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ANNAMARIA BARTOLOTTA

*On the typology of motion events in Aymara*

**ABSTRACT:** This paper investigates the lexicalization pattern of motion events in Aymara, an Andean language spoken in Bolivia, Peru, and Chile. After providing a description of the morphosyntax of translational motion events, this study aims at a preliminary typological classification of Aymara within the framework of Talmy's typology (Talmy 2000). With this purpose, three diagnostic tests have been used to determine the basic framing-typology of motion events. These tests consider i) the size of manner-of-motion lexicon and, more broadly, the degree of manner salience, ii) the complex-path constructions and the use of 'plus-ground' clauses, iii) the expression of boundary-crossing. The results of this analysis are in line with predictions of expected values according to Talmian typology, and suggest that Aymara is a predominantly satellite-framed language.

**KEYWORDS:** Talmy's framing typology; lexicalization patterns; manner salience; complex-path; boundary-crossing.

1. Introduction

As far as I know, no attempt has been made toward a typological classification of Aymara with reference to motion events encoding. The aim of this study is to give a first account of the morphosyntax of translational motion events in Aymara, with the ultimate goal of a preliminary typological classification of this language within the theory of lexicalization patterns proposed by Talmy (1985; 1991; 2000). Before analysing the data, this section provides a brief outline of the theoretical framework used in this work. According to Talmy, the translational motion event involves four main internal semantic components, namely the **FIGURE**, which is the moving object or entity changing its location with respect to a reference object called **GROUND**; the component of **MOTION** itself, which indicates the presence of motion, and the **PATH** or trajectory of motion along which the **FIGURE** is moving. Additionally, another external semantic component may be added to the motion schema, i.e. an associated co-event of **MANNER**, which specifies how the **FIGURE** is moving, or the co-event of **CAUSE** of motion. Talmy (2000: 28) distinguishes three types of translational motion, according

to the agentivity of the FIGURE. In the non-agentive motion, the FIGURE has no control over its motion, which is not triggered by some explicit cause, as in (1):

- (1) *The ball rolled down the hill*  
 [Figure] [Motion+Manner] [Path] [Ground]

In the agentive motion type, instead, the motion is triggered by an explicit external cause, and the FIGURE has no control over its motion, as illustrated in (2):

- (2) *I rolled the ball down the hill*  
 [Cause] [Motion+Manner] [Figure] [Path] [Ground]

In the self-agentive motion, the FIGURE has control over its motion, as shown in (3):

- (3) *I ran down the hill*  
 [Figure] [Motion+Manner] [Path] [Ground]

This paper aims at describing the lexicalization pattern of translational motion events in Aymara, by focusing on self-agentive motion. As is well-known in the literature on motion events, Talmy's typological classification splits the world languages into two main types, according to the different conflation patterns of semantic components in the motion schema. Specifically, in the satellite-framed languages (S-languages) PATH tends to be expressed by satellites (such as affixes, cases, verb particles, prepositions, adverbs, etc.) out of the verb root, whereas MANNER is conflated in the main verb (conflation of MOTION + MANNER), as seen in example (1) from English. In the verb-framed languages (V-languages), PATH is expressed by the main verb (conflation of MOTION + PATH) and MANNER of motion appears as an optional element, such as an adverb, a gerund, etc., as can be seen in the example (4) from Spanish.

- (4) *La niña entró bailando*  
 [Figure] [Motion+Path] [Manner]

Although in the last decades an increasing number of studies has discussed the validity of such a two-way classification (see, among others, Croft *et al.* 2010; Slobin 2004; Filipović & Ibarretxe-Antuñano 2015; Ibarretxe-Antuñano & Hijazo-Gascón 2012; Fortis & Vittrant 2016), which in fact has been successively developed and integrated, Talmy's framing classification nevertheless still represents a basic tool for typological analysis of motion events. Of course, no rigid boundary can be drawn between typological types. However, a coherent correlation has been found between the lexicalization pattern of motion events and a number of morphosyntactic and lexical features. More specifically, Talmy's typology sheds light on crosslinguistic differences with respect to features such as the following: i) the size of manner-of-motion verb lexicon, and the related degree of manner salience (Slobin 2004: 251); ii) the encoding

of ‘complex-path constructions’, involving ‘plus-ground’ (vs ‘minus-ground’) verbs that may co-occur not only with satellites of PATH, but also with one or more lexical (prepositional, nominal, adverbial, etc.) phrases indicating the GROUND, i.e. source or/and goal (Slobin 1996: 201; 2004); iii) the existence of a ‘boundary-crossing constraint’ (Slobin & Hoiting 1994; Slobin 1997: 441), according to which V-languages cannot use manner verbs + directional particles when a boundary-crossing motion is to be expressed. In the following sections I will focus on these features, which will serve as diagnostic tests to define the basic framing-typology of motion events in Aymara. This paper is structured as follows. Section 2 presents a brief preliminary introduction to the Aymara language, focusing on the syntax of motion events (2.1). Corpus and methodology are presented in 2.2, dwelling on some problems in the analysis due to the sociolinguistic characteristics inherent to Aymara. Section 3 shows how the semantic components of motion events map into the morphosyntactic structures of the language. After describing the lexicon of motion verbs, I will consider the degree of manner salience (3.1), the ability to use complex-path constructions with related ‘plus-ground’ clauses (3.2), and the lexicalization of boundary-crossing (3.3). The concluding section (4) contains final remarks concerning the results of this analysis, and gives suggestions for further studies on this topic.

## 2. Constructing motion events in Aymara

So far, previous studies on Aymara have never been specifically concerned about motion event constructions. The only case study investigated within the Talmian framework is very recent (Bartolotta & Quartararo 2019) and concerns the asymmetric path-conflation pattern shown by the two basic motion verbs *juta* ‘come’ and *sara* ‘go’.<sup>1</sup> Before analysing the encoding strategies of translational motion events in Aymara, let us briefly summarize the salient features of this language.

### 2.1. Mapping the semantic components of motion into morphosyntactic structures

Aymara is part of the Aymaran family (Adelaar with Muysken 2004: 259), one of the two most ancient and dominant Amerindian families of the central Andes, along with Quetchuan. It is spoken in Bolivia, Southern Peru and Northern Chile, with

1. In particular, the motion verbs *juta* ‘come’ and *sara* ‘go’ show a different behavior with respect to the conflation of the Deictic component of PATH, which is assumed to be part of their lexical semantics from a typological perspective. In fact, these two verbs in Aymara, as has also been observed for other non-Indo-European languages (and for ancient Indo-European languages as well), are shown to be not deictically complementary within a two-element subsystem. More specifically, ‘come’ does inherently entail deictic motion toward the speaker, whereas ‘go’ indicates generic motion along a path at a lexical semantic level and expresses PATH through morphological (derivational suffixes, case endings), syntactic (spatial NPs, adverbs), and pragmatic contexts.

regional variations (Briggs 1976; 1981). All dialects of Aymara seem however to be mutually intelligible (Briggs 1976: xv; Hardman 1981: 8; 2001: 2). From a typological perspective, it is a nominative-accusative language (Cerrón-Palomino 2008: 181), with an agglutinative suffixing morphology (Cerrón-Palomino 2008: 97; Coler 2014: xii), a predominant SOV word order (Cerrón-Palomino 2008: 183), and a modifier-head construction (Adelaar with Muysken 2004: 274). The verbal system is characterized by a very rich derivational morphology, especially with reference to spatial categories. In fact, the semantic components of motion may be distributed over different lexical and morphological elements. In particular, the semantic component of PATH can be expressed by means of both verb derivational suffixes and noun case markers, thus resulting overtly distributed over five different form classes, i.e. motion verb roots, derivational suffixes, case endings (accusative, allative, ablative, genitive/locative, limitative, perlative), uninflected nouns, and deictic spatial adverbs.<sup>2</sup> The semantic component of MANNER can be overtly distributed over six different form classes, i.e. motion verb roots, case markers (comitative, comparative, ablative), adverbs, uninflected nouns, adjectives, and derivational suffixes (cf. footnote n. 12 below). Each verb exhibits both derivational and inflectional suffixes, although only the latter are compulsory, indicating person, tense, and mood. As far as motion encoding is concerned, there is a high number of verbal derivational suffixes involved in spatial expressions, which show a high productivity. These suffixes, which occur in the slot closest to the verb root and always precede the inflectional suffixes, are traditionally classified into two groups (Adelaar with Muysken 2004: 278; Coler 2014: 293). The first group includes the directional suffixes *-nta-* ‘inward’, *-su-* ‘outward’, *-qa-* ‘downward’, *-ta-* ‘upward’, *-ja-* ‘atop’, whereas the second group involve suffixes denoting different types of spatial location, such as *-kata-* ‘motion across’, *-kipa-* ‘contouring motion or perifactive’, *-muku-* (or *-nuku-*) ‘distancer’, *-naqa-* ‘diffuse motion’, *-tata-* ‘dispersal motion, motion in all directions’, *-tapi-* ‘gathering motion’, *-xata-* ‘atop, above’, *-ni-* ‘cislocative; translocative’, *-waya-* ‘distancer, separation; action performing in passing’ (Adelaar with Muysken 2004: 280). As will be shown in section 3, each motion verb may include one or more derivational suffixes describing the semantic component of PATH, which in turn may be segmented into more than one complement as a GROUND, specifying for the same event both the goal and the source of motion. Beside this rich set of spatial locative and directional verb suffixes, all documented varieties of Aymara exhibit a rich noun case marking morphology, with at least twelve case suffixes.<sup>3</sup> In particular, the morphological cases encoding the GROUND component of PATH are the following: the allative *-ru* (5), the zero-marked

2. For the distributed spatial semantics in fully specified motion constructions and its role within Talmy’s typology see Sampahó *et al.* (2009).

3. As has been pointed out (Coler 2014: 198), the number of cases could be 13 or even 14, if we consider that not only the allative and the dative, but also the genitive and the locative are expressed by an identical suffix, respectively *-ru* and *-na* (see also Cerrón Palomino 2008: 120).

accusative  $-\emptyset$  (6), and the limitative *-kama* ‘until to’ (7) encode the goal of motion, the ablative *-ta* encodes the source of motion (8), the perlocative *-kata* encodes the traversal of path (9) (see Talmy 2000: 53).

(5) (Quartararo 2017: 96)

*masüru-x(a) qhathu-ru-w(a) sar(a)-ta*  
 yesterday-TOP fair-ALL-DECL go-1SIM  
 ‘Yesterday I went to the fair’

(6) (Coler 2014: 211)

*qull(u)- $\emptyset$  sar(a)-t(a)-x(a)*  
 mountain-ACC go-1SIM-TOP  
 ‘I went to the mountains’

(7) (Coler 2014: 241)

*China-kam(a) sara-xa-x(a)*  
 China-LIM go-1FUT-TOP  
 ‘I’ll go as far as China’

(8) (Cerrón Palomino 2014: 124)

*Punu-t(h)a jut-t(h)(a)-wa*  
 Puno-ABL come-1SIM-DECL  
 ‘I come from Puno’

(9) (Coler 2014: 249)

*uka-t(a) jani-w(a) sara-wj(a)-t(a)-t(i) kha-kat(a)*  
 then-ABL no-DECL go-BFR-1SIM-NEG yonder-PT  
 ‘And I never went across yonder (again)’.

The genitive/locative case *-na* generally expresses a spatial locative meaning, as illustrated in (10).

(10) (Coler 2014: 241)

*uka qullu-naka-n(a) ya sinku-si-ni-w(a)-ch(i)-(i)*  
 that mountain-PL-LOC DIS fall-REFL-H-COMPL-DUB-3SIM  
 ‘In those mountains he must have fallen’.

As far as the semantic component of MANNER is concerned, the nominal cases which express the way (or the instrument with which) the FIGURE moves are the instrumental-comitative *-mpi* (11), the comparative *-jama* (12), but also the ablative *-ta* (13).

(11) (Coler 2014: 197)

*kumun(a)-pacha-w(a) musiku-mp(i) uka wila-mpi-w(a)*  
 community-INC-DECL band-COM that candle-COM-DECL

*inlis(a)-∅ sar(a)-t'a-wj(a)-tan-x(a)*  
 church-ACC go-MOM-BFR-1INCL.SIM-TOP  
 'The entire community. With the band with the candle  
 we go to the church'

(12) (Bartolotta & Quartararo 2019: 114)

*Mä jisk'a animal-it(u)-jama khuchhi-sit(u)-jama*  
 one small animal-DIM-CP pig-DIM-CP

*sar(a)-naqa-yat(a)-xa*  
 go-DF-1EP-TOP  
 'I walked like a small animal, like a piglet'

(13) (Bartolotta & Quartararo 2019: 110)

*Aka-ta buti-t(a) Ch'ililay sara-p.x(a)-pacha-xa*  
 this-ABL boat-ABL Chililaya go-PL-3INFR-TOP  
 'From here he must have gone by boat to Chililaya'.

Before analyzing the data related to motion encoding strategies in Aymara, let us describe the corpus sample used in this study.

## 2.2. Selecting the language sample

One of the main difficulties with selecting a corpus of Aymara lies in the peculiar sociolinguistic situation of this language. In fact, Aymara is spoken by different communities located primarily in the high Andean plains of Bolivia, Peru and Chile, being thus characterized by a certain degree of regional variation. As a consequence, although all dialects share basic morphosyntactic structures and seem to be mutually intelligible, some differences mostly occur at phonological and morphological level (cf. Briggs 1976: xv; Hardman 1981: 8; 2001: 2; Coler 2015: 522).<sup>4</sup> This variation makes it difficult to create a corpus sample which is consistently uniform and homogeneous, unless one decides to refer to one specific dialect only. However, since the aim of this study is to give a first account of the typology of motion events in Aymara, an investigation on more than one dialectal variety about the main strategies used by native speakers seemed more useful in order to build a broad typological outline. For this reason, in this study I have considered different sources, related to different regional varieties. Some slight phonetic or morphological differences in the data are thus possible, although not frequent, and are eventually explicitly indicated. Another main difficulty in creating a significant sample of analysis is due to the traditional oral character of this language. Indeed, since the colonial times «the Spanish

4. As has been pointed out by Briggs (1976: 15), «differences among Aymara dialects have always been considered minor from colonial times to present».

found no written materials in the languages of the Inca Empire» (Briggs 1979: 87).<sup>5</sup> Even today, the written literary production by native Aymara speakers is quite scant, recent and limited to popular songs and folk tales (Albò & Layme 1992: 16; see also Yapita 1981). Given these considerations, data sources for this study range from existing grammars, dictionaries, linguistic studies, but also oral narratives elicited through interactive tasks, administered to native speakers of La Paz and El Alto in Bolivia (Quartararo 2017; Bartolotta & Quartararo 2019). More in detail, the main reference grammars are Hardman (2001), mostly based on the Bolivian dialects of La Paz, Coler (2014), which describes the southern Peruvian dialect of Muylaque, but also the first grammar of Aymara written by the Italian Jesuit Ludovico Bertonio (1603), which is based on the southern Peruvian dialect of Lupaca, and still contains a wealth of useful information about both the lexicon and the morphosyntactic properties of the language. Reference dictionaries are mostly Bertonio (1612) and Layme Pairumani (2015). Among the linguistic studies are Adelaar with Muysken (2004), Cerrón-Palomino (2008), Briggs (1976), besides more specific case studies such as Haude (2003), on the directional suffix *-su*, and Segura (2011), on verbal derivational suffixes in the southern Peruvian dialect of Pomata. Needless to say, given the limits of the selected sample, this study does not claim to be exhaustive. Nonetheless, significant linguistic results can be obtained from a closer scrutiny of corpora of limited size. The next section (3) will show how the Aymara language behave with respect to some specific diagnostic criteria used to determine the typology of motion events.

### 3. Applying diagnostic tests toward a typological classification

This section is devoted to the analysis of translational motion encoding strategies in Aymara, focusing in particular on the following features: the size of the manner-of-motion verb lexicon, and the lexicalization of the MANNER component outside the verb root (3.1); the complex-path encoding, involving more than one path segment attached to the main verb, which allows ‘plus-ground’ constructions (3.2); the expression of ‘boundary-crossing’ (3.3). These features will serve as reliable tests towards a preliminary attempt at classifying Aymara within Talmy’s framing typology.

#### 3.1. The Aymara motion verb lexicon and the expression of MANNER

As is widely held (see, among others, Slobin 2004: 220, Ibarretxe-Antunano 2004: 91), there exists a strong correlation between motion verb lexicon and typology of PATH and MANNER encoding in a language. Specifically, S-languages tend to exhibit a rich

5. It is generally assumed that Incas did not use a writing system in a traditional sense, but only knotted threads in bundles of cords, called *quipus*, in which information (mainly administrative and economic) was conveyed by the number, position, size, and color of knots and cords (cf. Adelaar and Muysken 2004: 254; Locke 1912).

inventory of path satellites that can be added to a single verb, thus allowing for a detailed description of the semantic component of PATH in the sentence. In addition, since the verb slot is made available for the expression of the component of MANNER, S-languages usually show a rich and variegated manner-of-motion verb lexicon. This in turn may also imply that, being the semantic space dedicated to the component of MANNER more saturated, speakers tend towards more fine-grained distinctions (Slobin 2004: 237). Put in other words, S-languages not only conflate MOTION and MANNER in the main verb, but also add further manner specifications outside the verb root, thus exhibiting a high degree of manner salience (cf. Slobin 2006). On the other hand, V-languages conflate MOTION and PATH in the main verb, expressing the manner by means of adjunct elements, such as adverbials, gerunds, participles, and the like. Therefore, differently from S-languages, V-languages tend to show a less rich manner-of-motion verb lexicon,<sup>6</sup> generally paying less attention to the semantic component of MANNER than S-languages. Such low-manner salience has been ascribed to many factors (Slobin 2004: 223), from the ‘boundary-crossing constraint’, according to which manner verbs cannot describe boundary-crossing events (see below 3.3), to the high-cost process of encoding MANNER through subordinated elements instead of using a manner-of-motion verb. Let us now examine the mapping of PATH and MANNER to morphosyntactic expressions in Aymara. First, the motion verb lexicon turns out to be extremely rich of manner-of-motion verbs. Since the colonial times, Bertonio’s dictionary gives indeed evidence of the richness and variety of manner verbs, which is normally a cue for the identification of S-languages. Aymara speakers appear to pay particular attention not only to the trajectory (PATH), which is expressed by means of a rich set of directional suffixes added to the main verb, but also to the MANNER of motion, according to the diverse modalities with which they move. To quote precisely an example found in Bertonio’s dictionary (1612: 48), Aymara speakers made distinction among different ways of walking. Thus, alongside the generic or bare motion verb *sara* ‘move, go’, also meaning ‘walk’, numerous manner-of-motion verbs formed a very expressive lexicon according to different ways of moving or walking, such as, for example, *ccochutha* ‘to walk all together’, *ccuycutha* ‘to walk head down’, *chullchutha* ‘to walk with difficulty’, *hithitha* ‘to walk dragging’, *kaymasitha* ‘to walk restless’, *llaullitha* ‘to move like a worm’, *lattatha* ‘to move like a toad; to walk like a cat’, *mullttitha* ‘to move like a snake’, *ñukhñutha* ‘to walk step by step without being heard’, *ñuquitha* ‘to walk around like a strengthless child’, *thayllitha* ‘to walk non-stop to obtain something’, *ttikhuttikhutha* ‘to walk without interruption’, and so on. Second, the component of MANNER could also be expressed twice, by adding a lexical element to a manner-of-motion verb, as for example in *huayhuaqui halatha* ‘to run as light as the wind’ (Bertonio 1612: 49).<sup>7</sup> Although today some of these manner-of-motion verbs

6. Of course, there are not rigid classification types, and both intra- and inter-typological variation can be observed among languages (Ibarretxe-Antuñano 2009: 404).

7. For a complete list of manner-of-motion verbs see Bertonio’s dictionary (1612).

are no longer used or have been replaced by new verbs, Aymara speakers still exhibit an extraordinary rich and expressive manner verb lexicon, as can be seen in any modern dictionary (cf. Layme Pairumani 2015), confirming how significant motion is in their life. This is hardly surprising, as they are primarily an agricultural people, living in the vast area of the Altiplano (highlands) around Lake Titicaca extending from Peru to Bolivia and Chile. Therefore, land is of extreme importance in everyday life, as they are predominantly farmers or herders, and have traditionally traded over a wide area (Briggs 1976: 5), moving very frequently among villages, ploughed fields and cities, where they sell their products. For this reason, they pay particular attention to both PATH, which depends on the long distances and the type of road (downhill, uphill), and MANNER, which closely depends on space (traversing the Altiplano through difficult or flat terrain), time (walking quickly or slowly), and mostly on carrying loads (see Cuelenaere 2011). Let us now consider some examples, which show how the description of motion events may involve attention not only to PATH but also to MANNER outside the verb root.

(14) (Coler 2014: 324)

*llaki llaki-w(a) sar(a)-naqa-s.k(a)-i-x(a)*  
 sorrow sorrow-DECL go-DF-PROGR-3SIM-TOP  
 ‘Sorrowful he is walking about’

(15) (Bartolotta & Quartararo 2019: 114)

*Uk(a)-jam(a) wiskh(u)-itu-mpi sar(a)-naqa-p.x(a)-ta*  
 that-CP sandal-DIM-COM go-DF-PL-1SIM  
 ‘In that way, we walk about with sandals’

(16) (Bartolotta & Quartararo 2019: 121)

*Uka-t(a) iwija-x(a) k’achat(a) sara-qa-way(a)-x(a)-i*  
 that-ABL sheep-TOP slowly go-DW-DIST-COMPL-3SIM  
 ‘Then the sheep goes slowly down’

(17) (Coler 2014: 337)

*kawallu-n(a)-x(a) liju sill(a)-xata-t(a) sara-wj(a)-ch(i)-i-x(a)*  
 horse-LOC-TOP all sit-above-RE go-COMPL-DUB-3SIM-TOP  
 ‘Nicely seated on horseback, he must have gone’.

From (14) to (16) the component of PATH is expressed by derivational suffixes, namely *-naqa-* ‘diffuse motion’ in (14)-(15), which refers to motion performed in various directions (see, among others, Cerrón Palomino 2008: 155), and *-qa-* ‘downward’ in (16). Differently, in (17) it is the aspectual completive suffix *-wja-* that expresses the deictic centrifugal motion (away from the speaker), by indicating PATH bounded at start (cf. Bartolotta & Quartararo 2019: 122). In these examples the component of MANNER co-occurs with the bare motion verb *sara* ‘go’, albeit through different lexical and morphological strategies. Specifically, it is expressed through the

reduplicated noun phrase *llaki* ‘sorrow, sadness’ in (14)<sup>8</sup>, the comitative case marking *-mpi* in (15), the adverb *k’achata* ‘slowly’ in (16), and the participle formed with the nominalizer resultative suffix *-ta* added to the subordinate verb *silla* ‘sit’ in (17) (cf. Cerrón Palomino 2008: 132). When a path verb is used in the sentence, the manner is likely to be added as well, as illustrated from (18) to (22).

(18) (Coler 2014: 584)

*tarti-ru-x(a) lij(u) kulira-t(a) juta-wj(a)-ch(i)-i-x(a)*  
 afternoon-ALL-TOP much anger-ABL come-COMPL-DUB-3SIM-TOP  
 ‘In the afternoon she must have returned very angry’

(19) (Coler 2014: 496)

*uk(a)-jama-w(a) jut(a)-t’a-si-ph(a)-iri-v-tayna-x(a)*  
 that-CP-DECL come-MOM-REFL-PL-AG-VBZ-3DIS-TOP  
 ‘That is how they used to come’

(20) (Bartolotta & Quartararo 2019: 130)

*Uma-nta-ta-x(a) jut(a)-xa-rak(i)-i-wa*  
 drink-IW-RE-TOP come-COMPL-ADD-3SIM-DECL  
 ‘He also came drunk’

(21) (cf. Adelaar with Muysken 2004: 298)

*uka-t(a) nayra.qat(a) ch’axw(a)-ir(i) sultaru-w(a)*  
 that-ABL in front fight-AG soldier-DECL

*uny(a)-s(i)-ta-ni-p-x(a)-itu, q’ala thantha-w(a) puri-ni-na*  
 see-REFL-UW-H-3POSS-COMPL-3>1SIM all ragged-DECL arrive-H-3EP  
 ‘Then, soldiers who had been fighting earlier appeared before us, they arrived totally in rags’

(22) (Coler 2014: 380)

*wali-ki-ras(a) pur(i)-t’a-ni-wj(a)-t(a)-x(a)*  
 good-DL-CFY arrive-MOM-H-COMPL-1SIM-TOP  
 ‘Yes, I already arrived just fine’.

In all the passages above, the path verb co-occurs with the component of MANNER, which is encoded through different strategies. From (18) to (20) the motion event involves the deictic verb *juta* ‘come’, indicating motion toward the speaker, and the component of MANNER expressed by respectively the noun phrase *kulira* ‘anger’ marked with the ablative case *-ta-* (18), the demonstrative *uka* ‘that’ suffixed with the

8. On reduplication in Aymara see Hardman (2001: 200).

comparative case *-jama-* (19), and the participle *uma-nta-ta* ‘drunk’ in (20). Additionally, the component of MANNER in (19) is put in focus by the suffix *-wa* (see Coler 2014: 538). The path verb in the examples (21)-(22) is *puri* ‘arrive’, while the manner of motion is conveyed by the adjectives *thantha* ‘ragged’ (21), focused by the suffix *-wa*, and *wali* ‘good’ (22), emphasized by the delimitative suffix *-ki-*.<sup>9</sup> Also, the component of MANNER can be expressed twice, both in the main verb and outside the verb root, as in the example below (23), where the manner-of-motion verb *jala* ‘run’ co-occurs with the manner adverbial *mayaki* ‘suddenly’.

(23) (Coler 2014: 295)

*maya-ki-w(a) kuintinawu-x(a) jala-q(a)-ta-ni-jwa-tayna-xa*  
 one-DL-DECL ghost-TOP run-DW-UW-H-COMPL-3DIS-TOP  
 ‘Suddenly the ghost fell down’.<sup>10</sup>

Moreover, Aymara shows a further strategy to express MANNER, i.e. the use of sound symbolism. From a typological perspective, it is worth noting that the use of adverbial ideophones has been associated to a specific syntactic word order cross-linguistically (Slobin 2004: 234), which is the verb-final order that can also be found in Aymara. Ideophones occurring early in the sentence might indeed facilitate attention to MANNER by virtue of their ease of processing, as can be seen in (24).

(24) (Coler 2014: 770)

*wali lat'(a)-xata-t(a) patikin patikin patikin kha-n(a)*  
 good mount-above-RE patikin patikin patikin yonder-GEN/LOC

*pampa(a)-Ø-x(a) jala-ni-wj(a)-ch(i)-i-x(a)*  
 pampa-ACC-TOP run-H-BFR-DUB-3SIM-TOP  
 ‘Nicely mounted – *patikin, patikin, patikin* – he must have run  
 (on horseback) from yonder pampa’.

In (24) the manner of motion is not only lexicalized in the main verb *jala* ‘run’, but also in the subordinate verb (participle) *lat'a-xata-ta* ‘mounted above (a horse)’ accompanied by the adverb *wali* ‘well’. What is more, it is also reinforced by the triplicated ideophone *patikin patikin patikin*, expressing the sound made by a horse’s hooves.<sup>11</sup>

9. For a description of the delimitative suffix *-ki-* and its emphasiser meaning see Coler (2014: 522). The suffix *-rasa* (*wali-ki-rasa*) seems to be attested only in the variety of Muylaq' Aymara, where it is used to emphasize the veracity of a declaration (Coler 2014: 554).

10. It is worth noting that in (23) the manner verb root *jala* ‘run’ is derived with multiple path elements, namely *-q(a)-* ‘downward’, *-ta-* ‘upward’, *-ni-* ‘hither’, a trait that is typical of S-languages (see also § 3.2 and § 3.3 below).

11. Although it had been argued that it would play a major role in V-languages rather than in S-languages

In sum, the examples in this section show that MANNER is highly accessible in Aymara, as it can be encoded not only through the main verb, but also through a number of lexical (e.g. adverbs, adjectives), morphological (e.g. case marking, derivational suffixes), syntactic (e.g. reduplication), and iconic (e.g. ideophones) strategies.<sup>12</sup> Indeed, the expression of MANNER outside the main verb in Aymara shows a wide variety in both the lexicalization pattern, i.e. in the grammatical categories used to convey the information of manner, and the type of information conveyed, which can refer to (i) motor pattern, e.g. *kawallu-na-x(a) silla-xata-ta* ‘seated on horseback’, (ii) rate or speed of motion, e.g. *mayaki* ‘suddenly’, (iii) means of transport, e.g. *wiskh(u)-itu-mpi* ‘with sandals’, (iv) protagonist’s inner state, e.g. *kulira-ta* ‘angry’ (cf. Ibarretxe-Antuñano 2012: 8). Given these considerations, it is clear that the manner salience is not restricted to motion verbs, but it involves several levels of lexicalization. Therefore, the degree of manner salience in a language should be assessed by the size and diversity of manner expressions (Slobin 2006: 64), and not only by a single parameter based on the lexicalization pattern of MANNER conflated in the main verb root *vs* a ‘separate’ element, like subordinate verbs (e.g. gerunds, participles), adverbs, etc. (see Akita 2017: 45). As has been pointed out, «conflation patterns alone are unlikely to provide the entire explanation for the patterns observed, which also depend on distributed mappings of space, motion and manner elements to diverse, multiple form classes» (Sampaio *et al.* 2009 : 657).

### 3.2. Complex-path constructions and ‘plus-ground’ verbs

It is widely held that S-languages tend to encode more path segments, such as SOURCE, GOAL and also intermediate ‘way-stations’ or TRAVERSAL, in Talmy’s (2000: 53) terms, than V-languages (Slobin 1996: 202; 2004: 239), where the use of complex paths is quite restricted and source and goal are hardly encoded in the same motion event description. Furthermore, S-languages tend to elaborate PATH by accumulating more satellites than V-languages (see Berthele 2013: 60), where no more than one path element is added to the main verb. Therefore, S-languages typically show ‘plus-ground’ verbs, i.e. verbs co-occurring not only with path satellites but also with complements of path. Let us observe how Aymara behave with respect to the complex-path diagnostic test. As regards the encoding of path segments, the following examples show that Aymara speakers commonly describe source, goal and intermediate segments of PATH as well.

(Slobin 2004: 235), the use of ideophones has been shown more recently to be a parameter that is independent from the framing typology (Akita 2017).

12. Interestingly enough, another accessible slot made available for MANNER in Aymara may be in the path verb, which can undergo a derivational process by adding suffixes that encode manner information, usually after a metaphorization that starts from their spatial meaning. For instance, in the variety of Pomata, the derivational suffix *-ta-* ‘upward’ may develop a manner meaning, such as in *kuti* ‘return’ > *kuti-ta* ‘return suddenly’, *puri* ‘arrive’ > *puri-ta* ‘(the rain) arrive(s) suddenly’ (Segura 2011: 171).

- (25) (Bartolotta & Quartararo 2019: 124)  
*Chacha warmi sara-p.xa-na Oruru-t(a) Potosi-kam(a) sara-p.xa-n(a)*  
 man woman go-PL-3EP Oruro-ABL Potosi-LIM go-PL-3EP  
 ‘Husband and wife went, they went from Oruro until Potosi’
- (26) (Haude 2003: 14)  
*Jupa-x(a) t’uxu-t(a) punku-ru phaphalli-s.k(a)-i*  
 he-TOP window-ABL door-ALL go.on.tiptoe-PROGR-3SIM  
 ‘He goes on tiptoes from the window to the door’
- (27) (Haude 2003: 11)  
*Jupa-x(a) uta-pa-t(a) qhatu-ru jala-s.k(a)-i*  
 he-TOP house-3POSS-ABL market-ALL run-PROGR-3SIM  
 ‘He runs from his house to the market’
- (28) (Coler 2014: 212)  
*uka pampa-t(a) ma.nta-nta-jwa-ñ(a) q’awa-k(i)-∅*  
 there pampa-ABL enter-IW-BFR-ANMZ gorge-DL-ACC  
 ‘From that pampa one enters the gorge’
- (29) (Coler 2014: 199)  
*uka qullu-naka-n(a) ya sinku-si-ni-w(a)-ch(i)-(i)*  
 that mountain-PL-LOC DIS fall-REFL-H-COMPL-DUB-3SIM
- jaya-ru-w(a) jaqhi-t(a) jut(a)-iri-x(a) s(a)-i-w(a)*  
 far-ALL-DECL gulch-ABL come-AG-TOP say-3SIM-DECL  
 ‘In those mountains, it seems he fell far from the gulch they say’.

In (25) the bare motion verb *sara* ‘go’ is accompanied by two pieces of path information, i.e. the SOURCE marked with the ablative (*Oruru-ta* ‘from Oruro’) and the GOAL marked with the limitative case (*Potosi-kama* ‘until Potosi’). Similarly, examples (26) and (27) show the manner-of-motion verbs *phaphalli* ‘go on tiptoe’ (26) and *jala* ‘run’ (27) co-occurring with SOURCE, marked with the ablative *-ta-* (*t’uxu-ta* ‘window’ and *uta-pa-ta* ‘his house’ respectively) and GOAL, marked with the allative *-ru* (*punku-ru* ‘door’ and *qhatu-ru* ‘market’ respectively). The path verbs *ma.nta-nta* ‘enter’ (28) and *juta* ‘come’ (29) are accompanied as well by SOURCE, marked with the ablative (*pampa-ta* ‘pampa’ and *jaqhi-ta* ‘gulch’ respectively) and GOAL, marked with the accusative  $\emptyset$  plus the delimitative *-ki-* (*q’awa-k(i)-∅* ‘gorge’) in (28), and with the allative (*jaya-ru* ‘far’) in (29). Let us now compare the examples (30) and (31) below.

- (30) (Coler 2014: 242)  
*Muylaq’(i)-kam(a) Sijway(a)-kam(a) pur(i)-t’(a)-pay(a)-t(a)-xa*  
 Muylaque-LIM Sijuaya-LIM arrive-MOM-MLT-1SIM-TOP  
 ‘I arrived until Muylaque and Sijuaya’

(31) (Coler 2014: 242)

*Muylaq'i-mpi-r(u) Sijwaya-mpi-r(u) pur(i)-i-xa*  
 Muylaque-COM-ALL Sijuaya-COM-ALL arrive-3SIM-TOP  
 'They arrived until Muylaque and Sijuaya'.

The difference between (30) and (31) lies in goal-marking inflection. In fact, in both examples the same path verb *puri* 'arrive' co-occurs with the same goal, i.e. the two villages of Muylaque and Sijuaya, which however show two different case endings. In (30) *Muylaq'i* and *Sijwaya* are marked with the limitative case *-kama*, indicating that «the speaker arrived only at these two locations, and that he traveled more-or-less directly from his place of origin» (Coler 2014: 242). Instead, in (31) *Muylaq'i* and *Sijwaya* are double marked with the comitative and the allative cases, suggesting that the FIGURE (they) arrived in those villages «after a series of other stops in different places». Therefore, differently from (30), the comitative case is added in (31) to express the intermediate “way-stations” involved in the component of PATH. This accumulation of path satellites to express the intermediate or TRAVERSAL segment is similarly encoded in (32), where the comitative case is added to the allative case-marked goal.

(32) (Coler 2014: 242)

*Juli-mpi-r(u) Ch'uqi.Yap(u)-kama-mpi-ru-w(a) pur(i)-i*  
 Juli-COM-ALL La.Paz-LIM-COM-ALL-DECL arrive-3SIM  
 'He arrived as far as Juli and La Paz'.

The route or TRAVERSAL segment of path is also expressed in (33)-(34), albeit through different case-markings and derivational suffixes.

(33) (Coler 2014: 200)

*aka-t(a) sara-wjwa-ña-x(a) kha Sijwaya-n(a)-jama*  
 here-ABL go-BFR-ANMZ-TOP yonder Sijuaya-GEN/LOC-CP  
*uka-t(a) pasa-nta-jwa-ña-x(a) Kinistakilla-nak(a)-∅*  
 there-ABL pass-IW-BFR-ANMZ-TOP Kinistaquilla-PL-ACC  
 'From here one goes yonder by Sijuaya,  
 and then one passes to Kinistaquillas'

(34) (Adelaar with Muysken 2004: 280)

*iskwila-r(u) sar(a)-ka-sa-x(a) ihli:ša-ru-w(a) ma.nta-way(a)-ta*  
 school-ALL go-INCOMPL-SUB-TOP church-ALL-DECL go.in-DIST-1SIM  
 'On my way to school I entered the church for a moment'.

The motion event described in (33) shows a path segmented into SOURCE, expressed by the ablative-marked NP *aka-ta* 'from here', TRAVERSAL, the intermediate route conveyed by the genitive/locative-marked NP *Sijwaya-na-jama* 'by Sijuaya' added

with the comparative case, and GOAL, conveyed by two different grounds, i.e. the unmarked spatial adverb *kha* ‘yonder’ in the first clause, and the accusative-marked NP *Kinistakilla-nak(a)-∅* ‘to Kinistaquillas’ in the second clause. The motion path thus involves multiple grounds, i.e. departure, traversal, and arrival. The bare motion verb *sara* ‘go’ turns out to be a plus-ground verb, whereas the path verb *pasa* ‘pass’ in the second clause expresses the boundary-crossing by adding an accusative-marked goal NP. In (34) the route or TRAVERSAL segment of path is conveyed by the derivational spatial suffix *-waya-*, which either indicates a separation (see examples below in this section), or an action performed in passing, as is the case here. In his way to school (GOAL) the FIGURE stops indeed for a moment in a church, which constitutes an intermediate segment of the motion path (TRAVERSAL). This segment is conveyed by the allative-marked ground NP *ihli:ša* ‘church’ plus the satellite of path *-waya-* added to the bare motion verb *ma* ‘go, move’. This latter, in turn, underwent a derivational process formed through the addition of the directional suffix *-nta-* ‘inward motion’, which originally served as satellite of path (see footnote 16 below).

Interestingly, a single motion verb may co-occur with more than one goal, as can be seen in the examples from (35) to (38).

(35) (Coler 2014: 212)

*uka-t(a) wal(i) jala-p(h)(a)-ch(i)-i-x(a) ma q'awa-nak(a)-∅ ma*  
 that-ABL much run-PL-DUB-3SIM-TOP one gorge-PL-ACC one

*pampa-nak(a)-∅ pas(a)-ja-jwa-p(h)(a)-ch(i)-i-x(a)*  
 pampa-PL-ACC pass-atop-BFR-PL-DUB-3SIM-TOP  
 ‘And then they ran much, they must have passed  
 by some gorges and some pampas’

(36) (Coler 2014: 216)

*jicha-x(a) chaxlla-ru-rak(i) siwinqa-r(u) sar(a)-t'a-si-pha-tayn(a)*  
 now-TOP huarango-ALL-ADD cortadera-ALL go-MOM-REFL-PL-3DIS

*imilla-nak(a) lluqalla-nak(a)*  
 girl-PL boy-PL  
 ‘Well, the boys and girls also went to the huarango and cortadera’

(37) (cf. Bartolotta & Quartararo 2019: 120)

*Axsar(a)-t'a-sa-mpi-w(a) na-x(a) uka organisiyasiona-r(u) uka*  
 fear-MOM-SUB-COM-DECL 1PRO-TOP that organization-ALL that

*departamela-r(u) Lapasa-ru-x(a) sar(a)-k(a)-t(a)-xa*  
 department-ALL La.Paz-ALL-TOP go-INCOMPL-1SIM-TOP  
 ‘With fear I was going to that organization,  
 to that department, to La Paz’

(38) (Coler 2014: 212)

*jicha-x(a) Qamaqi-x(a) lij(u) parki aynacha amsta parki*  
 now-TOP Fox-TOP all slope descent ascent slope

*q'awa-nak(a)-Ø-s(a) khuy(u)-t'a-s(i)-s(a) sara-wj(a)-ch(i)-i-x(a)*  
 ravine-PL-ACC-ADD whistle-MOM-REFL-SUB go-BFR-DUB-3SIM-TOP  
 'And so, Fox must have gone whistling on all the slopes, ascents,  
 descents, mountainsides, and even in the ravines'.

In (35) the path verb *pasa* 'pass' governs two accusative-marked GROUNDS, namely *q'awa-nak(a)-Ø* 'gorges' and *pampa-nak(a)-Ø* 'pampas', both expressing geographic goals. The verb is suffixed with the path satellite *-ja-* 'atop', thus providing a more detailed description of PATH, as is typical of S-languages. Specifically, the directional suffix *-ja-* here reinforces the idea of the FIGURE'S TRAVERSAL of a spatial boundary inherent to the main verb. The passage in (36) shows the bare motion verb *sara* 'go' governing two allative-marked GROUNDS, *chaxlla-ru* 'to huarango (plants)' and *siwinqa-ru* 'to cortadera (plants)', which are the goal of the motion event, whereas in (37) the same verb governs even three allative-marked NPs, namely *uka organisiyasiona-ru* 'to that organization', *uka departamela-ru* 'to that department', *Lapasa-ru* 'to La Paz'.<sup>13</sup> Such a tendency to accumulate path elements, which is common in S-languages, also emerges in the productive suffixation of more than one directional or spatial satellite to a single verb. For instance, the bare motion verb *sara* 'go' can be suffixed with the path satellites *-ta-* 'upward' and *-waya-* 'away', thus forming *sar(a)-ta-way(a)* 'get up and go away' (Hardman 2001: 88; England 2001: 109).<sup>14</sup> The example in (38) illustrates a further strategy used by Muylaque Aymara speakers to mark multiple goal GROUNDS. Indeed, the accusative ending on the final goal, namely *q'awa-nak(a)-Ø* 'ravines', has its scope over all the previous unmarked goals listed in the clause. Another interesting example is given in (39), taken from Pomata Aymara, where goal-marking is indicated by the limitative case on noun along with a verbal directional suffix, thus expressing a complex-path construction (cf. Ibarretxe Antuñano 2009: 408).

(39) (cf. Segura 2011: 296)

*uwih(a)-Ø pampa-kama anak(i)-waq(a)-t'a-ya-si-n(i)-ita*  
 sheep-ACC pampa-LIM herd-DW-MOM-CAUS-REFL-H-2>1IMP  
 'help me to herd the sheep downward to the pampa'.<sup>15</sup>

13. It is worth reminding that case marking in Aymara is added only to the head of a noun phrase, and not to its modifiers (see, among others, Hardman 2001: 193).

14. Another means to accumulate multiple paths is through adding the aspectual suffixes (incompletive) *-ka-* and (completive) *-xa-* to the verb. These aspectual suffixes in some contexts may indeed assume a spatial or directional meaning, as for example with *sara* 'go', which can be derived with both spatial and aspectual suffixes, thus forming *sara-q(a)-xa* 'go away in a downward direction' (*sara* 'go' + *-qa-* 'downward' + *-xa-* 'completive'), *sara-way(a)-k(a)-xa* 'I will go on ahead (but I can never return)' (*sara* 'go' + *-waya-* 'away' + *-ka-* 'incompletive' + *-xa-* 'completive') (Hardman 2001: 91, 96).

In (39) the manner-of-motion verb *anaki* ‘herd’ (cf. Levin 1993: 136) is a plus-ground verb, which is accompanied by the derivational suffix *-waqa-* ‘downward’ and the goal NP *pampa-kama* ‘to the pampa’. Overall, the examples analyzed in this section show that Aymara speakers do make use of complex-path constructions, involving both ‘plus-ground’ verbs and detailed descriptions of the motion path comprising structurally distinct segments.

### 3.3. The boundary-crossing constraint

As has been seen in some examples of the previous section (3.2), the Aymara language can describe motion events that involve crossing of a spatial boundary. The boundary-crossing is experientially salient (Filipović 2007: 20), to the extent that the way languages describe it is considered as a diagnostic test for the typological classification of a language (Özçalışkan 2015: 485). In particular, the ‘boundary-crossing constraint’ predicts that V-languages avoid manner verbs in describing the FIGURE’s traversal of a spatial boundary. This is because manner-of-motion verbs are activity-verbs, which are less compatible with the “instantaneous” change of state inherent to boundary-crossing (Slobin 2004: 226). Consequently, V-languages are required to use only path verbs in the description of boundary-crossing events. On the contrary, S-languages allow the use of manner verbs with the traversal of a spatial boundary, thanks to the rich inventory of path satellites they have at their disposal. Thus, they tend to encode boundary-crossing by means of specific path satellites, leaving the expression of MANNER, when present, to the main verb root (and/or other adjunct elements). Of course, the fact that boundary-crossing is mostly expressed by satellite elements does not prevent the use of path verbs as well as bare motion verbs in the clause. Indeed, as seen in section 3.2, S-languages typically tend to provide a more detailed description of PATH than V-languages, also through the addition of further path satellites to path verbs. Let us now examine the linguistic strategies used by Aymara speakers to express the crossing of a spatial boundary. In the previous section (3.2), we have already noted the use of two different morphosyntactic strategies, namely, the use of path verbs (*arrive, pass*) co-occurring with NPs marked with the accusative (33)-(35) or with the comitative added to the allative case (31)-(32). In fact, there is a large inventory of path satellites that can be chosen to express boundary-crossing in Aymara. Let us consider some examples.

(40) (Coler 2014: 249)

*uka-t(a) jani-w(a) sara-wj(a)-t-t(i) kha-kat(a)*  
 then-ABL no-DECL go-BFR-1SIM-NEG yonder-PT  
 ‘And I never went across yonder (again)’

15. In the variety of Pomata, the derivational suffix *-waqa-* may replace the more common suffix *-qa-* ‘downward’ when added to a three-syllable verb (Segura 2011: 298). The reflexive suffix *-si-* also has a reciprocal meaning in Aymara, indicating «reciprocal action between two persons» (see, among others, Hardman 2001: 87).

(41) (cf. Coler 2014: 250)

*uka lluqalla-x(a) jawir(a)-kata-ki-∅-w(a) sara-ñ(a)*  
 that boy-TOP river-PT-DL-ACC-DECL go-ANMZ

*muna-s.ka-n(a)-x(a)*

want-PROGR-3EP-TOP

‘That boy wanted to go to through the river’

(42) (cf. Coler 2014: 250)

*aka anu-x(a) warm(i)-kata-ki-∅-w(a) sara-ñ(a)*  
 this dog-TOP woman-PT-DL-ACC-DECL go-ANMZ

*muna-s.k(a)-i-x(a)*

want-PROG-3SIM-TOP

‘This dog is wanting to go through the female (dog)’.

The motion event described by the bare motion verb *sara* ‘go’ in the sentences from (40) to (42) involves a boundary-crossing, which is expressed by the perlocative case *-kata-* added to the spatial adverb *kha* ‘yonder’ (40), and to the accusative-marked goal NPs *jawira* ‘river’ (41) and *warmi* ‘woman’ (42). Indeed, *-kata-* is a directional suffix that refers to a movement through a referent noun (Cerrón Palomino 2008: 156). In particular, the passage in (41) «describes the ambitions of a boy who, according to local lore, was enchanted by a siren, and was compelled to bathe frequently in a certain river» (Coler 2014: 249), whereas the sentence in (42) «was said of a male dog who was drawn to a female one in estrus» (Coler 2014: 249). This suffix can also be affixed to verbs, denoting «motion across. With verbs of movement, it typically refers to crossing a river, wall, or border» (Coler 2014: 312), as illustrated in (43).

(43) (Coler 2014: 313)

*uka-t(a) jicha-x(a) jawir(a)-<sub>c</sub>∅ pas(a)-kata-wj(a)-ch(i)-i-x(a)*  
 that-ABL now-TOP river-ACC pass-MA-BFR-DUB-3SIM-TOP

‘After, now, he must have crossed the river’.

The information about the path of motion in (43) is encoded by three different elements, i.e. the verb root *pasa* ‘pass’, the derivational suffix *-kata-* ‘motion across’, and the accusative-marked goal NP *jawira* ‘river’. This accumulation of path elements is common in S-languages. Differently from (40)-(42), the motion event is here described by a path verb, which encodes crossing from one side of the river to the other. Instead, the example in (44) shows the originally bare motion verb *ma* ‘go, move’<sup>16</sup> added with two satellites of path, i.e. the derivational suffixes *-kata-* ‘motion

16. It is worth noting that the verb *ma* ‘go, move’ in Aymara is now lexicalized, as in *ma-nta* ‘entry’, *ma-kata* ‘cross’, etc. (see, among others, Segura 2011: 150).

across' and *-ni-* 'hither'. In the same clause the path verb *puri* 'arrive' co-occurs with the allative-marked spatial adverb *jak'a* 'near'.

(44) (Coler 2014: 312)

*pur(i)-t'a-ni-wj(a)-(i)*      *jupa jak'a-r(u) ma.kata-ni-wj(a)-ch(i)-i*  
 arrive-MOM-H-BFR-3>3SIM he    near-ALL go.across-H-BFR-DUB-3>3SIM  
 'He arrived near him, he must have approached him'.

Beside the suffix *-kata-*, the boundary-crossing may also be encoded by other satellites of path, as illustrated in the examples from (45) to (47) below.

(45) (Coler 2014: 308)

*uka-t(a)*    ***pasa(a)-ja-ña-x(a)***    *desiyert(u) pampa*  
 there-ABL pass-atop-ANMZ-TOP desert      pampa

*desiyertu Klimisi pampa*  
 desert    Clemesi pampa  
 'After one had to pass over the desert pampa,  
 the desert Clemesi pampa'

(46) (Coler 2014: 373)

*uka-t(a)*    *jawira-r(u)*    *pur(i)-xata-sin(a)*    *jawir(a)-Ø-x(a)*  
 that-ABL river-ALL    arrive-above-SUB    river-ACC-TOP

*kawall(u)-xat(a)*    ***pasa-rpaya-jwa-tayn(a)***  
 horse-above      pass-MLT-COMPL-3>3DIS  
 'Later, arriving upon the river, he had passed  
 (over) the river on horseback'

(47) (Coler 2014: 228)

*mant(a)-i-x(a)*      ***uka-n(a)-jam(a)***    *ma.nta-w(a)-ch(i)-i-x(a)*  
 enter(go.in)-3SIM-TOP that-GEN/LOC-CP go.in-BFR-DUB-3SIM-TOP  
 'He entered, by there, he must have entered.'

In (45) the boundary-crossing information is encoded by the path verb *pasa* 'pass' suffixed with the satellite of path *-ja-* 'atop', meaning 'pass over', followed by unmarked goal NPs (*desiyertu pampa desiyertu Klimisi pampa*). In (46) it is the derivational multiplier suffix *-rpaya-* that serves as a satellite of path, indicating that the FIGURE «passed the river and left it behind (in essence, abandoning it)» (Coler 2014: 373; cf. England 2001: 107; Hardman 2001: 86). Additional path information comes from the accusative-marked goal NP *jawira* 'river', while manner information is expressed by the NP *kawall(u)-xat(a)* 'on horseback'. Similarly to what seen in (33), the example in (47) shows a further strategy to encode boundary-crossing, i.e. the ground NP *uka* 'there' marked with the genitive/locative case plus the comparative

*-jama-*. The main verb is the bare motion verb *ma* ‘go, move’ suffixed with the satellite of path *-nta-* ‘in’ (cf. footnote 16). Besides, the boundary-crossing may be encoded through the directional suffix *-kipa-*, indicating perifactive or contouring motion, as shown in (48) and (49).

(48) (Coler 2014: 317)

*uk(a)-jama-r(u) pacha-r(u) sinku-**kip(a)-ta-w(a)-t-x(a)***  
 that-CP-ALL place-ALL fall-PRF-UW-BFR-1SIM-TOP  
 ‘And just in that place I flipped over’.

The path verb *sinku* ‘fall’ in (48) expresses the boundary-crossing by adding two satellites of path, i.e. the derivational suffixes *-kipa-* ‘perifactive motion’ and *-ta-* ‘upward’, plus the allative-marked goal NP *pacha* ‘place’.

(49) (Coler 2014: 674)

*may(a)-**kipa-t(a)** may(a)-**kipa-t(a)** sara-ña-x(a)*  
 one-PRF-ABL one-PRF-ABL go-ANMZ-TOP  
 ‘to walk skipping every other step’.

In (49) the boundary-crossing information is conveyed by the reduplicated NP *may(a)-* ‘one’ marked with the perifactive suffix *-kipa-* and the ablative case *-ta-*, which indicate passing or skipping the steps. The verb used here is neutral, i.e. the bare motion verb *sara* ‘go’. Overall, the examples analyzed so far show that Aymara does not obey the boundary-crossing constraint, which is a distinctive feature of V-languages. In fact, this constraint predicts that boundary-crossing is mostly encoded by verbs conflating MOTION + PATH, which is not the case for Aymara. Indeed, the boundary-crossing events analyzed in this paper involve path verbs as well as neutral bare verbs, such as *sara* ‘go’ and *ma* ‘go, move’. More importantly, the traversal of a spatial boundary can also be expressed by manner-of-motion verbs, suffixed with satellites of path indicating directional motion like *-kipa-* ‘perifactive’ or *-kata-* ‘motion across’. Some of these manner verbs are *khacha* ‘take large steps’ > *kacha-kipa* ‘pass to the other side with great flare’, *kujul* ‘limp’ (sp. *cojear*) > *kujul-kipa* ‘cross to the other side as if limping’, *thama* ‘go slowly’ > *thama-kipa* ‘pass to the other side slowly, with small steps’ (Coler 2014: 317), *aywi* ‘go in a flock’, *ayw(i)-kata* ‘climb a hill in a group’ (England 2001: 103).

#### 4. Conclusions

The results of this preliminary investigation on motion events encoding in Aymara are consistent with predictions of expected values within Talmy’s typological correlations. In particular, the analysis conducted in this study is based on three diagnostics tests that have been selected to examine how the Aymara speakers map the semantic components of motion events into linguistic structures. As for the first

diagnostic test applied to the corpus sample, i.e. the size of the manner-of-motion verb lexicon, Aymara exhibits an extremely rich and variegated choice with a far larger class of manner rather than path verbs (only *pasa* ‘pass’, *puri* ‘arrive’, *juta* ‘come’, *kuti* ‘return’, *sinku* ‘fall’ are found in the sample). In addition, the semantic component of MANNER is frequently lexicalized outside the verb root, through a wide range of linguistic strategies, such as lexical (e.g. adverbs, adjectives), morphological (e.g. case marking, derivational suffixes) and syntactic (e.g. NP reduplication). These characteristics imply a high degree of manner salience and, as has been argued in section 3.1., both are consistent with the satellite-framing typology. As for the second diagnostic test, Aymara speakers do make use of complex-path constructions and plus-ground verbs in describing motion events. They rely heavily on path satellites, thanks to the available rich verb directional suffixes, but also on path complements, expressed by a rich case marking morphology. These linguistic recourses allow for a more detailed description of PATH, which is easily represented through more than one segment, including source, traversal, and goal. In particular, the presence of an elaborate case system permits a greater specification of different types of GROUNDS. The examples analysed in this study show indeed that Aymara speakers tend to accumulate more path segments and make use of plus-ground clauses, where the path is expressed by motion verbs in conjunction with path satellites, adverbs, and multiple NP grounds marked with different cases (allative, accusative, genitive/locative, limitative, perlativ, perifactive), according to their specific function. As a result, Aymara turns out to rank very high along the cline of path salience. As for the third diagnostic test, data show that Aymara does not obey the boundary-crossing constraint. Indeed, there is no restriction about the kind of motion verb that can be used in describing the FIGURE’s traversal of a spatial boundary. In particular, the examples show both verbs conflating MOTION + PATH (e.g. *pasa* ‘pass’, *sinku* ‘fall’), and verbs conflating MOTION + MANNER (e.g. *thama* ‘go slowly’, *kujul* ‘limp’), but also generic motion verbs (*sara* and *ma* ‘go, move’).

Overall, these findings suggest classifying Aymara as a satellite-framed language. Of course, I do not believe in rigid or dichotomous typological classifications, and it would probably be more appropriate to speak in terms of clines of path or manner salience (see, among others, Ibarretxe Antuñano 2009). Furthermore, it cannot be excluded that the Aymara language underwent and is still undergoing some progressive typological reorientations due to its being dominated by Spanish, which is a V-language (for example, it borrowed path verbs such as *pasa* < Sp. *pasar* ‘pass’). Nevertheless, Talmy’s framing typology still remains a useful tool for the early identification of main lexicalization patterns of motion events in a given language. In this paper I have tried a first attempt to assess motion events encoding in Aymara. One main limitation of the present study derives from the difficulty to create an extensive and reliable corpus, mostly because of the high sociolinguistic variability that is characteristic of this language. Furthermore, the diagnostic tests applied here refer to a limited set of features, which require further in-depth investigations. For example, it would be useful to extend the analysis to metaphorical motion events (Özçalışkan 2004; Slobin 2006), since almost all directional and spatial suffixes in Aymara tend to develop metaphorical

meanings (see, among others, Hardman 2001: 93). Additionally, it would be very useful to investigate the link between orality and high-path salience (see Ibarretxe Antuñano 2009 and references therein), considering that Aymara is a predominantly oral language. Finally, further research needs to extend the corpus sample in order to achieve a more complete survey of the percentage of motion event encoding strategies actually exploited in all the dialectal varieties of Aymara.

### List of abbreviations

ABL = ablative; ACC = accusative; ADD = additive; AG = agentive; ALL = allative; ANMZ = action nominalizer; BFR = buffer; CAUS = causative; CFY = confirmatory; COM = comitative; COMPL = completive aspect; CP = comparative; DECL = declarative; DF = diffuse motion; DIM = diminutive; DIS = distal past tense; DIST = distancer; DL = delimitative; DUB = dubitative; DW = downward motion; EP = experienced past; EXCL = exclusive; GEN = genitive; H = hither (motion towards speaker); IMP = imperative; INC = inclusor; INCL = inclusive; INCOMPL = incompletive aspect; INFR = inferential; IW = inward motion; LIM = limitative; LOC = locative; MA = motion across; MLT = multiplier; MOM = momentaneous aspect; NEG = negative; OW = outward motion; PL = plural; POSS = possessive; PRF = perifactive; PRO = pronoun; PROGR = progressive; PT = perlative; RE = resultative; REFL = reflexive; SIM = simple tense; SUB = subordinator; TOP = topicalizer; UW = upward motion; VBZ = verbalizer; 1 = first person; 2 = second person; 3 = third person.

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