter) arriving back home with

<sup>34</sup> See footnote 31 on the glottal stop in *-'u*.

meat.’

With transitive motion verbs, the pure directional use of inflectional AM circumfixes is only found with verbs whose semantics imply motion of the A, regardless of whether the O is also in motion, as with the caused-motion verb *dusu* ‘take, lead, transport’ in (45), the non-caused motion verb *tije -a-* ‘go behind, chase’ in (46a,b), or whether the O is motionless, as with *naria* ‘approach’ in (47). With motion verbs whose semantics only imply motion of the O, the inflectional AM circumfixes do not have a pure directional use but an AM meaning, encoding that the A is also in motion, as with, for instance, *ina* ‘grab’ in (24b) above.

(45) Transitive motion verb ‘go behind, follow, chase’

*Ejije=su shu, etse e-dusu-ta-u, [edue*  
forest=LOC INTJ:GO\_FAST 1DL VPF-take/transport-3A-IPFV.GOING sibling  
*deja=detse], ekene e-pu-u, edid'i=je, y-ase-u.*  
man=DL in\_front\_of VPF-be-IPFV.GOING path=PERL VPF-walk-IPFV.GOING  
‘Y al monte nos vamos, nos lleva los hermanos varones, adelante se va por el camino  
va andando.’ ci022  
‘We would go into the forest, our brother leading (lit. taking) us, ahead (of us), we  
would walk on the path.’

(46) Transitive motion verb ‘follow, go behind, chase’

- a. ... *yanana=eje [tije y-a-ta-siu].*  
child=PERL go\_behind VPF-do-3A-IPFV.COMING  
‘(Su mamá de ese leoncito) por la cria, al cazador lo estaba persiguiendo.’ ye134  
‘(The mother of the baby squirrel monkey) was chasing the hunter on his way back  
home, for her baby (that the hunter had captured).’
- b. *Tije y-a-ta-niuneti=putsu...*  
go\_behind VPF-do-3A-IPFV.WANDERING=TEMP.SS  
‘Porque le estaba persiguiendo por atrás...’ bu002  
‘Because he (the jaguar) was chasing him (the wicked fox) everywhere...’

(47) *Beju ema Ishawa=ja e-naria-ta-siu.*  
PTC 1SG devil=ERG VPF-approach-3A-IPFV.COMING  
‘The prince of this world is coming (Lit. the devil is approaching me, towards here).’  
(John 14.30, LB455)  
(<https://www.biblegateway.com/passage/?search=John+14&version=NIV>)

Finally, it should be mentioned that a number of examples with transitive verbs provided in sections 4.1.1 to 4.1.3 could possibly be analyzed as expressing pure direction rather than AM, when the verb event is one that is typically (possibly obligatorily) realized when the subject is moving, as with ‘look for’ in (24a), (26a) and (39b) and ‘carry on shoulder’ in (35).

## 4.2 AP circumfixes (inflectional)

The four AP circumfixes, *e-...-(a)ni / e-...-(i)nia* ‘IPFV(.SITTING)’, *e-...-neti / e-...-netia* ‘IPFV.STANDING’, *e-...-sa* ‘IPFV.LYING’ and *e-...-bade* ‘IPFV.HANGING’ are used in complementary distribution with the five AM circumfixes (and with the rest of the inflectional markers; see Table 4). In terms of aspectual semantics, like the AM forms, the AP forms all express



imperfective aspect. In terms of postural semantics, only three AP forms are concerned, ‘standing’ vs. ‘lying’ vs. ‘hanging’, and in all three cases, the posture relates to the subject (intransitive S or transitive A) – never the object (transitive O) of the verb. As already mentioned, the ‘sitting’ form does not encode posture (or, for that matter, any other kinds of spatial semantics), despite its etymology in the verb ‘sit’ (see §3). Finally, two forms (‘sitting’ and ‘standing’) are sensitive to the grammatical function and the person of the subject of the verb.

In terms of use in discourse, as shown by the results of my text count in Figure 1, the AP circumfixes tend to be more frequent than the AM circumfixes, even when the non-spatial AP marker (532 tokens) is left out. Among the three spatial AP circumfixes, the most common one is the ‘lying’ form (83 tokens), followed by the ‘standing’ form (40 tokens) and the ‘hanging’ form (22 tokens).

The following sections provide a formal and semantic description of the four inflectional AP circumfixes, starting with the non-spatial ‘sitting’ marker in §4.2.1, followed by the ‘standing’ marker in §4.2.2, the ‘lying’ marker in §4.2.3 and the ‘hanging’ marker in §4.2.4).

#### 4.2.1 ‘SITTING’/DEFAULT

Like the other eight circumfixes of the inflectional subsystem of imperfective marking, *e-...-ani / e-...-inia* ‘IPFV(.SITTING)’ encodes imperfective meanings, in the sense of Comrie (1976) and Bybee et al. (1994); see footnote 19. Unlike the other circumfixes, however, *e-...-ani / e-...-inia* does not encode any spatial (postural or motional) meanings. The suffixal part presents two allomorphs, *-ani* and *-inia*, conditioned by the grammatical function (S vs. A) and the person of the subject of the verb.

The following examples illustrate a number of imperfective values encoded by *e-...-ani / e-...-inia* (and the other inflectional circumfixes) in the corpus: **progressive** in (48a-c), **iterative** in (49a,b), **habitual** in (50a-c) and **generic** in (51a,b). The examples further illustrate the distribution of the two suffix allomorphs: *-ani* with subjects of intransitive verbs regardless of their person – see for instance (48a) with a 1<sup>st</sup> person S, (48b) with a 2<sup>nd</sup> person S and (49a) with a 3<sup>rd</sup> person S – and subjects of transitive verbs when it is a 3<sup>rd</sup> person – see for instance (48c); *-inia* with subjects of transitive verbs with a speech act participant – see for instance (53) with a 1<sup>st</sup> person A and (50c) with a 2<sup>nd</sup> person A.

(48) Progressive

- a. *Ema e-(ja-)id'i-ti-ani=su* *beu, moto yama*  
 1SG VPF-MID-drink-MID-IPFV(.SITTING)=TMP PTC motorcycle 1SG.ERG  
*id'aba-(a)na beu.*  
 hear-REC.PST PTC  
 ‘Cuando yo estaba tomando, ya yo escuché la moto.’ lp102  
 ‘While I was drinking, I heard a motorcycle.’

- b. *Kepia =mida e-rubuti-ani?*  
 where =2SG VPF-hide-IPFV(.SITTING)  
 ‘¿Donde te escondes?’ os027  
 ‘Where are you hiding?’

- c. *E-id'ua-ta-(a)ni* *ema [kema ewane=ja].*  
 VPF-wait\_for-3A-IPFV(.SITTING) 1SG 1SG.GEN wife=ERG  
 ‘Me está esperando mi mujer.’ os014  
 ‘My wife is waiting for me.’

(49) Iterative

- a. *Dapia e-wawa-(a)ni* *e-jeje-(a)ni*  
there VPF-whistle\_with\_the hands-IPFV(.SITTING) VPF-shout-IPFV(.SITTING)  
'Ahí colomeaba y gritaba.' ch041  
'(The poor man, abandoned in the tree) was whistling and shouting (in the hope that someone would eventually hear and come rescue him).'
- b. *E-uru-ani* *beu be, be, be, be, be, be,*  
VPF-fall-IPFV(.SITTING) PTC ONOM ONOM ONOM ONOM ONOM ONOM  
[*porque mesa jida enabai=kwana*  
because 3SG.GEN that wing=PL  
*e-juje-ta-(a)ni=su* *beu*].  
VPF-singe-S3.PL-IPFV(.SITTING)=LOC PTC  
'Cae el murciélago, está cayendo porque esas sus alas lo quema el fuego.' mc061  
'The bats are/were falling down (from the tree), "be", "be", "be", "be", "be", "be",  
because their wings are/were burning (from the fire that we have/had set).'

(50) Habitual

- a. *Ema =mu e-pa-(a)ni*, [*kea mamita=eje*].  
1SG =CONTR VPF-cry-IPFV(.SITTING) 1SG.GEN dear\_mother=PERL  
'Yo lloraba por mi mamita (porque no sabía separarme / largarme de ella, porque era chiquitita todavía).' tm074  
'I kept crying for my dear mother (because I couldn't stand to be separated from her).'
- b. *Pamapa y-asease-ti*, *ema e-(ja-)duse-ti-ani*,  
all VPF-hunt-GO&DO 1SG VPF-MID-fetch-MID-IPFV(.SITTING)  
*dukei, wabukere...*  
deer collared\_peccary  
'Cada cazería ya me traía venado, taitetú, chancho de tropa. du028  
'Every time I would go hunting I would bring back deer, collared peccaries for myself...'
- c. *Mikwaneda=we e-dia-inia* [*ye aicha*]...  
2PL=RESTR VPF-eat-IPFV(.SITTING).1/2A this meat  
'Uds. no más lo comen la carne de estos animales.' ev037  
'You are the ones who always eat this meat (that you hunt, but never bring home).'

(51) Generic

- a. *Tueda mimisai-da e-tsua-(a)ni* *id'eti*.  
that slow-ASF VPF-go\_up-IPFV(.SITTING) sun  
'(En el mes de Mayo,) este sube bien lento el sol (porque lo carga el perico).' so006  
'(In the month of May, in [the Southern Hemisphere] autumn,) the sun climbs very slowly (because it is carried by the sloth).
- b. ... *y-asease-u=su=we* *etse, epamu dhukwana*,  
VPF-hunt-IPFV.GOING=TMP=RESTR 1DL flour at\_least  
*etse y-(ja-)abu-ti-ani*.  
1DL VPF-MID-carry-MID-IPFV(.SITTING)

'... cuando va a cazar, harina de maíz tostado uno se carga.' ye071  
 'When one (lit. we two) goes hunting, one (lit. we two) carries at least toasted corn.'

Interestingly, in a few examples, a verb marked with *e-...-ani* / *e-...-inia* is used in a context where the verb event is bounded at its end or its beginning, and is therefore compatible with a narrative time advancement interpretation, a phenomenon noted for the sister language Araona (Salanova & Tallman To appear). In (52), for instance, the first verb ('eat') is further marked by the (non-inflectional) completive suffix *-pe* and is translated by 'finishing eating'. This verb provides the context in which the next event in the story line, encoded by the verb 'sprout', can take place, translated by 'beginning sprouting'.

- (52) ... [tu=*e-dia-pe-ta-(a)ni*=su] =pa beu  
 3SG=VPF-eat-COMPL-3A-IPFV(.SITTING)=TMP =REP PTC  
*enekita ja=nime beu [...]*  
 really macaw=SIMLR PTC  
 ... *beu =pa mesa e-bururu-ani enabai=kwana.*  
 PTC =REP 3SG.DAT VPF-sprout-IPFV(.SITTING) wing=PL  
 'En verdad dice cuando él está terminando de comer, empezó como paraba [...] ya dice empezó a brotar plumas en sus brazos.' ch171-172  
 'When (the man) was finishing eating (the fish), he was like a macaw bird [...] his wings were starting to sprout feathers.'

Even though both suffix allomorphs, *-ani* and *-inia*, are transparently related to the lexical verb *ani* 'sit' (see §3), the circumfix does not appear to carry any postural meanings. First, there are many examples in the corpus where *e-...-ani* / *e-...-inia* is used in situations where the context shows unambiguously that the subject referent is not sitting, but in another posture, including standing, lying or hanging. In (48a) above, for instance, the person who is drinking is lying on the ground. In controlled elicitation, consultants confirm that the subject of a verb marked by *e-...-ani* / *e-...-inia*, can be in any posture. For instance, one of my consultants commented that an elicited example like (53) could be used whatever the posture of the person who 'is waiting', whether 'sitting', 'standing' or 'lying'; note that the possibility of a 'hanging' posture was not checked.

- (53) *Yama =da e-id'ua-inia jida wirakucha...*  
 1SG.ERG =PTC VPF-wait\_for-IPFV(.SITTING).1/2A that gentleman  
 'Yo lo estoy esperando a ese caballero...' n2.0231 (elicited)  
 'I'm waiting for that gentleman.'

Second, there are many examples in the corpus of verbs marked by *e-...-ani* / *e-...-inia* in contexts where a 'sitting' posture the verb subject is inconceivable. Such is the case, for instance, when the subject is in motion, whether motion is encoded by the verb, as with 'run' in (54a) or 'come' in (54b) – see also 'bring' in (50b), and 'go up' in (51a) –, or not encoded in the verb but evident from the context, as in 'pick up fish scattered on the ground' in (22).

- (54) a. *E-jududu-ani.*  
 VPF-run-IPFV.SITTING  
 'Estaban corriendo (el pío y la garrapata).' pi013\_ott  
 '(The ostrich and the tick) were running.'
- b. ... *e-pue-ta-(a)ni-yu etsau ja-(a)bu-ti.*  
 VPF-come-S3.PL-IPFV.SENTADO-REITR hueso MED-carry-MED  
 '(Cada vez que iban) regresaban cargado de huesos.' ev010

‘(Every time the hunters used to go hunting,) they would return carrying bones.’

Such is also the case when the subject is not in motion, but in a posture that is explicitly not that of ‘sitting’. In (55), for instance, *e-...-ani / e-...-inia* is used with the posture verb *bade* ‘hang’, which is the etymological source of the posture suffix *e-...-bade* ‘IPFV.HANGING’; see also (107), with the posture verb *sa* ‘lie’ (etymological source of the posture suffix *e-...-sa* ‘IPFV.LYING’).

- (55) *Beu =pa beta tsine, e-bade-ani.*  
 PTC =REP two day VPF-hang-IPFV.SITTING  
 ‘Hacían dos días que (el tigre) estaba (en el hueco).’ bu045  
 ‘(The jaguar) had been staying (lit. hanging) for two days (in the hole).’

If we add to these observations the fact *e-...-ani / e-...-inia* is overwhelmingly more frequent in discourse than any of the other AP (and AM) circumfixes (see Figure 1), this marker is better analyzed as a default imperfective marker, used by the speakers whenever the posture (or the motion) of the verb subject is not deemed relevant.

#### 4.2.2 STANDING

The second AP circumfix *e-...-(n)eti / e-...-netia* ‘IPFV.STANDING’, like *e-...-ani / e-...-inia*, encodes imperfectivity, although in a more limited fashion, with a majority of examples restricted to the domain of the progressive. In addition, *e-...-(n)eti / e-...-netia* encodes clear standing postural meanings that relate to the subject of the verb, even if rarely explicitly translated in Spanish by my consultants, and despite a number of non-postural semantic extensions, some of which are possibly non-spatial. The suffixal part of the circumfix presents two allomorphs, *-(n)eti* and *-netia*, which are conditioned in the same way as the two allomorphs of the circumfix *e-...-ani / e-...-inia*; in addition the allomorph *-neti*, displays a shortened variant *-eti* which is in free variation with the longer variant *-neti*.

The following examples illustrate the typical **progressive & standing postural meanings** of *e-...-(n)eti / -netia* with human subject referents in (56) and an animal subject referent in (57) (repeated from (20)). These examples, together with more examples further below, also illustrate the distribution of the two suffix allomorphs: *-neti* with 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> person subjects of intransitive verbs and 3<sup>rd</sup> person subjects of transitive verbs, illustrated in (56a,b) and (57) with a 3<sup>rd</sup> person S and (59a,b) with a 1<sup>st</sup> person S and (62c) with a 3<sup>rd</sup> person (A); *-netia* with speech act participant subjects of transitive verbs, illustrated in (56c) with a 2<sup>nd</sup> person A and (58) with a 1<sup>st</sup> person A. As for the shortened variant *-eti* (in free variation with *-neti*), it is illustrated in (59a), (61b) and (62a). Finally, the examples illustrate the fact that the argument of the verb concerned by the standing posture is the subject: intransitive S in (56a,b) and (57) and transitive A in (56c).

- (56) a. [*Tu=e-wia-neti=su*] *=pa watena-ta-idha beu,*  
 3SG=VPF-urinate-IPFV.STANDING=TMP =REP jump\_on-3A-REM.PST PTC  
*e-tibeini=jenetia.*  
 NPF-behind=ABL  
 ‘Cuando el estaba orinando de atrás le brincó ...’ ti012  
 ‘When he was urinating, (the jaguar) jumped on him from behind.’

- b. *Daja e-jeje-neti=je* *=pa beju,*  
 thus VPF-shout-IPFV.STANDING=PERL =REP PTC

[*echuadudu=su neti-tsua-ti=putsu*] =*pa e-jeje-neti...*  
 log=LOC stand-go\_up-GO&DO=TMP.SS =REP VPF-shout-IPFV.STANDING  
 ‘Gritando así se subió a un tronco y empezó a gritar así (“¿Pa que me han dejado aquí?”).’ gu072  
 ‘As she (the lost mother-in-law) was shouting this way, she stood up on a log and was shouting (“Why did you abandon me here?”)’

c. *Ja-wija-ti-ke* [*mike puluku*],  
 MID-remove-MID-IMP 2SG.GEN sandal(Sp)  
 [*yawa iyu-da =mi e-tidhi<sup>35</sup>-netia=putsu*].  
 land respected-ASF =2SG VPF-step\_on-IPFV.STANDING.1/2A=TMP.SS  
 ‘(Then the Lord said to him,) “Take off your sandals, for the place where you are standing is holy ground.” (lit. as you are stepping standing on respected land) (Acts 7.33)  
 (<https://www.biblegateway.com/passage/?search=Acts+7&version=NIV>)

(57) *Dukei=base e-neti ena=su e-(ja-)id'i-ti-neti.*  
 deer=DEPREC VPF-stand stream=LOC VPF-MID-drink-MID-IPFV.STANDING  
 ‘Ahí está el venado dentro del agua está tomando.’ hv027  
 ‘(Let’s be quiet!) There is a deer (standing) in the water, drinking while standing.’

Even in typical standing contexts, it is often unclear what exactly motivates the use of the ‘standing’ circumfix since the unmarked ‘sitting’ circumfix can be used instead; as we will see, the same question also holds with the other two posture circumfixes. For instance, compare the minimal pair of examples (58) (with the ‘standing’ form) and (53) (with the default ‘sitting’ form), which can both be used to depict the exact same propositional / semantic content (“I’m waiting for that gentleman while I’m standing”), but which differ in that in (58) the ‘standing’ posture of the verb subject is explicit while in (53) it is not; as already commented in the preceding section, the ‘standing’ posture in (53) is just one of many other possible interpretations (the subject could be ‘lying’, ‘hanging’ ...).

(58) *Yama =da e-id'ua-netia jida wirakucha...*  
 1SG.ERG =PTC VPF-wait\_for-IPFV.STANDING.1/2A that gentleman  
 ‘Yo lo estoy esperando a ese caballero... [yo parado afuera a la entrada de mi casa].’  
 n2.0230 (elicited)  
 ‘I’m waiting for that gentleman [while I’m standing, e.g. standing outside of my house].’

As far as I can say, different facets of what a typical ‘standing’ posture is are put forward in particular uses. One is likely the **stop or absence of motion** (a frequent meaning of the source lexical verb; see §3), which establishes not only a semantic contrast with other posture markers (‘lying’ and ‘sitting’), but also with the motion markers. Such a meaning is likely at issue in (57), where an innocent deer is drinking and standing still while the hunter and his friend, both well hidden, are preparing to shoot at him; (56a), where a man is urinating while a jaguar jumps on him from behind; (59a), where the speaker recounts her childhood when, as a little girl, she once had to stop walking during a journey because she was very tired and, while at rest, was complaining to her older brother; and (59b), from a story where the speaker relates an accident in the forest, when he had to return home with an injured ankle and had to stop walking many times on the way, to think about the best path to follow.

<sup>35</sup> In the original, the verb root for ‘stepping’ is wrongly spelled *tidi*.

- (59) a. *Pishiwe beu ema e-tisitisi-eti,* *carga, carga*  
 weak PTC 1SG VPF-complain-IPFV.STANDING load(Sp) load(Sp)  
*abu-ja=mue=su.*  
 carry-DESID=NEG=TMP  
 'Cansada, quejándome' ci064  
 'I was tired, I was complaining (standing), I did not want to carry this load (a heavy basket) anymore.'
- b. *Ena=biasu neti. E-piba~piba-neti ema.*  
 stream=ON\_TOP\_OF stand VPF-think~think-IPFV.STANDING 1SG  
 'Encima de la senda me paré. Me quedé pensando ("¿Por dónde me voy a ir?")' lp014-015  
 'I stopped (walking) above the stream (on a log) and I was thinking / started to think ("Where I am going to go from here?")'

Another second motivation seems to be that emphasizing **verticality / height** (as opposed to horizontality / ground level) and in doing so providing some indication about how a particular action is performed. For instance, in (60a), the use of the 'standing' circumfix likely indicates, or is at least consistent with, the fact the activity of harvesting corn ears in a corn field is done at a man's height and therefore requires the person who harvests to be standing. Similarly, in (60b), the 'standing' circumfix likely indicates that the 'searching' activity is occurring at some height (and so requires the body to be standing), considering that the brother-in-law is located in a tree.

- (60) a. *Tueda beju e-rari-netia=je...*  
 that PTC VPF-harvest-IPFV.STANDING=PERL  
 'Ya cosechando ese maíz (en mi maizal junto a mi casa)...' du050  
 'As we were harvesting (corn ears, in the corn field that I had planted near the house)...'
- b. *Yanakane yama, [kema d'aki] yama*  
 in\_vain 1SG.ERG 1SG.GEN brother\_in\_law 1SG.ERG  
*e-chaku-netia.*  
 VPF-search\_for-IPFV.STANDING  
 'De balde yo lo estoy buscando a mi cuñado.' ch047  
 'In vain I'm searching for my brother-in-law (I can't find him).'

The verticality / height meaning probably further explains a number of uses of *e-...-(n)eti / e-...-netia* in examples where no postural meaning is evident but which still involve spatial semantics, as in (61a), where a bug passes near the face of God, i.e., in Heaven, (61b), when the sun is very hot, i.e., very high in the sky and (61c), and with fire(wood) burning, i.e., emitting heat vertically.

- (61) a. *Dapia =pa =da, [ye, dumitakai], =di, [tusa e-bu=je],*  
 there =REP =PTC this dung\_beetle =ALSO 3SG.GEN NPF-face=PERL  
*ububu, jaitiana, e-pu-neti.*  
 every\_so\_often pass VPF-be-IPFV.STANDING  
 'Ahí dice este jetore (el pequeño verde) cada rato pasaba por su cara (de Dios), moles-tando, estaba.' je002  
 'It is said that (in the old time), this dung beetle used to pass near His face (the face of God, in Heaven, begging God to give him a name) over and over again.'

- b. *Id'eti =di tuche-da e-pu-eti.*  
 sun =ALSO strong-ASF VPF-be-IPFV.STANDING  
 'El sol también estaba fuerte.' lp078  
 '(I was exhausted, lying on the ground, and very thirsty,) And the sun was very hot.'
- c. *Dapia beju kwati e-utsu-neti=su,*  
 there PTC fire/firewood VPF-burn-IPFV.STANDING=TMP  
*e-inakwawi-ta-(a)ni=wekwana.*  
 VPF-singe-3A-IPFV.SITTING=3PL  
 'Allí donde estaba ardiendo el fuego, las chamuscaban.' tr070\_ott  
 '(In the old time, the women) would singe them (the peccaries) in the fire(wood) that was burning.'

A third motivation that appears to be at play in the selection of *e-...-(n)eti* / *e-...-netia* is what Newman (2002b: 2) calls ‘force dynamics’ (degree of control and balance), related to the ‘sensorimotor control which is needed in order to maintain the position’, and which is the highest in the case of the standing posture, in contrast to other postures. In the data, this trait possibly explains several examples where postural or spatial meanings seem unlikely or are clearly impossible. In (62a), for instance, the narrator depicts a fight between the hero (a bear-man) and a dangerous enemy. Although they might be standing, what seems more relevant in this example is the violence of the fight, and the effort that hero has to produce to beat his opponent. Perhaps even more clearly, ‘force dynamics’ also likely explains (62b), which I collected from one of my consultants during a transcription session, both of us sitting at a table in the courtyard of his house, when we saw the author (an elderly man) of the recording that was being transcribed as he was passing in the street. This utterance reports what my consultant shouted to him. I suspect that he used *e-...-(n)eti* / *e-...-netia* to emphasize the seriousness with which he and I were transcribing. And similarly, ‘force dynamics’ possibly explains (62c), which depicts how a sacred mountain near the Tacana territory used to be defended by a ferocious tribe.

- (62) a. *Dasu beju, kristianu=kwana, kwati dhita-piru-ta-idha=wekwana,*  
 then PTC person=PL firewood gather-START-3A-REM.PST=3PL  
 [*tu=e-(ja-)iche-ti-eti=kama*].  
 3SG=VPF-MID-hit-MID-IPFV.STANDING=WHILE  
 ‘Por eso la gente empezó a juntar leña.’ au254  
 ‘The people started to gather firewood while he (the bear-man) was fighting (with the cannibal).’
- b. [*Mike kisa=kwana*] *etseju e-dere-netia.*  
 2SG.GEN story=PL 1DL.EXCL VPF-paint-IPFV.STANDING.1/2A  
 ‘Estamos escribiendo lo que has contado.’ n4.0327 (situational)<sup>36</sup>  
 ‘We are transcribing (lit. painting) your story.’
- c. *Tueda beju e-inatsiwa-ta-neti mesa.*  
 that PTC VPF-look\_after-3A-IPFV.STANDING 3SG.DAT  
 ‘Ese lo cuida.’ cq005\_ott  
 ‘They (wild Chama people) look after it (the holy Caqueahuaca mountain).’

It is clear that ‘stop / absence of motion’, ‘verticality / height’ and ‘force dynamics’ do not account for all the meanings of *e-...-(n)eti* / *e-...-netia* and that further work is needed to reach a better understanding of the range of the possible extentions. For instance, the use of *e-...-(n)eti* / *e-...-netia* on the verb ‘rot’, to depict the decomposition of dead animals in (52a), does not

<sup>36</sup> The comment ‘situational’ means that the example was collected through participant observation.

seem to relate to any of the above extensions. According to one of my consultants, the use of the ‘standing’ circumfix means an advanced stage of decomposition.

- (63) *Etsেকে* =*mu*, [*mesa animalu=kwana*] *e-iwi-neti*=*su*  
 outside =CONTR 3SG.GEN animal=PL VPF-rot-IPFV.STANDING=TMP  
*pue-idha beju.*  
 come-REM.PST PTC  
 ‘En el patio estaba podriendo sus animales cuando vino.’ ti070  
 ‘In the courtyard, his animals (pigs, chickens, etc.) were (dead and) rotting when he arrived (they had been killed by the jaguar).’

Although most instances available of *e-...-(n)eti* / *e-...-netia* have progressive meanings, a number of examples suggest that the aspectual values can be broader, including the expression (or at least the compatibility) with **iterative and/or habitual meanings**, as found in (61a,c) and (62c). Of note is also the possibility that verbs marked by *e-...-(n)eti* / *e-...-netia* express narrative time advancement, as illustrated in (59b).

### 4.2.3 LYING

The third AP circumfix, *e-...-sa* ‘IPFV.LYING’, encodes imperfectivity (essentially the progressive) and lying posture relating to the subject of the verb, or at least spatial meanings related to the lying posture. In terms of form, it does not display any of the allomorphic variations that characterize the ‘sitting’ and ‘standing’ markers. The suffix part of *e-...-sa* (unlike the suffix part of the ‘sitting’ and ‘standing’ forms) remains the same, whatever the grammatical function (S vs. A) and the person of the subject of the verb (1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup>).<sup>37</sup>

**Typical progressive and lying postural meanings** are found in a number of examples such as those in (64), with human referents performing static activities: in (64a) the verb marked by *e-...-sa* depicts the activity of someone sleeping in his bed while in (64b) it relates to the activity of someone (the narrator himself) thinking while lying on the ground – the narrator’s sitting posture is made clear by the use of the verbs *sana* ‘lie, enter in a lying posture’ and ‘sa’ ‘lie’ in the preceding clauses.

- (64) a. [*Tu=e-tawi-sa=su*], [*mesa e-wane=ja*], *sawana=neje*,  
 3SG=VPF-sleep-IPFV.LYING=TMP 3SG.GEN NPF-wife=ERG bed\_sheet(Sp)=ASSC  
*biad'ama-ta-ana.*  
 cover-3A-REC.PST

‘Cuando él estaba durmiendo, su mujer lo tapó con sábana.’ br010  
 ‘When he was sleeping (drunk), his wife covered him with a bed sheet.’

- b. *Dapia ema sana, dapia ema e-sa, buepatia beu.* [...]  
 there 1SG lie there 1SG VPF-lie at\_midday PTC

*Ema, e-piba~piba-sa ema.*  
 1SG VPF-think~think-IPFV.LYING 1SG

‘Ahí me eché, ahí estoy echado, las doce ya. [Cuando yo estoy ahí echado, a tronado. “Caramba, va llover será... Si va llover me va mojar, que voy a hacer?”) Yo estoy pensando.’ lp054-058

‘There I lay down (with my injured ankle). There I’m lying down, at midday. (Suddenly I hear the thunder. “Caramba, it is going to rain! If it rains, I’m going to get wet. What am I going to do?”) I’m thinking (as I’m lying down)’.

<sup>37</sup> This can be seen in (64a), with a 3<sup>rd</sup> person S, (64b), with a 1<sup>st</sup> person S and 3A in (67d), with a 3<sup>rd</sup> person A, and (67c), with a 1<sup>st</sup> person A.



As with the ‘standing’ form, it is again not always clear why the speaker chose the marked ‘lying’ postural circumfix instead of *e-...-ani* / *e-...-inia* (the default ‘sitting’ marker, unmarked for posture) and only a few suggestions can be proposed at this stage, and only for some of the examples. In (64b), for instance, the ‘lying’ marker is possibly used to emphasize the fatigue of the narrator (who is desperately trying to return home with an injured ankle and who realizes that he will probably have to face the rain); in (64a), somehow similarly, *e-...-sa* is perhaps there to reinforce the depth of the sleeping activity, since the person sleeping is drunk and completely unaware of his surroundings.

On-going activities, static or not, performed by **animals whose normal (natural) posture is that of ‘lying’**, typically require *e-...-sa*, as in (65a,b) with fishes and (66) with caimans.

- (65) a. *Enekita beu, se=kwana e-manu-ta-sa.*  
 really PTC fish=PL VPF-die-S3.PL-IPFV.LYING  
 ‘En verdad dice que los pescados iban muriendo.’ ch107  
 ‘Really, the (poisoned) fish were dying (in the little stream).’
- b. *Se=kwana =mu beu e-siu-sa beu, bai=jenetia*  
 fish=PL =CONTR PTC VPF-escape-IPFV.LYING PTC lake=ABL  
*e-d’ud’u-sa beu.*  
 VPF-drip-IPFV.LYING PTC  
 ‘Los pescados estaban ya saliendo / escapando del lago (por el desagua).’ em017  
 ‘The fish are escaping from the lake when it is raining (lit. when [the lake] is dripping).’
- (66) *De, ebuteji=su=we e-sa [jida caimán].*  
 there port=LOC=RESTR VPF-lie that caiman  
 [Aki jurujuru=nime] *e-pu-sa wa bed’a~bed’a e-pu-sa.*  
 tree rotten=SIMLR VPF-be-IPFV.LYING thus float~float VPF-be-  
 IPFV.LYING  
 ‘Ahí está en la bajada no más el caimán. Como palo podrido está así boga, boga.’  
 ci167-168  
 ‘There, on the port, is that caiman lying. It is (lying) like a rotten tree, floating (lying).’

Moving a step further from the typical lying posture, the ‘lying’ circumfix is also frequently used with subject referents performing activities with a **‘bending’ posture, with the upper part of the body, the head or the hands close to or touching the ground**. A fair number of examples with this meaning involve verbs of putting, taking or searching for something on the ground, as with ‘planting’ in (67a), ‘collecting fruits (spilled on the ground)’ in (67b), ‘gathering (dead/dried leaves on the ground)’ in (67c) or ‘searching for dead bats on the ground’ in (67d) – compare (67d) with (60b), where *e-...-(n)eti* / *e-...-netia* ‘IPFV.STANDING’ is used in the context of ‘searching for ones brother-in-law located in a tree’.

- (67) a. *Ai=kwana e-(ja-)bana-ti-sa te=su.*  
 thing=PL VPF-MID-SOW-MID-IPFV.LYING garden=LOC  
 ‘Está sembrando algo en su chaco.’ gu014  
 ‘He is sowing things for himself in his garden.’
- b. *Tueda beu, e-wiru-ta-bade wara~wara playa=je.*  
 then PTC VPF-harvest-3A-IPFV.HANGING spilled~spilled beach=PERL  
*E-chudu~chudu-sa ema ejud’uji=su*  
 VPF-pick\_up~pick\_up -IPFV.LYING 1SG clothes=LOC

- [*polera tiwe=su*] *e-chudu-sa*.  
 t\_shirt(Sp) edge\_of\_clothes=LOC VPF-pick\_up-IPFV.LYING  
 ‘Ese ya estaba cosechando derramando en la playa. Yo estaba recogiendo en mi ropa, polera.’ ci121-122  
 ‘(My sister, up in a tree) was picking (sweet fruits) and dropping them down on the beach (of the river). I (down on the beach) was collecting them in my clothes, I was collecting them in my t-shirt (lit. in the edge of my t-shirt).’
- c. [*Yama, tuwanu ina=kwana e-dhita-sa=kama*] =mida  
 1SG.ERG copa\_palm leaf=PL VPF-gather-IPFV.LYING=while =2SG  
*asau* *y-a*.  
 food\_cooked\_on\_embers(Sp) VPF-do  
 ‘Mientras yo estoy juntando hoja de copa (palmera), vas a hacer asado.’ mc034  
 ‘While I am gathering (dead/dried) copa palm leaves (to make a fire), you will cook (the capybara, on embers).’
- d. [*Kea tata*] =mu *e-chaku-ta-sa=we...*  
 1SG.GEN father =CONTR VPF-search\_for-3A-IPFV.LYING=RESTR  
 ‘Mi papá sigue buscando (murciélagos muertos garroteando por el cachichira).’ mc085  
 ‘My father is searching for them (dead bats, on the ground).’

Other examples of *e-...-sa* in the corpus with likely ‘bending’-related (rather than strict ‘lying’) meanings are given below: (68a) where a small child is playing (moving around his little cars) on the ground, (68b) where sick people are vomiting and (68c) where a young girl is bathing / washing herself in a stream, with the water taken from the stream.

- (68) a. *E-(ja-)situ-ti-sa* *tueda*.  
 VPF-MID-play-MID-IPFV.LYING 3SG  
 ‘Está jugando él.’ n3.0071 (situational)  
 ‘(My child) is playing (on the ground, with his little cars).’
- b. ... [*jida pia=kwana dia-ta-iti-a=kwana*] =di *beu e-batasiu-ta-sa*.  
 that other=PL eat-3A-TDM-PST=PL =ALSO PTC VPF-spit-S3.PL-IPFV.LYING  
 ‘Esos otros que comieron también ya estaban arrojando.’ su096  
 ‘The other ones who had eaten (the empanadas) were also vomiting.’
- c. *Epuné e-nawi-sa*, [*tusa enabaki=su*], *tsi-ta-idha*.  
 young\_lady VPF-bathe-IPFV.LYING 3SG.GEN stream=LOC steal-3A-REM.PST  
 ‘Cuando la chica estaba bañando en su arroyo (sentado), lo robó.’ au005  
 ‘The young girl was bathing in the stream when (the bear-man) robbed her.’

With animal subjects, this use of *e-...-sa* is found in examples such as (69a), where a donkey has its head down, smelling a drunk man sleeping in his bed – the same person depicted in (64a) –, and (69b), where peccaries are eating, with their snouts foraging food in the ground.

- (69) a. [*Jida, asunu Chaplin*] =mu, ... *e-waniba-ta-sa...*  
 that donkey Chaplin =CONTR VPF-smell-IPFV.LYING  
 ‘Ese burrito Chaplin ya lo estaba volviendo a oler...’ br040  
 ‘(For the second time,) that donkey called Chaplin was sniffing him (Don Antonio, who was sleeping drunk in his bed).’

- b. *Dapia =pa =da be, e-id'aba-ta be, wabukere=kwana,*  
 there =REP =PTC PTC VPF-hear-3A PTC collared\_peccary=PL  
*e-dia~dia-ta-sa e-dia~dia-ta-sa.*  
 VPF-eat~eat-S3.PL-IPFV.LYING VPF-eat~eat-S3.PL-IPFV.LYING  
 'Ahí dice que lo escuchó los taitetuces comiendo, comiendo.' ye083  
 'There he heard collared peccaries eating, eating.'

Some further examples with human subjects, such as those in (70), suggest that *e-...-sa* might simply be used whenever, for some reason, an action normally performed while standing, is realized in a less controlled standing posture (lower degree of “force dynamics” Newman 2002b: 2), as when depicting someone ‘arriving with a heavy load while limping’ in (70a), ‘walking behind someone in an unknown forest’ in (70b) and ‘removing a gun from the wall while drunk’ in (70c).

- (70) a. [*Kema tata=ichenu*] =mu, *tida=putsu mm, apena*  
 1SG.GEN father=COMPASS =CONTR lame=TMP.SS INTJ with\_difficulty  
*e-kwina-sa beu, kaju ja-mapa-ti...*  
 VPF-arrive-IPFV.LYING PTC box MID-carry\_on\_shoulder-MID  
 ‘Mi papá porque es cojo, appena llega hombreado de su cajón...’ em064  
 ‘Because my father was lame, he arrived with difficulty, carrying his load...’

- b. [*Tu=tije*] =pa *y-ase-sa.*  
 3SG=behind =REP VPF-walk-IPFV.LYING  
 ‘Trás de él estaba andando (chibute adelante).’ ch135  
 ‘(The man who was lost in the jungle) was following (walking behind) the imp (who was showing him the way back to his home).’

- c. *Kunu=base=ja* =mu, *eskupeta e-jemi-(b)ute-ta-sa*  
 brother=deprec=ERG =CONTR shotgun VPF-remove-go\_down-3A-IPFV.LYING  
*me-jududu-ke =da!*  
 IMP.NSG-run-IMP =PTC  
 ‘Tu hermano está bajando la escopeta. ¡Escápense!’ tm046-47  
 ‘Your (drunk and angry) brother is grabbing (lit. removing down) the shotgun (from the wall, in order to shoot at you). So run away!’

Finally, some examples suggest that only the ‘close to the ground’ meaning can be retained, with the exclusion of any postural sense, as illustrated in (71), from the same text as (51a), a traditional story that explains why the sun has a different speed and trajectory in the sky depending on the season: slow and high in May (autumn), because the sun is carried by the spider monkey – this is depicted with the default ‘sitting’ marker in (51a); fast and **low in horizon** in August (winter), because the sun is carried by the sloth – this is depicted with the ‘lying’ marker in (71).

- (71) *Da=putsu tipei-da e-tsua-sa id'eti.*  
 this=TMP.SS fast-ASF VPF-go\_up-IPFV.LYING sun  
 ‘Por eso rápido avanza el sol (porque lo carga el marimono).’ so008  
 ‘This is why the sun climbs very fast (in August, because it is carried by a spider monkey).’

Note that not all examples available of *e-...-sa* appear be explainable along the above lines, and more work (and data) will be needed to fuller understand its possible meanings and uses ; see for instance the use of *e-...-sa* on verb ‘drip’ in (65b), which would translate literally as ‘the

lake is dripping lying’.

Similarly to what happens with the ‘standing’ form, most instances available of *e-...-sa* have progressive meanings, yet some examples do suggest that the ‘lying’ marker can have broader aspectual values, at least the possibility to express (or at least be compatible with) **iterative and/or habitual meanings**, as found in (65a,b) and (71).

#### 4.2.4 HANGING

The fourth AP circumfix, *e-...-bade* ‘IPFV.HANGING’, is the least frequent of all AP circumfixes; my text corpus only shows 22 occurrences (as compared to the 40 occurrences of the ‘standing’ circumfix and the 88 occurrences of the ‘lying’ circumfixes; see Figure 1). It encodes imperfectivity (essentially the progressive) and, in most examples available, a hanging ‘posture’ of the subject of the verb, which extends to configuration where an entity is at least not touching the ground; note however that *e-...-bade* does not appear to manifest the types of non spatial extensions that are characteristics of the ‘standing’ and ‘lying’ circumfixes. The suffix part of *e-...-bade* (unlike the suffix part of the ‘sitting’ and ‘standing’ forms, but like the suffix part of the ‘lying’ form) remains the same, whatever the grammatical function (S vs. A) and the person of the subject of the verb (1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup>).<sup>38</sup>

The circumfix *e-...-bade* is typically used in the context of humans performing activities in trees, as with a man stuck in a tree ‘shouting (for help)’ in (72a), a man up in a tree, waiting for deer to hunt and ‘watching (a spirit coming in his direction)’ in (72b) and a little girl ‘playing’ and ‘climbing up’ in the forks of a tree in (72c) – compare with (68a) where a small child is playing on the ground; see also *e-wiru-ta-bade* ‘picking fruits standing in a tree’ in (67c). These examples also show that it is always the subject of the verb that is concerned by the ‘hanging’ posture: intransitive S in (72a,c) and transitive A in (72b).

- (72) a. *Daja pa e-jeje-bade ebake=su.*  
 thus REP VPF-shout-IPFV.HANGING top=LOC  
 ‘Así dice está gritando, arriba.’ ch044  
 ‘He was shouting up there (stuck on a branch of an almendrillo tree [*Dipteryx micrantha*], hoping that someone would hear him and help him go down).’
- b. *Daja yama e-chama-bade=su mitsu-ta-idha ema*  
 thus 1SG.ERG VPF-watch-IPFV.HANGING=SUB.DS talk\_to-3A-REM.PST 1SG  
*einid’u=ja.*  
 spirit=ERG  
 ‘Así cuando yo lo estaba mirando de arriba, me habló el duende.’ du017  
 ‘(I was sitting up high in a bibosi tree, waiting for deer to hunt when I saw a spirit on the ground coming towards me.) As I was watching him, the duende talked to me.’
- c. *Ema =mu e-(ja-)situ-ti-bade [aki echa=kwana=je], [rauki echa].*  
 1SG =CONTR VPF-play-MID-IPFV.HANGING tree branch=PL=PERL tree\_sp. branch  
*Etsedhada=je e-tsua-bade epuné=chidi=putsu.*  
 fork\_of\_tree=PERL VPF-go\_up-IPFV.HANGING young\_lady=DIM=TMP.SS  
 ‘Yo estaba jugando en los gajos de rauki. En las palcas estaba trepando como era jovencita.’ ci099-ci100  
 ‘I was playing in the branches of the tree, branches of the “rauiki” tree. I was climbing up in the tree forks, as I was a very small girl.’

<sup>38</sup> This can be seen in (72a,c), with a 1<sup>st</sup> person S, (73a,b), with a 3<sup>rd</sup> person S, (76b,c), with a 3<sup>rd</sup> person A and (72b), with a 1<sup>st</sup> person A.

Similar examples, now portraying animals performing activities in trees, are given in (73a), with macaw birds eating in trees, and (73b) with a spider monkey climbing in a tree.

(73) a. *Tueda =da beu [jida, ja=kwana] =pa ba-ta-iti-a edid'i=su,*  
 3SG =PTC PTC that macaw=PL =REP see-3A-TDM-PST path=LOC  
*e-dia~dia-ta-bade.*

VPF-eat~eat-S3.PL-IPFV.HANGING

'El lo vió las parabas en el camino, estaban comiendo (en los árboles).' lo007

'He saw the macaw birds on the path, as they were eating (in the trees).'

b. *Chama-ke biwa e-sikwa-bade.*

watch-IMP spider\_monkey VPF-climb-IPFV.HANGING

'Mire al mono trepando (suspendido).' (Ottaviano & Ottaviano 1989: 9)

'Look at the spider monkey climbing.'

Further examples of on-going activities performed by actors not touching the ground but in locations other than trees are shown in (74), where (74a) depicts a boy 'picking up (coconuts)' while standing on a ladder and (74b) someone 'shouting' while lying in a hammock. The little dialog (question and answer) in (74a) was triggered by a real situation that took place during a working session with my consultant when I saw his nephew climbing on a ladder leaning against a nearby coconut tree. I asked my consultant in Tacana *ai da e-pu-ani*, using the default (posture neutral) 'sitting' circumfix. He answered *coco jemi-ute e-pu-bade*, using the 'hanging' circumfix and told me that the 'hanging' circumfix could have been appropriate as well in my question, as transcribed in (74a):

(74) a. *Ai =da e-pu-bade? Coco jemi-(b)ute*  
 do\_what =PTC VPF-do-IPFV.SITING coconut(Sp) remove-go\_down  
*e-pu-bade.*

VPF-be-IPFV.HANGING

A: 'Que está haciendo (su nieto Bori)?' B: 'Coco está bajando (del cocotero).' n4.0164 (situational)

A: 'What is he doing (your nephew, standing on this ladder against the coconut tree)?'

B: 'He is picking up coconuts (for us to drink).'

b. ... [*tusa chawi emasu*] *beju e-tid'e =pa*  
 3SG.GEN hammock under PTC NPF-ember =REP

*bererea-ta-iti-a beju.*

scatter-3A-TDM-PST PTC

*Daja pu, "Iiiii". E-tsiatsia-bade =pa, "Ai! Kwaja =da*

thus be INTJ VPF-shout-IPFV.HANGING =REP what how =PTC

*ema e-pu?"*

1SG VPF-be

'... entonces desparramaron las brasas debajo de su hamaca. [...] (Sentía mucho dolor,) entonces gritó: "¡Iiiii!" (Gritando) "Ay! ¿Qué voy a hacer?'" rn051\_ott, rn056\_ott, rn057\_ott

'So they spread the embers under his hammock (where he was lying). [...] (Feeling pain,) he went "Iiiii". As he was shouting, (he was saying:) "What am I going to do?'"

The circumfix *e-...-bade* is also used for depicting contingent states with inanimate entities, as in (75), which depicts the lamentations of an old woman when she realizes that her lazy son-in-law did not harvest the plantains in his field.

- (75) *Nasa, nasa =mu madha-da e-pu-bade.*  
 plantain plantain =CONTR many-ASF VPF-be-IPFV.HANGING  
 ‘Plátano se está echando a perder (en las plantas).’ gu030  
 ‘There are many (ripe) plantains (in the plantain trees, which should be harvested soon, lest they will be spoiled).’

Beyond the clear hanging / not touching the ground meanings found in the above examples, *e...-bade* is also used in several instances in situations of entities falling iteratively, such as bats falling down from a burning tree in (76a), blood dripping in (76b) and rain falling in (76c).

- (76) a. *E-uru-bade=we* [jida bina=kwana].  
 VPF-fall-IPFV.HANGING=RESTR that bat=PL  
 ‘Sigue cayendo los murciélagos.’ mc075  
 ‘The bats kept falling down (on the ground, from the kachichira tree that was burning).’
- b. [Jida du=kwana=sa ami] *e-pu-bade,*  
 that howler\_monkey=PL=GEN blood VPF-be-IPFV.HANGING  
*ebake=su y-a-ta-bade.*  
 top=LOC VPF-do-3A-IPFV.HANGING  
 ‘La sangre de los maneches estaba chorreando. Estaba goteando de arriba.’ ma043\_ott, ma044\_ott  
 ‘The howler monkeys’ blood was dripping, it was falling on them (the hunters) from above (from the trees, where they had been struck dead with sticks)
- c. *Be me-kwayu-ji, nai tsu’u y-a-ta-bade,*  
 IMP.NEG IMP.NSG-go\_back-IMP.NEG rain\_on still VPF-do-3A-IPFV.HANGING  
*e-tsabia-ta =da mikwana.*  
 VPF-wet-3A =PTC 2PL  
 ‘No se vayan todavía, está lloviendo, les va mojar.’ n2.0143 (elicited)  
 ‘Don’t go back yet, it is going to rain on you and you will get wet.’

The circumfix *e...-bade*, similarly to ‘standing’ and ‘lying’ forms, is most often found with progressive meanings in the available data, even if a few examples suggest it might be able to express (or at least be compatible with) broader aspectual values, at least those of **iterativity**, as in (72a), (74b) and – as we have just commented – (76a,b); no examples with clear habitual or generic meanings could be found.

## 5 Non-inflectional AM suffixes

We now turn to a brief description of the non-inflectional AM system (non-obligatory suffixes), repeated in Table 6. The main characteristics of this system, as well as the semantics and formal behavior of a majority of its members, are fairly similar to those found in the related languages Cavineña and Ese Ejja, for which detailed descriptions are available (see Guillaume 2006; 2008; 2009 for Cavineña; and Vuillermet 2012; 2013 for Ese Ejja). For this reason, and for lack of space, the discussion and exemplification here will be much briefer than what was proposed above for the inflectional AM and AP markers (which don’t have an equivalent in Cavineña and Ese Ejja), and will essentially highlight the main semantic contrasts at play.

As a reminder, nine of the ten non-obligatory AM suffixes to be discussed occur in slot +3 of the predicate structure (Table 1), close (but not adjacent) to the verb root and one (*-jeu* ‘COME&DO’) in the more peripheral slot +7, after (rather than before) the 3<sup>rd</sup> person indexation

marker *-ta*, if present; see pair of examples in (12a,b).

Table 6. Inventories of non-inflectional AM suffixes<sup>39</sup>

| Path        | Motion of S/A  |  | Motion of O <sup>40</sup> |                                     |
|-------------|--|--|---------------------------|-------------------------------------|
|             | prior  | concurrent   | prior                     | subsequent                          |
| itive       | <i>-ti</i><br>GO&DO<br><i>-(sa)seu</i><br>ARRIVE.THERE&DO    | <i>-na</i><br>DO.ITER.GOING  | —                         | —                                   |
| ventive     | <i>-jeu</i><br>COME&DO<br><i>-(sa)sena</i><br>ARRIVE.HERE&DO | <i>-be</i><br>DO.ITER.COMING   | —                         | —                                   |
| non-deictic | —  | <i>-wanana</i><br>DO.ONCE.PASSING<br><i>-niuneti(a)</i><br>DO.ITER.WANDERING | <i>-tsu</i><br>COME(O)&DO | <i>-(j)use/-(j)usia</i><br>DO&GO(O) |

As shown by Table 6, the overall organization of the system can be captured by the common typological parameters of **moving argument** (S/A vs. O), as discussed in §5.1, **temporal relation** (prior vs. concurrent vs. subsequent), as discussed in §5.2 and **path** (itive vs. ventive, indirective/random, towards the A vs. away from the A) as discussed in §5.3. Within (some of) these main categories, further (typologically more or less common) distinctions are made, that belong to the domain of **aspect**, as discussed in §5.4 and what I will call ‘**temporal tightness**’ (move&do vs. arrive&do), as discussed in §5.5. Section §5.6 further explores the non-inflectional AM suffixes in terms of their frequency of use in discourse (§5.6.1), their use as ‘pure directionals’ with certain motion verbs (§5.6.2) and their co-occurrence possibilities with inflectional AM circumfixes (§5.6.3).

## 5.1 Moving argument

The majority of non-inflectional AM markers (eight out of ten), similar to all the inflectional AM forms, encode the motion of the **subject of the verb**, whether S, as in (77a,b), or A, as in (12a,b) (repeated), which display the same AM suffixes, *-ti* (prior itive) and *-jeu* (prior ventive), with intransitive and transitive verbs, respectively.

(77) motion of S

<sup>39</sup> In the publications by the SIL (Ottaviano & Ottaviano 1989), only four of the non-inflectional suffixes have been explicitly identified, as follows : *-ti* *sufvl.* ir a otra parte y actuar (p. 110) ; *-sena* *sufvl.* llegar a hacer la acción (p. 105) ; *-na* *sufvl.* actuar alejándose de él que habla (p. 84) ; *-be* *sufvl.* actuar viniendo hacia él que habla (p. 12)

<sup>40</sup> The two object AM forms, *-tsu* and *-(j)use/-(j)usia*, might be better analyzed in terms of compounded verbal lexemes (in slot +1; see discussion of verbal compounding in §3) rather than productive grammatical suffixes (in slot +3), or perhaps as displaying both functions. Arguments that would favor a verb compounding analysis are that, as observed in §3, unlike most other AM markers, both *-tsu* and *-(j)use/-(j)usia* have transparent corresponding independent lexical verbs still in use in Tacana (*tsu* ‘encounter O’ and *jusia* ‘throw O’) and that the evidence for their occurring in slot +3 (rather than in +1) is very slim, and even null in the case of *tsu*. That is, I have no example available where *-tsu* is separated from the preceding main verb root by another suffix; with *-(j)use/-(j)usia*, I have only one such example (see (85) below, with the intervening suffix *-ba* ‘TRY’). Finally, there are examples where their meaning is unexpected. For instance, with certain transitive caused-motion or caused-posture verbs, such as *icha* ‘put O’ and *nitya* ‘stand O’, *-(j)use/-(j)usia* can express (subsequent) motion of A (rather than O), as in *icha-juse(a)* ‘put O and leave’ and *netia-jusea* ‘stand O and leave’.

- a. *Janawa-pad'i-ti-ke!*  
rest-A\_LITTLE\_BIT-GO&DO-IMP  
'¡Anda descansar un rato!' n2.0223 (situational)  
'Go and rest a little bit (in your house)!'
- b. *Pa-dia~dia-jeu                    sena                    pa-pu-jeu!*  
HORT-eat~eat-COME&DO    have\_dinner(Sp)    HORT-be-COME&DO  
'¡Que venga a comer, que venga cenar!' (me dijo mi señora).' su049  
'Let him come and eat, let him come and have dinner!' (my wife told me)

(12) motion of A

- a. *Enekita beu ba-ti-ta-(a)na.*  
truly    PTC    see-GO&DO-3A-REC.PST  
'Y ya fue a verlo.' co069  
'And he went to see him.'
- b. ... *mama=detse=ja    etse    chaku-ta-jeu-kwa                    beu.*  
mother=DL=ERG    1DL    search\_for-3A-COME&DO-ABIL    PTC  
'... los papás nos pueden venir a buscar.' ps057  
'... our parents might come to look for us.'

Only two forms, *-tsu* and *-jusia*, which can only be used with transitive verbs, encode the **motion of the O**. They are illustrated in (78) and (79), respectively.

(78) *-tsu* 'COME(O)&DO'

*Miwa-tsu-ta-iti-a                    [mesa    kupari].*  
feed-COME(O)&DO-3A-TDM-PST    3SG.GEN    compadre  
'Lo recibió con comida a su compadre.' (n3.0055/elicited)  
'He<sub>i</sub> received his<sub>i</sub> compadre<sub>j</sub> with food.' / 'He<sub>i</sub> fed his<sub>i</sub> compadre<sub>j</sub> after he<sub>j</sub> arrived.'

(79) *-jusia* 'DO&GO(O)'

*Miwa-use-ta-iti-a                    [mesa    kupari].*  
feed-DO&GO(O)-3A-TDM-PST    3SG.GEN    compadre  
'Le dio que comer a su compadre, se fue.' (n3.0056/elicited)  
'He<sub>i</sub> fed his<sub>i</sub> compadre<sub>j</sub> before he<sub>j</sub> left.'

## 5.2 Temporal relation

The second major structuring parameter is that of the temporal relation between the motion and the verb event, which distinguishes five **prior motion** forms – four that encode subject motion, as with *-ti* and *-jeu* in (32a,b) and (11a,b), and one object motion, *-tsu*, illustrated in (78) – from four **concurrent motion** forms, all encoding subject motion, as with *-na* 'DO.IPFV.GOING' in (80a,b) and *-be* 'DO.IPFV.GOING' in (81a,b), and one **subsequent motion** form, *-(j)use/- (j)usia*, encoding object motion, illustrated in (79); note that in addition to (concurrent) motion, *-na* and *-be* also express iterative aspect, encoding the fact that the verb event is repeated several time over the motion path, while the subject is going / coming (see more in §5.4).



(80) a. intransitive

*Tueda =mu, senda=je uru-na-ta-iti-a.*  
that =CONTR path=PERL fall-DO.ITER.GOING-S3.PL-TDM-PST  
'La fruta ha ido cayendo.' ye059  
'(The motacú nuts) fell along the path.'

b. transitive

*E-waniba-na =mida yama tije.*  
VPF-smell-DO.ITER.GOING =2SG 1SG.ERG from\_behind  
'Te voy a ir oliendo (por) atrás.' os028  
'I'm going to go smelling you from behind.'

(81) a. intransitive

*"Jame=ja =da ema chiu-ta-iti-a. Bu!" =pa =da*  
frog=ERG =PTC 1SG peel-3A-TDM-PST INTJ =REP =PTC  
*pu-be-iti-(i)ba(-a).*  
do-DO.ITER.COMING-TDM-BACK-PST  
'Las ranas me pelaron. Bu!', vino así diciendo (esas cosas).' rn042\_ott, rn043\_ott  
'"The frog skinned me, Bu!", he kept saying as he came.'

b. transitive

*Uchi =da yama iwa-be-iti-a.*  
dog =PTC 1SG.ERG call-DO.ITER.COMING-TDM-PST  
'Al perro le he venido llamando (varias veces) y no vino.'  
'I called the dog multiple times on my way here.' n2.0040 (elicited)

### 5.3 Path

Path (direction or orientation) is the third major structuring parameter. There are three types of path semantics. The first type, deixis, distinguishes three **itive path** forms, including prior motion *-ti* (77a), (12a), prior 'arrive there' motion *-seu* (see below), and concurrent motion *-na* (80a,b), from three **ventive path** form, including prior motion *-jeu* (77b), (12b), prior 'arrive here' motion *-sena* (see below) and concurrent motion *-be* in (81a,b).

A second type of path encoding is that of '**wandering**' ('indirective', 'randomly distributed over multiple locations'), expressed by the concurrent motion *-niuneti(a)*; as reminder, there is also a suffix *-niuneti(a)* with the same 'wandering' meaning in the inflectional system, used in co-occurrence with *e-* (see §4.1.3).<sup>41</sup> It is illustrated in (82), with the derived intransitive verb 'eat' (detransitivized by reduplication), and (83), with the transitive verb 'ask'.

(82) intransitive

*Tueda kuchi=kwana dia~dia-niuneti-ta-ina*  
there pig(Sp)=PL eat~eat-DO.ITER.WANDERING-S3.PL-HAB.PST

<sup>41</sup> Note also that both markers have two variants, a short variant (*-niuneti*) and a long variant (*-niunetia*), the conditioning factors of which are not known; see more in footnote 33.

*muruku=biasu.*

hillock=ON\_TOP\_OF

‘A large herd of pigs was feeding on the nearby hillside.’ (Mark 5.11, LB169)  
(<https://www.biblegateway.com/passage/?search=Mark+5&version=NIV>)

(83) transitive

*Pamapa e-jude=je Jesús kisaba-niunetia-ta-(a)na=wekwana.*

many NPF-village=PERL Jesus ask-DO.ITER.WANDERING-S3.PL-REC.PST=3PL

‘They kept looking for [lit. going around in many villages asking for] Jesus.’ (John 11.64 LB441)

(<https://www.biblegateway.com/passage/?search=John+11&version=NIV>)

Finally, a third type of path encoding contrasts the orientation of the motion of the transitive O argument expressed by the AM suffixes *-tsu* ‘COME(O)&DO’ and *-(j)use/-(j)usia*, ‘DO&GO(O)’, which is directed towards the A argument with *-tsu* (84) – see also (78) above – and away from the A argument with *-(j)use/-(j)usia* (85) – see also (79) above.

(84) *E-ina-tsu =da yama, [mike echuje].*  
VPF-grab-COME(O)&DO =PTC 1SG.ERG 2SG.GEN payment

‘Voy a recibirlo tu pago.’ du097

‘I’m going to receive your payment (lit. grab your payment as it arrives).’

(85) *Ina-ba-use-ta-iti-a epuné=chidi.*

grab-TRY-DO&GO(O)-3A-TDM-PST young\_lady=DIM

‘Lo atocó no más la chica (solamente atentado).’ n3.0044 (elicited)

‘He tried to grab the lady as she went away.’

## 5.4 Aspect

The fourth structuring parameter falls under the category of aspect, in specifying the temporal contour of the verb event relative to that of the motion expressed by the AM markers. This parameter is manifested in a ‘**do once**’ versus ‘**do repeatedly**’ contrast within the set of concurrent motion markers, setting apart the three concurrent forms discussed above, itive *-na* (80), ventive *-be* (81) and ‘indirective’ *-niuneti(a)* (82), (83), which encode an **iterative realization** of the verb event (temporally co-extensive with the motion), with a fourth one, *-wanana* ‘DO.ONCE.PASSING’, which encodes a “punctual” realization of the verb event (temporally not co-extensive with the motion). This form is illustrated in (86a-c), applying to intransitive verbs ‘enter’, ‘rest’ and ‘sit/stay’, and (87a,b), applying to transitive verbs ‘shoot at’ and ‘visit’.

(86) intransitive

a. *Ema =da nubi-wanana-iti-a [aicha e-tia=puji].*

1SG =PTC enter-DO.ONCE.PASSING-TDM-PST meat VPF-give=PURP

‘Al paso entré viniendo, a darles carne (a mis padres).’ n3.0010 (elicited)

‘While passing, I entered to give meat (to my parents).’

b. *[Tiyu=sa ete=su] =da ema janawa-wanana-iti-a.*

uncle=GEN house=LOC =PTC 1SG rest-DO.ONCE.PASSING-TDM-PST

‘En la casa de mi tío al paso, he descansado un rato (conta en el chaco a su mujer, o aquí, de vuelta).’ n4.0371 (elicited)

‘In the house of my uncle, I took a rest while passing by.’

- c. ... [*piada tsine*] *ekwanaju ani-wanana-(a)na tuna=neje.*  
 one day 1PL.EXL sit-DO.ONCE.PASSING-REC.PST 3PL=ASSC  
 ‘(We continued our voyage from Tyre and landed at Ptolemais, where we greeted the brothers and sisters and) stayed with them for a day. (Leaving the next day, we reached Caesarea and...)’ Acts 21.7 LB581  
<https://www.biblegateway.com/passage/?search=Acts+21&version=NIV>

(87) transitive

- a. *Rai=su tueda wabu pisa-wanana-ta-iti-a.*  
 saltlick=LOC 3SG white\_lipped\_peccary shoot\_at-DO.ONCE.PASSING-3A-TDM-PST  
 ‘En el salistral él mató chancho al paso.’ n2.0227 (elicited)  
 ‘In the saltlick, he killed (lit. shot at) white lipped peccaries while passing.’
- b. *Ema España yawa=su e-puti=su, yama mikwana*  
 1SG Spain(Sp) land=LOC VPF-go=TEMP 1SG.ERG 2PL  
*e-pere-wanana.*  
 VPF-visit-DO.ONCE.PASSING  
 ‘(I plan to do so) when I go to Spain. I hope to see you while passing through (and to have you assist me on my journey there).’ Romans 15.21 LB665  
<https://www.biblegateway.com/passage/?search=Romans+15.24&version=NIV>

## 5.5 Temporal tightness

The final structuring parameter, here named “**temporal tightness**”, has not yet been much discussed in descriptive and typological work on AM and is not a standard label. It is possibly related to that of Speed (Rose 2015: 127; Koch 2021: 240–241), for a “sub-component of the timing parameter [...] where the boundary between lexical action and [grammatical] motion is particularly tight” (2015: 127). Here, it refers to the ‘go / come’ versus ‘arrive there / arrive here’ contrast in the prior motion forms, namely between *-ti* ‘GO&DO’ and *-jeu* ‘COME&DO’, discussed above, and *-(sa)seu* ‘arrive there & do’ and *-(sa)sena* ‘arrive here & do’, illustrated, respectively, in (88) and (90), with intransitive verbs, and (89) and (91), with transitive verbs. Both markers appear in two variants, a short variant and a long variant which corresponds to the short variant preceded by the syllable *sa*. For lack of sufficient data on these morphemes, it is not known if there is a difference in meaning between the two variants.

(88) *-(sa)seu* ‘ARRIVE.THERE&DO’: intransitive

- a. *Yanana kema, te=su tawi-seu-iti-a.*  
 child 1SG.DAT garden=LOC sleep-ARRIVE.THERE&DO-TDM-PST  
 ‘Mi huahua llegó al chaco a dormir.’ n4.0356 (elicited)  
 ‘My baby slept as we arrived (there) at the garden.’
- b. *Jeje-saseu-iti-a tata te=su.*  
 shout-ARRIVE\_THERE&DO-TDM-PST father garden=LOC  
 ‘Ha llegado gritando papá en el chaco.’ n4.0366 (elicited)  
 ‘Daddy arrived shouting at the garden’.

(89) **-(sa)seu** ‘ARRIVE.THERE&DO’ : transitive

a. *Mama=ja [te=jenetia kwina=putsu] d’ije*  
 mother=ERG garden=ABL arrive=TMP.SS corn  
*wana-seu-ta-iti-a.*

lay-ARRIVE\_THERE&DO-3A-TDM-PST

‘La mamá llegando del chaco el maíz lo puso y lo dejo.’ n4.0365 (elicited)

‘Arriving from the garden, the mother laid down the corn (as she arrived).’

b. *Ai =da yama e-dia-saseu?*

what =PTC 1SG.ERG VPF-eat-ARRIVE\_THERE&DO

‘¿Que cosa voy a llegar a comer (a mi casa)? / Que cosa voy a comer llegando de vuelta a mi casa?’ os010

‘What am I going to eat when I arrive at my house?’

(90) **-(sa)sena** ‘ARRIVE.HERE&DO’ : intransitive

a. *Enekita =pa beu, kwina-yu-idha beu. Kwina-yu,*  
 really =REP PTC arrive-REITR-REM.PST PTC arrive-REITR  
*manu-sena-yu.*

die-ARRIVE\_HERE&DO-REITR

‘Y verdad dice que llegó (el hombre tigre). Llegó y murió / llegó a morir (en su casa).’  
 co177-178

‘(The jaguar man) arrived (in his house). He arrived and he died (when he arrived).’

b. *Tawi-sasena-iti-a [tusa masha=su].*

sleep-ARRIVE\_HERE&DO-TDM-PST 3SG.GEN bed=LOC

‘Llegó a dormir aquí en su cama.’ n3.0062 (elicited)

‘He slept in his bed when he arrived here.’ (Note: the speaker accompanies this utterance with a gesture of the hand in his direction)

(91) **-(sa)sena** ‘ARRIVE.HERE&DO’ : transitive

a. *Iche-sena-ta-iti-a tata=ja [kema kwara].*  
 hit-ARRIVE\_HERE&DO-3A-TDM-PST father=ERG 1SG.GEN mother

‘Ha llegado a pegarlo mi papá a mi mamá.’ n2.0033 (elicited)

‘Daddy beat my mother when he arrived.’

b. *...=pa =da beu a-sasena-ta-idha=wekwana*  
 =REP =PTC PTC do-ARRIVE\_HERE&DO-3A-REM.PST=3PL  
 [mesa ewane=kwana].

3SG.GEN wife=PL

‘(“Había sido chapapeandolo terminan de comer”,) dice que (el chico) llegó a contar a sus esposas (de los cazadores).’ ev034

‘(“What happens is that the hunters<sub>i</sub> cook the meat and eat is up in the jungle”,) he<sub>j</sub> (the young boy) said to their<sub>i</sub> wives when he<sub>j</sub> arrived.’

## 5.6 Frequency of use and distribution

### 5.6.1 Frequency of use

With the exception of one suffix, *-ti* ‘GO&DO’, the non-inflectional AM suffixes, like the AM circumfixes, are not very frequently used in the available data and they do not occur with equal frequency. As shown in Figure 2, which displays the results of a count in my own corpus of narratives – and which excludes the overly frequent (and likely lexicalized) sequence *pu* ‘be (located)’ + *-ti* ‘GO&DO’ (see comments below) –, non-inflectional AM suffixes are found on the verb of 390 clauses of the ~3274 sentences (12%) in my Field Linguist’s Toolbox database, among which a majority corresponds to the *-ti* ‘GO&DO’ form (326 examples, 84%).

Figure 2. Frequency of use of non-inflectional suffixes

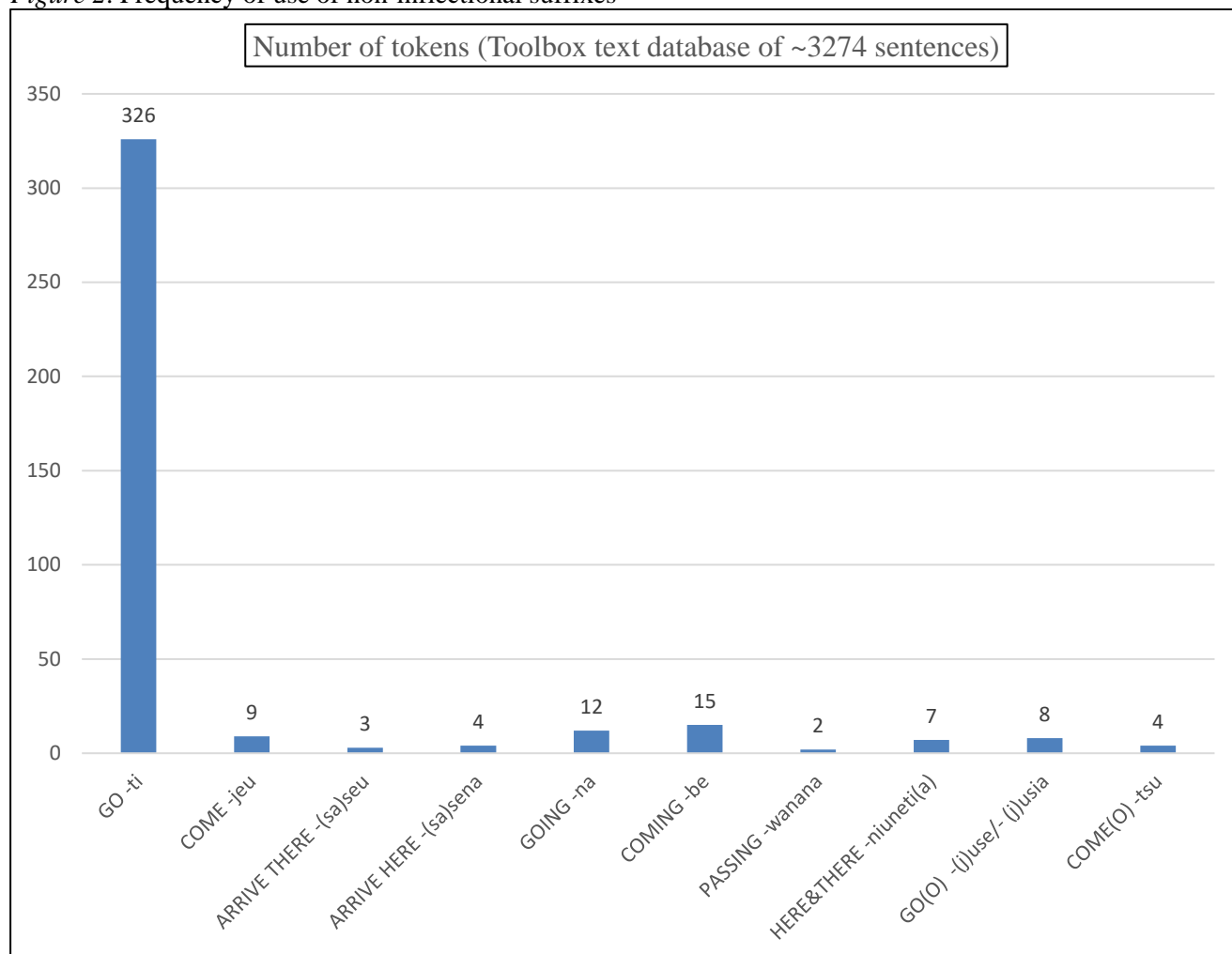


Figure 2 does not include the instances in my narrative corpus of the use of *-ti* ‘GO&DO’ with the locative verb *pu* ‘be (located)’, illustrated in (92) where *-ti* is not segmented from *pu* – see also (87b).

- (92) *D'aki=neje ema ejie=su ema puti-ana.*  
 brother\_in\_law=ASSC 1SG forest=LOC 1SG go-REC.PST  
 ‘Con mi cuñado yo he ido al monte.’ hv001  
 ‘I went to the forest with my brother-in-law.’

The reason for not counting *-ti* in *puti* is that I suspect that *puti* is a lexicalized combination. Besides its unusually high number of occurrences – which amount to 181, i.e. 36% of the total

number of instances of *-ti* (507) –<sup>42</sup> *puti* is the only verbal expression used to express an itive motion event ‘go’ in Tacana and it is systematically rendered by the verb *ir* ‘go’ in Spanish.<sup>43</sup> A further piece of evidence for lexicalization of *-ti* in *puti* is that *pu* is also found as unambiguously lexicalized in the ventive motion verb *pue* ‘come’ – see for instance (42) and (104) –, where synchronically, *e* does not have any independent use as a suffix. Finally, in this respect, it is of note that *-ti* is also found unambiguously lexicalized in other verbs, as in (at least) *jeti* ‘go and fetch’ and *nuati* ‘go and return’ – where synchronically *je* and *nua* do not exist as independent verbs.

Arguably, although not followed here because of its relative rarity or lack of data, the same analysis in terms of lexicalization could perhaps be followed for *-niuneti(a)* ‘DO.IPFV.WANDERING’ in combination with *pu*, as in (93a,b). This combination is generally translated as *andar* in Spanish (‘wander, roam, walk around’) and appears to be the most frequent use of *-niuneti(a)* in Tacana, accounting for 6 of the 7 occurrences in my own corpus of narratives; it is also highly frequent in the translation of the New Testament and is actually treated as a lexical entry in the SIL dictionary (Ottaviano & Ottaviano 1989: 96).

(93) a. *Daja beu pu-niuneti-(i)dha* [jida iba]  
 thus PTC be-DO.ITER.WANDERING-REM.PST that jaguar  
*pamapa ete=je te=je.*  
 all house=PERL garden=PERL  
 ‘Así andaba ese tigre por todas las casas y los chacos.’ ti054  
 ‘So did this jaguar walk around (lit. was in various places while wandering) in all the houses and gardens.’

b. *D’anitayawa=kwana emata=kwana=je*  
 desert\_place=PL hill=PL=PERL  
*pu-niuneti-ta-idha=wekwana.*  
 be-DO.ITER.WANDERING-S3.PL-REM.PST=3PL  
 ‘They wandered in deserts and mountains.’ (Hebrews 11.38, LB912)  
<https://www.biblegateway.com/passage/?search=Hebrews+11&version=NIV>

As for the rest of the non-inflectional AM suffixes, only *-be* ‘DO.IPFV.COMING’ is found to combine with *pu*, but this does not appear to be a particularly frequent collocation, only attested in a single example the whole corpus.

(94) *Yanakane =da ekwanaju pu-be-iti-a*  
 in\_vain =PTC 1PL.EXCL be-DO.ITER.COMING-TDM-PST  
 [mike ebakepuna=eje].  
 2SG.GEN daughter=PERL  
 ‘De balde hemos venido nosotros por tu hija.’ tm024  
 ‘We came in vain for your daughter.’

## 5.6.2 AM versus pure directional meanings

As with the AM circumfixes (see §4.1.4), (at least) the concurrent temporally co-extensive non-inflectional AM suffixes *-na* ‘DO.ITER.GOING’, *-be* ‘DO.ITER.COMING’ and *-niuneti(a)*

<sup>42</sup> As a reminder, it was noted that the locative verb *ju* was also a very frequent host for the AM circumfixes, although not in the same proportions as for *-ti* (see §4.1.1, §4.1.2 and §4.1.3).

<sup>43</sup> Tacana appears to have (had) another itive motion verb, *kwa* ‘go’, but this form is only found once in my own text corpus; it is also likely lexicalized in a few motion verbs such as *kwabetsa* ‘fly’, *kwade* ‘expulse’, *kwadhiba* ‘spy on’, *kwatsasia* ‘send’, etc.

‘DO.ITER.WANDERING’ are attested to function as ‘pure’ directional (and iterative aspect) markers with some motion verbs, where their spatial contribution is restricted to a path specification (itive versus ventive versus random/aimless) to the motion that is already encoded by the verb event. In the available data, examples of this function are found with (at least) the intransitive manner of motion verbs ‘walk’ in (95), ‘crawl’ in (96) and ‘run’ in (97) and the transitive caused-motion verbs ‘take, transport’ in (98) and ‘pull’ in (99); note that, similarly to what was observed with the inflectional AM circumfixes, no examples are found of *-na*, *-be* or *-niuneti(a)* with the deictic verbs *puti* ‘go’, *kwa* ‘go’ or *pue* ‘come’.

- (95) *Soldau=kwana senda=je ase-na-ta-idha.*  
 soldier=PL path=PERL walk-DO.ITER.GOING-S3.PL-REM.PST  
 ‘Los soldados por la senda se fueron andando.’ n4.0324 (elicited)  
 ‘The soldier went walking.’
- (96) *Pa-reru-na-yu ema.*  
 HORT-crawl-DO.ITER.GOING-REITR 1SG  
 ‘Me iré gateando.’ lp046  
 ‘(My knee was injured and I couldn’t walk, so I said to myself:) I’m going to go crawling.’
- (97) ... [*pamapa ejude=su ani-ji cristiano=kwana*] [*Pablo y-ani=su*]  
 all village=LOC sit-NMLZ people(Sp)=PL Pablo VPF-sit=LOC  
*jududu-be=putsu, ja-dhita-ti-ta-(a)na=wekwana.*  
 run-DO.ITER.COMING=TMP.SS MID-gather-MID-REC.PST=3PL  
 ‘... the people came running from all directions [lit. the people who lived in all the villages came running to where Paul was and gathered]’ (Acts 21.30, LB584)  
<https://www.biblegateway.com/passage/?search=Acts+21&version=NIV>
- (98) *Daja beni=ja ekwanaju dusu-niunetia-ta-(a)na.*  
 thus wind=ERG 1PL.EXCL take/transport-DO.ITER.WANDERING-3A-REC.PST  
 ‘The ship was caught by the storm (lit. the wind took us in many directions) (Acts 27.17, LB608)  
<https://www.biblegateway.com/passage/?search=Acts+27&version=NIV>
- (99) a. *Enekita beu rire-na-ta-idha=wekwana playa=su beu juu.*  
 really PTC pull/drag-DO.ITER.GOING-3A-REM.PST=3PL beach=LOC PTC INTJ  
 ‘En verdad dice ya lo jalaron a la playa.’ bo095  
 ‘Actually, they pulled it (the caiman) onto the beach.’
- b. ... *e-rire-be-ta, [wape biaje] beu playa=su.*  
 VPF-pull/drag-IPFV.COMING-3A floating\_sticks on\_top PTC beach=LOC  
 ‘... lo jalaron por encima de la palizada a la playa.’ ci213  
 ‘They pulled it (the caiman) over the floating sticks on to the beach.’

Note that not all motion verbs trigger a pure directional reading with these suffixes, as with the intransitive path of motion verb ‘fall’ in (80a) and the transitive caused-motion ‘put’ in (100), with which the non-inflectional AM suffixes *-na* and *-be*, respectively, still encode a complete motion+path (AM) meaning distinct from the motion+path meaning encoded by the verb.

- (100) *Tata=ja tumi icha-be-ta-iti-a.*  
 father=ERG motacú\_palm put-DO.ITER.COMING-3A-TDM-PST

‘El papá ha venido dejando motacú (pa su hijo, para que come, en los descansaderos, lugares limpiados).’ n4.0284 (elicited)  
 ‘Father came leaving (lit. putting) motacú palm nuts in different places (for his child, so that he would have something to eat in the jungle).’

The other non-inflectional AM suffixes do not appear to yield pure directional function, even if the data available does not always allow us to formulate a clear judgement and a fuller treatment would be in order. For instance, the prior motion *-ti* ‘GO&DO’ is frequently used with the intransitive path of motion verb *tsua* ‘go up’ and *bute* ‘go down’ (101a,b), *nubi* ‘enter’ (102) and *kwina* ‘arrive’ (103). As (at least some of) the translations provided (in Spanish) by the consultants suggest, the meaning of *-ti* appears to remain that of a (prior) AM marker, adding a distinct motion component the precedes the motion expressed by the verb.

- (101) a. [*Jida junu, e-bade=je*] *tsua-ti-ke!*  
 that liana VPF-hang=PERL go\_up-GO&DO-IMP  
 ‘Por ese bejuco que hay subite!’ lo020  
 ‘Go climb up (on the almendrillo tree) on (lit. through) that hanging liana.’
- b. *Ai =petse ema bute-ti-kwa,* [*jida junu=chidi=je*?]  
 what =EXCLAM 1SG go\_down-GO&DO-ABIL that liana=DIM=PERL  
 ‘¿Que voy a poder bajarme por ese bejuquito?’ ch072  
 ‘How can I go climb down (from the almendrillo tree) on (lit. through) that tiny liana?’
- (102) [*Piada señora pesu*] [*aloja pu-idha*] *beu.*  
 one woman LOC.APPROX put\_oneself\_up be-REM.PST PTC  
*Dapia beu ema nubi-ti-(i)dha.*  
 there PTC 1SG enter-GO&DO-REM.PST  
 ‘Donde una señora (el subprefect) se ha alojado (señora Laura). Ahí ya fui a entrar (en la casa de la señora Laura).’ su051-052  
 ‘(The subprefect) was staying in the house of a woman (named Laura). There (in this house) I went and entered (the house) (to look for him).’
- (103) *Kwina-ti-(i)dha* [*mesa ete=su*].  
 arrive-GO&DO-REM.PST 3SG.GEN house=LOC  
 ‘Ha ido a llegar a su casa.’ ch146  
 ‘He went and arrived at his house.’

Even more clearly, in the text excerpt in (104), where *-ti* and its deictically opposite marker *-jeu* ‘COME&DO’ are used, respectively with the transitive cause-motion verbs *icha* ‘put’ and *jemi* ‘remove’, the translation shows that the suffixes encode a(n) itive) motion that is temporally prior to that encoded by ‘put’ and ‘remove’.

- (104) *Icha-ti erere=su icha-ti. Neicha=we pue-yu,* [*pia eje*]  
 put-GO&DO cabin=LOC put-GO&DO again=RESTR come-REITR other bundle  
*macha jemi-pe-jeu beu.*  
 also remove-COMPL-COME&DO PTC  
 ‘Fui a dejar al campamento. Y otra vez me vine para llevar el otro jase.’ ci108-109  
 ‘I went to leave (lit. put) the wood in the camp. And again I came back and removed all the other piles (of wood).’

(See also the examples of *-wanana* ‘DO.ONCE.PASSING’ with ‘enter’ in (86a) and *-tsu* ‘COME(O)&DO’ and *-(j)usia/- (j)use* ‘DO&GO(O)’ with ‘grab’ in (84) and (85), respectively; the



suffixes *-(sa)seu* ‘ARRIVE.THERE&DO’ and *-(sa)sena* ‘ARRIVE.HERE&DO’ are never found with motion verbs.)

### 5.6.3 Combination of non-inflectional AM with inflectional AM or inflectional AP affixes

Since non-inflectional AM affixes and inflectional AM or AP affixes belong to distinct slots in the verbal predicate structure, a reasonable question to ask is whether they can co-occur. Even if such combinations do not appear to be completely impossible, they are still exceedingly rare in the available data and are only attested with a very small number of members of the distinct paradigms.

The co-occurrence of non-inflectional and inflectional AM affixes is only attested in a few elicited examples and only with two of the three concurrent forms, *-na* ‘DO.IPFV.GOING’ and *-be* ‘DO.IPFV.COMING’, from the non-inflectional set, and their deictically-matching forms *e-...-u* ‘DO.IPFV.GOING’ and *e-...-siu* ‘DO.IPFV.COMING’, from the inflectional set. An example of each possibility is provided in (105), with the itive forms, and (106a), with the ventive forms.

- (105) *Wabu* =*pa* =*da* *ba-ta-iti-a=wekwana=su*  
 white\_lipped\_peccary =REP =PTC see-3A-TDM-PST=3PL=TMP  
*e-chaku-na-u*.  
 VPF-search\_for-DO.ITER.GOING-DO.IPFV.GOING

‘Chancho dice que (otra persona) han visto y voy a ir por partes a buscar (a los chanchos) sera por aquí o por alla, apartándose del camino, no va directo.’ n4.0333 (elicited)  
 ‘They say they have seen white-lipped-peccaries, so I’m going to search around for them.’

- (106) a. *Edid’i=je yama pudu e-dia-be-siu*.  
 path=PERL 1SG.ERG tamal VPF-eat-DO.ITER.COMING-DO.IPFV.COMING

‘Por el camino vengo comiendo tamal (come, deja, sigue caminando, come otra vez, de rato en rato).’ n4.0337 (elicited)  
 ‘I’m coming through the path eating tamal (repeatedly)’

- b. *Edid’i=je yama pudu e-dia-siu*.  
 path=PERL 1SG.ERG tamal VPF-eat-DO.IPFV.COMING  
 ‘Por el camino vengo comiendo tamal (está comiendo seguido).’ n4.0338 (elicited)  
 ‘I’m coming through the path eating tamal (continuously)’

The rationale for such combinations appears to be essentially aspectual, in specifying that the realization of the verb event is iterative, which is a specification of the non-inflectional *-na* and *-be*, but not of inflectional *e-...-u* and *e-...-siu*. This is clearly suggested by the contrast in the minimal pair *e-dia-be-siu* in (106a) and *e-dia-siu* in (106b) – repeated from (26b), where the inflectional ventive *e-...-siu* ‘DO.IPFV.COMING’ is used on its own; in (105), the Spanish translation provided by the consultants (with its sense of spatial distribution, *por aquí o por alla...* ‘here and there...’) is less transparent, although it does not preclude a (possibly more central) iterative / pluractional reading of doing the action of searching multiple times in multiple places, regardless of whether these places are distributed along a meandering (as per the Spanish translation) or a direct motion path (as in (106a)).

As for the co-occurrence of non-inflectional AM and inflectional AP affixes the only combination found in the data is that of the prior itive motion *-ti* ‘GO&DO’ with the default / non-spatial ‘sitting’ inflectional AP marker *e-...-ani* / *e-...-inia* ‘IPFV(.SITTING)’, illustrated in (107a,b).

(107) a. [*Mesa mama*] =*di* *beu, dapia icha,*  
 3SG.GEN mummy=ALSO PTC there put  
*e-sa-ti-ani* *beu, beu yanana=chidi=neje.*  
 VPF-lie-GO&DO-IPFV(.SITTING) PTC PTC child=DIM=ASSOC  
 ‘Y su mama también ahí se lo pone con la wawa para que se eche.’ pa021  
 ‘We place the mother there so that she lies with her (newborn) baby.’

b. *Du=bawi* *y-a-ti-ta-(a)ni.*  
 howler\_monkey=RESTR VPF-do-GO&DO-3A-IPFV.SITTING  
 ‘Iba a matarlos.’ ma105\_ott  
 ‘(Very often,) he used to go kill (lit. do) just howler monkeys (and ended up exterminating them).’

## 6 Summary and conclusions

This paper has presented a description in Tacana of the 19 verbal affixes that express, as part of their primary meanings, the concepts of **associated motion (AM)** – a recent yet now well established descriptive and comparative / typological concept in linguistics (Guillaume 2016; Guillaume & Koch 2021a; 2021b) – or **associated posture (AP)** – a new concept that some linguists have started to use, by analogy to that of AM. The **15 AM affixes** form two distinct sets, a set of five inflectional circumfixes (slots -3 and +8) and a set of ten non-inflectional suffixes (slots +3 or +7). The **four AP affixes** form a single set of five inflectional circumfixes which are in complementary distribution with, first, the five inflectional AM circumfixes and, second, a range of non-spatial TAM affixes (all in the same slots -3 and/or +8). In the remainder of this section, we review the main contributions of the three distinct sets for the typology of AM systems, AP systems and inflectional imperfective aspect.

The five **inflectional AM affixes** (§4.1) are noteworthy from the perspective of the typology of AM, first of all for their extreme degree of grammaticalization, having reached the **status of obligatory morphology** without losing their translational motional meanings, a property rarely achieved in AM systems. Even if a fair amount of AM systems – including the Tacana non-inflectional suffixes – tend to approach this status and if some authors sometimes analyzed them as inflectional (or “quasi-inflectional”) as in, for instance many Australian languages (Wilkins 1991; Koch 2021), truly obligatory inflectional AM systems of the Tacana type are not frequent; among the many languages and languages families with AM systems studied in Guillaume & Koch (2021), only Mudburra (Pama-Nyunga, Australia; Osgarby 2021) and Otomi languages (Otomangean; Mexico; Hernández-Green & Palancar 2021) seem to have AM markers comparable, in term of their obligatoriness, to the Tacana inflectional AM affixes. A second point of typological interest is the particular prior motion-with-purpose reading (‘be on one’s way to do’) that at least three inflectional affixes can express with some verbs in certain contexts, where the imperfective reading only applies to the motion component and the motion bears a purposive relation to the verb event.

The ten **non-inflectional AM suffixes** (§5) are also interesting for the typology of AM, although for different reasons. First, they display an extremely rich system – typical of Takanan and a couple of other languages of the region (see Guillaume 2016), as well as of a few languages of Central Australia (see Koch 2021), but fairly rare in other parts of the world (Ross 2021: 44ff) – that manifests all the major semantic contrasts in terms of the major structuring parameters in typology: **moving argument**, with distinct AM forms for the motion of the subject (S/A) and for the motion of the object; **temporal relation**, with distinct AM forms for prior vs. concurrent vs. subsequent motion; **direction**, with distinct forms for itive versus ventive

versus wandering motion; and **aspectual**, with distinct AM forms for ‘punctual’ versus ‘iterative’ realizations of the verb event. Second, the system manifests, still by way of distinct AM markers, a contrast in terms of ‘**temporal tightness**’ that has not yet been much documented or explored in descriptive work on AM, and that sets apart two ‘go/come’ prior AM markers from two ‘arrive there/arrive here’ prior markers.

Finally, as part of their secondary meanings, both inflectional and (at least certain) non-inflectional AM markers can function as ‘**pure**’ **directional markers** with (at least certain) motion verbs, where their spatial contribution is restricted to a path specification to the motion that is already encoded by the verb event.

Turning to the (**inflectional**) **AP affixes** (§4.2), three of them (‘standing’, ‘lying’ and ‘hanging’ forms) are, like the inflectional AM affixes, remarkable in their having achieved the **highest degree of grammaticalization**, forming part of a paradigm of **obligatory affixes** (together inflectional AM and non-spatial TAM affixes, and the fourth, ‘sitting’ AP form, which has lost its spatial semantics) while still retaining postural specifications as (at least) some of their possible meanings.

A second point of typological interest of the Tacana AP affixes, is the presence, in this grammatical system, of a ‘**hanging**’ **term**, a type of posture that is, unlike ‘sitting’, ‘standing’ and ‘lying’ postures, hardly ever cited as a source of grammaticalization cross-linguistically (for instance, “hanging” verbs are not mentioned in Kuteva 1999; Heine & Kuteva 2002; Newman 2002a). From an areal perspective, however, the patterning of ‘hanging’ posture verbs together with ‘sitting’, ‘standing’ and ‘lying’ verbs, in a class of basic posture verbs in different constructions and grammaticalization paths, whether or not yielding AP markers, is a well documented phenomenon in languages from Amazonia and neighboring lowland regions of Latin American; see for instance Vuillermet (2009; 2012: 634ff) and (5a) and (7a) above for Ese Ejja (Takanan, Bolivia and Peru), Queixalós (Queixalós 1992; 2009) for Sikuaní (Guahiban, Colombia), Obert (2019: 130–132) for Dâw (Naduhup, Brasil), and Grinevald (2006) for a broader discussion and a suggestion that this phenomenon is likely explainable by the omnipresence and frequent use of the hammock in this part of the world (p. 38).

A third notable aspect of the system of AP affixes is its strict parallel patterning with the system of inflectional AM affixes in terms of their formal realization – they are all circumfixes filling the same obligatory morphological slots in the verb predicate structure; they all involve the same prefix *e-* – as well as their aspectual meanings – they all express the aspectual category of imperfectivity (progressive, iterative, habitual or generic) – and discourse function – backgrounding, visible, for instance, in semantically redundant “echo constructions” (see (19) and (20) and footnote 16). These common properties suggest that historically both systems arose out the same source construction, an observation that is congruent with cross-linguistic findings that motion and posture verbs often pattern together in the same multiverbal constructions, as in, for instance “asymmetrical” serial verb constructions, where they are cross-linguistically the most likely types of verbs to occur (Foley & Olson 1985: 41; Aikhenvald 2006: 47). They also plead for recognition in general / typological linguistics of associated posture, like associated motion, as a verbal spatial grammatical category (that can be present in certain languages) and a comparative concept in typology (in the sense of Haspelmath 2010), referring to **grammatical morphemes that are associated with the verb and that have among their possible functions the coding of postural meanings**. Such a recognition would open up a new field of typological research aiming at exploring the phenomenon of associated posture in its own right. AP systems in the languages of the world could be surveyed and methodically compared along the following lines of inquiry, following the way the phenomenon of AM has been investigated during the past decade (Guillaume 2013a; 2016; 2017a; Guillaume & Koch 2021b; Ross 2021):

- geographical distribution across the world, across linguistic areas, across language families

- requisite parameters for their description : postural distinctions (any posture besides ‘sit’, ‘stand’, ‘lie’ and ‘hang’ ?) ; TAM (or other non-postural) meanings co-expressed with AP (any aspect besides imperfective ?) ; argument of the verb concerned with the posture (any other argument than the subject ?) ; temporal relation between entering/being in/exiting the posture and the realization of the verb event... (any besides concurrent ?)
- degree of elaboration / complexity : number of contrasting values in the system
- interaction with other verbal categories : TAM, AM, direction, spatial distribution, static location, transitivity, voice... ; any ‘pure’ AP system (not co-expressing any TAM – or other types of – meanings)?
- types of verbal lexemes possible with AP
- relation with lexical expressions of posture in the same language
- discourse-pragmatic functions
- typological generalizations / hierarchy of parameters making predictions in the way AP systems are structured cross-linguistically
- possible etymologies and sources constructions
- the evolution into non-AP markers
- correlation with the sociocultural and geographical environment of the speakers

Finally, the Tacana **inflectional AM and AP affixes**, taken together, are relevant to the typological studies of inflectional aspect, in particular of the imperfective type (used in the sense of Comrie 1976; Bybee, Perkins & Pagliuca 1994, that is, encompassing the meanings of progressive, iterative, habitual and generic). From this perspective, their most noteworthy characteristic is the unusually elaborated (ninefold) system that they form by means of co-expressing, for eight of its members, imperfective aspect with spatial meanings taken from two distinct categories, AM (with five values: ‘going’, ‘coming’, ‘going back’, ‘coming back’, ‘wandering’) and AP (with three values: ‘standing’, ‘lying’, ‘hanging’), and having, for its ninth imperfective member, a ‘default’ marker, related to the lexical verb ‘sit’ but with no postural or other spatial meanings, which the speakers use whenever the posture or the motion of the verb subject is not deemed relevant.

## 7 List of non-standard abbreviations

(not in Leipzig Glossing Rules)

|        |   |
|--------|---|
| ( )    | morpheme that does not appear on the surface (in morpheme line) |
| [ ]    | multiple-word constituent                                       |
| ABIL   | abilitative   |
| ASF    | adjective suffix (semantically empty)                           |
| ASSC   | associative   |
| COMPAS | compassion  |
| CONTR  | contrastive   |
| DEPREC | depreciative  |
| DESID  | desiderative  |
| DIM    | diminutive  |
| DUBIT  | dubitative  |
| EX     | existential   |
| EXCLAM | exclamative   |
| INTENS | intensifier   |
| INTJ   | interjection  |
| MID    | middle  |
| NPF    | noun prefix (semantically empty)                                |
| PERL   | perlative   |
| PROP   | propriative   |
| PTC    | discourse particle (exact meaning unknown)                      |
| REITR  | reiterative   |
| RES    | resultative   |
| RESTR  | restrictive   |
| SP     | spanish loan  |
| SP     | species   |
| SS     | same subject  |
| TDM    | temporal distance marker  |
| TMP    | temporal adverbial clause                                       |
| VPF    | verb prefix (semantically empty)                                |

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