The many ways of falling down a cliff: Culture- and language-specific ways of expressing path in Jaminjung and Kriol[1]

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1 INTRODUCTION

In a cross-linguistic study of motion expressions, Talmy's (1985) typology of LEXICALISATION PATTERNS dividing languages into satellite- and verb-framed types depending on whether the path-component in a motion event can be expressed in a satellite (e.g. *go out*) or in the verb itself (*exit*), has been subject of numerous revisions and additions. One concerns the notion of PATH SALIENCE, i.e. the distribution pattern of various path elements in discourse as introduced by Ibarretxe-Antuñano (2009) based on Slobin (1996).

This paper aims to give an overview of path salience for two Australian Aboriginal Languages. Jaminjung is a highly endangered non-Pama-Nyungan language spoken by approximately fifty people and Kriol is an English-lexified Creole with ca. 20,000 speakers of different varieties. Both languages are structurally very different, but are spoken within the same cultural area across northern Australia. Therefore, a comparative study of the two languages has the potential to reveal to what extent language structure and cultural background respectively influence distribution patterns in discourse.

Concerning lexicalisation patterns (Talmy, 1985) of motion event descriptions, Jaminjung might best be described as an EQUIPOLLENTLY-FRAMED LANGUAGE (Slobin, 2006) in expressing the manner (*galu-galu* in (1)[2]) as well as the path

[2] The abbreviations used in this paper are: 1=first-person, 2=second-person, 3=third-person, ABL=ablative, ALL=allative, ALSO=additional, AUX=auxiliary, DAT=dative, LOC=locative, NEG=negative, NOW='now, then' (clitic), PL=plural, PROX=proximal demonstrative, PRS=present-tense, PST=past-tense, RDP=reduplication, SFOC=sentence focus, SG=singular, SUBJ=subject, TR=transitive marker, *taunwei*= Kriol is marked in Jaminjung examples in cases of code-switching with underscore and vice versa.

(*yirr*) component of a motion event description in coverbs forming complex predicates with an inflecting verb (–*ruma*). However, a roughly equal distribution pattern of expressing manner and path in discourse as reported for such languages by Slobin (2006:70), is not found in Jaminjung (Schultze-Berndt, 2007).

(1) *malara* **galu-galu** *a* **yirr** *ga-ram* *gardag-ngunyi*
frog RDP-footwalk ah move.out 3SG-come:PRS tin-ABL
'the frog comes right out of the tin' (DH10_A11_05_0020, MM)

A classification of Kriol in Talmy's typology is rather more straightforward. The language follows a SATELLITE-FRAMED pattern, like the lexifier English, in expressing the path of motion in a satellite, the preposition *pas* in example (2), rather than in the main verb. Furthermore, manner is encoded in the verb (*draib*) itself.

(2) *det* *men* *bin* **draib** **pas** *garrim* *ka* *langa* *im* *haus*
that man AUX.PST drive past with car LOC 3SG house
'the man drove past the house with his car' (DH10_A15_21_0019, MA)

The encoding of path is obligatory in any motion event (Slobin, 1996), however, languages differ regarding the degree of detail with which the path component is expressed in discourse (Ibarretxe-Antuñano, 2009). Jaminjung employs a variety of strategies to encode path in a motion description. Restricted path information is encoded in a closed-class inflecting verb (IV) (-*ruma* in (3)), and optionally in an open–classed uninflecting coverb (*burl*) and in any ground encoding specifying source (*ngiyi jarriny*), passed ground or goal of motion. Furthermore, path can be expressed as a direct object in a transitive ground-denoting IV (e.g. –*unga* 'leave').

(3) *ngiyi-ngunyi* *majani* *burl-burl* *burru-ruma-ny* *jarriny-ngunyi*
PROX-ABL maybe RDP-emerge 3PL-come-PST hole-ABL
'from here they maybe came out, out of the hole' (ES97_A03_01.294, IP)

Kriol also encodes some path information in the verb phrase (*kam* in (4)) and might employ adverbial suffixes (–*at*) or prepositions (*pas* in (2)) and ground encodings such as preposition marked NPs (*det woda*) or direct objects of transitive locomotion verbs such as *bolorim* 'follow' to specify path.

(4) *dei* *bin* **kam-at** *brom* *det* *woda*
3PL:SUBJ AUX.PST come-out ABL:from that water
'they came out from the water' (DH10_A15_05_0123, JoJo)

In this paper I examine two different types of datasets, one consisting of all motion event descriptions in a corpus of frog stories only for cross-linguistic comparison (labelled FMD 'Frog Motion Dataset' hereafter) and one including

narratives, route-descriptions and natural discourse for a narrower view on the two languages alone (CMD 'Complete Motion Dataset').

2 PATH SALIENCE

In a cross-linguistic approach, I examine the notion of path salience. Firstly a distinction can be made regarding ground specifications in discourse. In the following section 2.1 I will discuss the distribution of MINUS- AND PLUS-GROUND EXPRESSIONS (Ibarretxe-Antuñano, 2009, Slobin, 1996) in both languages. In minus-ground expressions, motion verbs stand alone or with a satellite (such as *fall* and *fall down* in English and *caer* 'fall' in Spanish). Plus-ground expressions on the other hand, are motion verbs accompanied by some ground element (*fall down into the river* and *caerse al río* 'fall to the river') (Ibarretxe-Antuñano, 2009:406).

Secondly, the notion of a COMPLEX PATH or JOURNEY (Slobin, 1996) is taken into account in section 2.2. Such extended path descriptions include, for example, more than one ground in a single verb phrase as in (5) where there is a source (*from its hole*), a goal (*into the field*) and an element passed along the trajectory (*past the sleeping cat*) combined in one verb phrase. Additionally, the degree of detail of other elements of path encoded in the verb phrase (*ran <u>out</u>* and *into*), adverbs and prepositions or locational nominals is examined.

(5) *The mouse ran out from its hole into the field past the sleeping cat.*

Thirdly, PATH AND EVENT GRANULARITY (i.e. how many different aspects of a complex journey are mentioned by speakers in a comparable motion event description) is considered in 2.3 examining the degree of detailed description of a motion event. Granularity is independent of the number of path components accompanying a single verb, but it is concerned with the total number of detailed path descriptions in the linguistic encoding of a motion event in discourse (Slobin, 1996). A combination of these three areas of analysis is meant to result in a cline of path salience along which languages are placed according to the amount of detail in which path is expressed (Ibarretxe-Antuñano, 2009:404).

In the last section 2.4 structural and cultural factors for path salience are closely examined and evaluated in light of the observations made for Jaminjung and Kriol It becomes clear that, while the languages exhibit great structural differences for the encoding of path in motion events in discourse, they show similar patterns concerning event granularity. I come to the conclusion that an analysis of path salience combining structural and elaboration (i.e. path granularity) features fails to account for the patterns observed in Jaminjung and Kriol and should therefore be kept apart.

2.1 Ground Specifications in Discourse in Jaminjung and Kriol

Languages can be distinguished in terms of using minus- and plus-ground phrases (Ibarretxe-Antuñano, 2009:405, Slobin, 1996). For Jaminjung a minus-ground

expression is exemplified in (6). Here the path coverb *buru* specifies the trajectory of motion, but no ground is expressed. Example (3) above on the other hand is plus-ground where the path is expressed in the reduplicated coverb *burl* and the source encoded in an ablative-marked landmark (*jarriny*) as well as a deictic (*ngiyi*). In Jaminjung, ground-encoding coverbs also form parts of plus-ground expressions such as *bu* 'enter water' in (8) below.

(6) *yawayi, nga-ngga   biyang ...   buru*
   yes   1SG-go.PRS   now   return
   'yes, I'm going now, ... back' (ES96_A08_02.034)

For Kriol, a minus-ground expression is exemplified in (7) where manner is expressed in the verb *flai* and path in the adverbial suffix (i.e. satellite) *–wei*, a specific ground, however, is not articulated. Example (4) above on the other hand is a plus-ground expression where the path is expressed both in an adverbial suffix (*-at*) as well as in a ground-encoding NP (*brom det woda*).

(7) <u>*wal*</u>   *det*   *mugmug* *bin*   **flai-wei**   <u>*na*</u>
   well   that   owl   AUX.PST fly-away   NOW
   'and the owl flew off then' (DH10_A15_18_0114, speaker CR)

In Figure 1 Jaminjung and Kriol results for ground distribution are placed among other languages for cross-linguistic comparison. All data here comes from Frog Story narrations only. The chart shows that Jaminjung occupies the extreme end of the cline in expressing ground explicitly in only 36% of all cases just like Squliq. This distribution frequency appears to be typologically rather rare in Ibarretxe-Antuñano's (2009) study with the majority of languages encoding plus-ground constructions more than 50% of the time.

Kriol speakers prefer[3] using plus-ground constructions in discourse (68% of all tokens). Generally, it has been suggested that there is a tendency in satellite-framed languages to express ground more often than in verb- and equipollently framed languages (Slobin, 1996:201). While this hypothesis is not generally confirmed in Ibarretxe-Antuñano's (2009) study where v-framed languages such as Squliq and Chantyal are found at both extreme ends of the cline, s-framed languages appeared to cluster towards the plus-ground encoding side. Therefore, Kriol's preference for plus-ground expressions is expected. However, within Ibarretxe-Antuñano's collection of s-framed languages, Kriol is placed at the very bottom, expressing ground less than other languages of this type.

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[3] A Mann-Whitney U tests was conducted for a statistical analysis to ensure that the tendencies observed for Kriol and Jaminjung were not due to speaker variation, but statistically significant. The test revealed just that – a highly significant difference between speakers of Jaminjung and Kriol (Z= -3.13. p = .002).
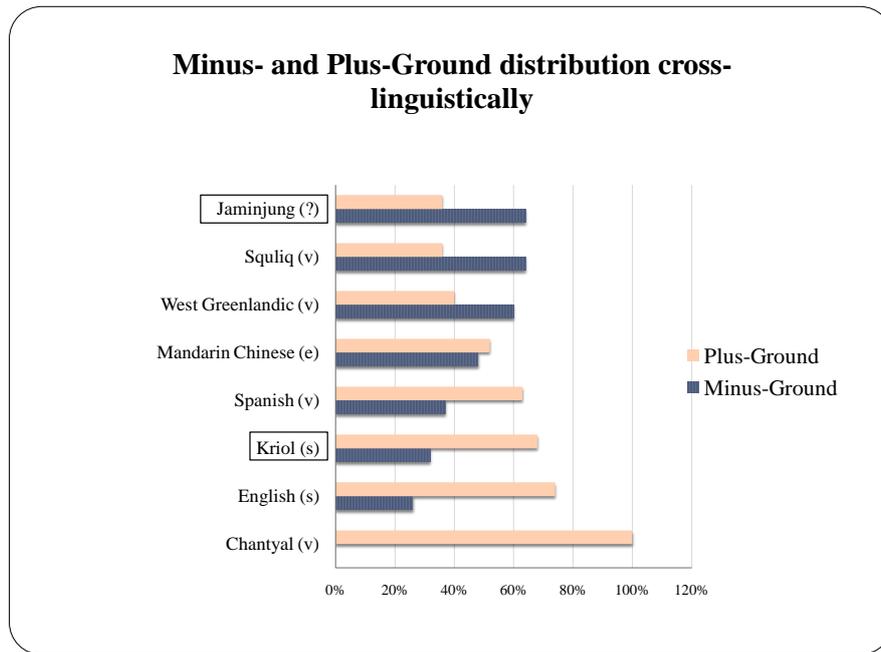
Minus- and Plus-Ground distribution cross-linguistically

Jaminjung (?)
Squliq (v)
West Greenlandic (v)
Mandarin Chinese (e)
Spanish (v)
Kriol (s)
English (s)
Chantyal (v)

Plus-Ground
Minus-Ground

0%   20%   40%   60%   80%   100%   120%

Figure 1:Minus- and Plus-Ground distribution in Frog Story narrations only (Ibarretxe-Antuñano, 2009:406)

2.2   Complex Motion Expressions

Complex path expressions in Jaminjung consist of one or more path coverbs (or a path and a manner coverb) and one or two ground NPs. In example (1) above a manner and a path coverb combine in a complex predicate with a source-encoding NP. In both datasets, such constructions were rather rare accounting for 11% of all motion event descriptions in the CMD and 10% in the FMD. Even rarer still were occurrences of more than one ground in a single motion event description as in (8) (3% in the CMD and 1.5% in the FMD). Generally, speakers tend to focus on either source or goal or passed ground in a motion event description disregarding all others.

(8) *wirib=gayi,*   *ga-dba-ny=ni*   ***gugu-bina***   *bu,*
    dog=ALSO   3SG-fall-PST=SFOC   water-ALL   dive

    balarraj-giyag,   *gurrany*   *gani-ngawu,*
    cliff-ABL   NEG   3SG>3SG-see.PST

    'the dog too, he fell, into the water, from the cliff, he didn't see it'
    (ES96_A01_04.297/299, DR)

In Kriol, complex path constructions are much more frequent in discourse than in Jaminjung. A complex path expression in Kriol includes a verb of motion with an adverbial suffix as in (4) above or a preposition or spatial adverb as in (9) and one or more ground-encoding NPs. Such constructions are in fact the preferred strategy of motion event encoding in the FMD where 52% of all motion expressions were complex paths. Even though this percentage was much lower in

the CMD (31%), it is also the highest frequency of all possible path detail encodings. Complex paths with two grounds were again very rare with only accounting for 2% and 2.5% of motion expressions in the FMD and CMD.

(9) *det dog tu imin   jamp **ontop** la   det **bigges log***
    that dog too 3SG:AUX.PST jump on+top to:ALL that big log
    'and the dog as well jumped onto the big trunk' (DH10_A16_06_0125, LM)

Taking a cross-linguistic perspective, Jaminjung and Kriol are among those languages that regularly take more than one path element per verb. Kriol stands out in Table 1 displaying a strong preference for two+ path elements rather than just one whereas Jaminjung shows a very similar pattern to a verb-framed language such as Turkish.

Language	Path Elements per verb	Number of Path Elements per Verb		
		One	Two or +	Total
Basque (v)	Several	32 (61%)	20 (39%)	52
Turkish (v)	Several	24 (75%)	8 (25%)	32
Spanish (v)	Usually one	42 (95%)	2 (5%)	44
West Greenlandic (v)	One	96 (98%)	2 (2%)	98
Jaminjung (?)	Several	136 (69.5%)	60 (30.5%)	158
Kriol (s)	Several	79 (40%)	119 (60%)	198

Table 1: Path elements per verb in frog stories cross-linguistically adapted from (Ibarretxe-Antuñano, 2009:407)

2.3 Path and Event Granularity
Motion event granularity identifies the frequency of path complements mentioned in discourse independent of the availability of complex path clauses discussed in the previous sections 2.1 and 2.2. Therefore, this section is concerned with the degree of detail in which an event is described irrespective of the detail of path expressions within a single motion event phrase.

For this analysis Ibarretxe-Antuñano (2009) following Slobin (1996) uses the cliff scene of the frog story as a base which is a particularly motion-rich episode in the picture book.

In the scene, a deer picks up a boy onto its antlers, runs with him towards a cliff and finally tops him over the edge. A dog is running alongside the deer and both the dog and the boy fall down together and eventually land in a pond below the cliff. Slobin (1996) segmented this scene into six sub-scenes:

1) deer starts to run, 2) deer runs, carrying the boy, 3) deer tops at cliff, 4) deer throws the boy (off the antlers/down), 5) boy and dog fall, 6) boy and dog land in water (Ibarretxe-Antuñano 2009:409)

According to Ibarretxe-Antuñano (2009:408-409), high event granularity for a language is, somewhat arbitrarily, assumed when always or mostly more than three of the six segments above are mentioned. In a cross-linguistic perspective, this is, for example, the case for Arrernte and Ewe, as well as Germanic languages and Thai. The other end of the scale is occupied by verb-framed languages such as Tagalog and French. For Jaminjung and Kriol, at least three segments are mentioned in six of the seven cliff scenes investigated. Therefore, both languages show elaborated path granularity in 85% of all cases as displayed in Table 2 below. Thus although Kriol is a satellite-framed language and similar to English, it exhibits the same pattern as Jaminjung which uses very different strategies of encoding path.

Language	+ 3 segments[4]
Tagalog (v)	17%
Romance (French, Portuguese, Spanish) (v)	30%
Malay (v)	50%
Slavic (Polish, Russian, Serbo-Croatian) (s)	76%
West Greenlandic (v)	80%
Jaminjung (?)	**85%**
Kriol (s)	**85%**
Germanic (Dutch, English, Icelandic, Swedish, German) (s)	86%
Chinese (e)	92%
Basque (v)	93%
Arrernte (v)	100%
Squliq (v)	100%
Chantyal (v)	100%

Table 2: Path Granularity in the Deer Scene based on Ibarretxe-Antuñano (2009:409)

It becomes clear that the languages show clearly different behaviour concerning the structural encoding of path on the clause level in discourse. However, a look at extra-linguistic factors such as path granularity reveals that speakers of Jaminjung and Kriol show the same patterns. I argue that this is due to a shared cultural space. I will discuss this approach in more detail in the following section 2.4 on factors influencing path salience.

2.4   Factors for Path Salience
Some language-specific factors appear to influence structural as well as extra-linguistic patterns for path salience. Structurally, the availability of a variety of different linguistic devices encoding motion components is expected to lead to high path salience patterns. Similarly, the existence of so-called 'dummy verbs' is expected to trigger more elaborate path encodings in discourse. For the two

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[4] Percentages are calculated by dividing the number of speakers who mention three or more segments by the total number of speakers.

languages under investigation, it can be said that both have rather elaborate linguistic devices for the expression of motion events such as path and manner coverbs and case-marking on grounds in Jaminjung and, for example, adverbial suffixes and prepositions marking source or goal in Kriol. Additionally, both languages use semantically 'generic' verbs (such as the IVs in Jaminjung and verbs such as *go* and *kam* 'come' in Kriol) which could be dubbed 'dummy verbs'. Therefore, other means of expressing motion components are expected to become more frequent. However, for Jaminjung, no explicit encoding of path outside the inflecting verb accounts for 39% of motion events in the CMD and 47.5% in the FMD. In Kriol on the other hand, only 6% of motion verbs appear on their own in the FMD and in 9% in the CMD in the expected pattern.

Generally, as discussed above, although both languages exhibit the 'right' factors for high path salience, Jaminjung appears to be generally only a medium-path salient language with relatively low frequency of explicit ground encodings, but a higher dissemination of other path elements such as coverbs or implicit encodings. Kriol, however, generally shows high path salience on the levels of explicit ground and complex path encodings.

On the other hand, path granularity should be considered separate from these structural features. I believe that Ibarretxe-Antuñano's final factor for influencing path salience – cultural systems – provides the right background for understanding why Kriol and Jaminjung show such major differences on path encoding frequency on the clause level, but behave exactly the same in terms of the detail offered in the description of motion events. It can be argued that languages displaying a high level of path event granularity in larger chunks of discourse are more likely to possess cultural systems in which space and motion play a more important role than languages which do not (Ibarretxe-Antuñano, 2009:411).

I claim that the shared cultural space of both languages is the reason for such behaviour. While frequency of path encodings appears to have its roots in the general structure of motion event expressions in the languages, event encodings in larger chunks of discourse appear not to be affected by this and might therefore have their origins in cultural systems. For other Australian languages such as Warlpiri and Arrernte it has been claimed that cultural factors are linked directly to the way space and motion are described displaying detailed attention for motion, paths, journeys, and orientation in space (Bavin, 2004:18-19, Ibarretxe-Antuñano, 2009:411, Simpson, 2002:298-299, Wilkins, 2004:143-144). The traditional lifestyle as hunters and gatherers of Jaminjung and Kriol speakers points towards a similar significance of motion and orientation.

The observed high salience of motion event encodings beyond the clause level appears to be connected to the need of explicitly describing the traditional country or routes travelled within it to find food and water. However, this does not necessarily have anything to do with frequent path encodings on the clause level as argued by (Ibarretxe-Antuñano, 2009) as my analysis of Jaminjung shows. As shown in Table 2 above, speakers of verb-framed Arrernte express more than three segments of the cliff scene 100% of the time. Therefore, a preference for detailed event encodings can be observed for three typologically different

Australian languages spoken in the same cultural realm. These observations however, do not entail that all languages that were identified by (Ibarretxe-Antuñano, 2009) as high path granularity languages, are spoken in hunter-gatherer type societies (for example speakers of Basque, Chinese and Germanic languages were also found to employ detailed elaboration of path beyond the clause level). However, these languages also show high path salience concerning ground-encodings and complex paths on the clause level. With reference to the two languages, analysed here, however, there is a remarkable mismatch for Jaminjung between event granularity and clause-level path salience which is not the case for Kriol.

3 SUMMARY AND CONLUSION

My analysis of Jaminjung and Kriol was based on three complementary areas. Firstly, an investigation of the combination of explicit ground encodings and verbs placed Jaminjung among languages preferring minus-ground expressions in discourse and Kriol on the opposite end with a preference for plus-ground encodings. Secondly, the distribution of complex paths encoding more than one path element in a single VP was analysed. For both languages, the combination of two explicit ground elements within one VP is a very rare construction. However, when considering other path elements within a motion event verb phrase, Jaminjung encodes path in great detail (52% in the FMD and 60% in the CMD). Kriol is analysed as being a highly path-elaborate language where in 76% of the CMD and in 84.5% of the FMD, path was explicitly expressed. Generally, these structural features place Jaminjung in a middle ground of the path salience cline and Kriol towards the plus-end.

Ibarretxe-Antuñano (2009) also includes an analysis of the degree of detailed path description beyond the clause level, namely the cliff scene in the frog story, into her typological analysis of path salience. However, I argue that this part of the investigation needs to be kept separate from the two levels of analysis mentioned above. Contrary to path encoding frequency on the clause level, Jaminjung here is considered as highly elaborate as Kriol with 85% of speakers of both languages expressing three or more segments of the cliff scene in the frog story.

Throughout this paper, I argued that for an analysis of path salience, the frequency of detailed path encodings on the clause level in discourse is a highly useful tool to compare and contrast typologically different languages. It is necessary to consider all different parts of path elements within a VP, including, but not limiting oneself to, explicit ground encodings. As Jaminjung and Kriol show, there are other parts of path elements such as path coverbs or adverbial suffixes that need to be taken into consideration. Similarly, the existence of certain types of semantically 'limited' verbs ('dummy verbs') appears to give rise to a higher rate of recurrence of path elaboration. Path event granularity, on the other hand, needs to be viewed separately.

To sum up, whereas structurally path salience accounts for major differences between Jaminjung and Kriol, the elaboration of segments in a given motion event appears to be very similar for the two languages. Considering that they are spoken within the same cultural area, this suggests a culture-specific pattern. My analysis raises doubts on Ibarretxe-Antuñano's (2009) study of path salience combining structural elements and elaboration patterns and suggests keeping the measurements apart.

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