## Cavineña "associated motion" suffixes: their meanings and discourse function

## 1 Cavineña: some background

The language and its speakers:
Northern Bolivia, Amazon Basin
Tacanan family: Araona, Cavineña, Ese Ejja, Reyesano, Tacana
Macro Pano-Tacanan family hypothesis: (Key 1968, Girard 1971)
Approx. 1000 ~ 1200 fluent speakers, some children still learn it
Original context of the study:
Doctoral dissertation at the Research Centre for Linguistic Typology (La Trobe University, Australia) between 2000-2004
Writing of a descriptive grammar of the language (Guillaume 2004),
 revised and published as Guillaume (2008)

The corpus :

- 15 months of fieldwork (6 fieldtrips) between 1996 et 2003 (in the town of Riberalta and 2 traditional communities)
- 60 texts and conversations recorded, transcribed and translated
- 20 texts written directly by speakers
- sentences obtained through controled settings
- sentences overheard during participant observation
- non-religious texts published by Camp et Liccardi (SIL missionaries)
- sentences that illustrate the entries of Camp et Liccardi's (1989) dictionary

Basic clause structure:

- case marking + pronominal clitics in $2^{\text {nd }}$ position; ergative pattern $(\mathrm{S}=\mathrm{O} \neq \mathrm{A})$
a. [Tuke tupuju] =tu iba tsajaja-chine.

3SG FOLLOWING $=3 \mathrm{SG}$ jaguar run-REC.PAST
'The jaguar chased him (lit. ran following him).' sg010
b. Iba=ra =tu iye-chine takure.
jaguar $=$ ERG $=3$ SG kill-REC.PAST chicken
'The jaguar killed the chicken.' n1.0227

- minimal verb: root + TAM inflection
- polysynthetic \& agglutinative: noun incorporation + numerous non-inflectional affixes possible between root and TAM inflection (aspect, manner, modality, posture, motion, valency-changing, etc.)


## 2 The system of "associated motion"

- paradigm of eleven mutually exclusive verbal suffixes (see Appendix)
- function: associate a "motion" component to the event expressed by the verb stem they are attached to
a. Tudya =ekwana
ba-ti-kware
takure.
then $=1$ PL see-GO.TEMP-REM.PAST chicken
'Then we went to see the chicken (in the back of the bus).' ga034
b. Jadya=tibu=dya =mikwana ba-na-wa...
thus=REASON=FOC =2PL see-COME.TEMP-PERF
‘This is why I have come to see you (here in your village).' T1.69
- fascinating topic that immediately draws the attention of the investigator
- earliest description by Camp (1982)
- three articles by Guillaume (2000, 2006a, in press) + a lengthy section in Guillaume (2004), fully revised in Guillaume (2008: 212-236)
- not yet fully understood. Work in progress.


### 2.1 Typological perspective

- correspond to "associated motion" in Australian languages (Wilkins 1991, 2006)
- different from Mayan directionals (Haviland 1991, 1993, Craig 1994)

Papuan directionals/elevationals (Foley 1986: 148-52)
English path particles (e.g., in, out, away, up, down, etc.)
German, Latin, Russian verb prefixes (Talmy 2007: 141-146)

- "associated motion" markers encode motion and path while directionals only encode path. ${ }^{1}$
- directional markers can only specify the path of a motion that is already present in the verb stem event they are attached to. Directional markers are restricted to motion verbs
(3) motion verbs (English)
move out
run away
push $O$ in
throw O away
etc.

[^0]- "associated motion" markers associate a motion component to a verb stem event, regardless of whether this event already involves motion or not. "Associated motion" markers can be attached to all sorts of verbs:
(4)

| (non-deictic) | motion verbs |  | non-motion verbs |
| :--- | :--- | :--- | :--- |
| nubi-ti- | 'go and enter' | nawi-ti- | 'go and bathe' |
| warere-ti- | 'go and turn' | wira-ti- | 'go and pee' |
| isha-ti- | 'go and insert O' | tawi-ti- | 'go and sleep' |
| abu-ti- | 'go and carry O' | ba-ti- | 'go and see O' |
| wesa-ti- | 'go and lift O' | isara-ti- <br> ara-ti- | 'go and greet O' <br> etc. |
|  |  |  | etc. and eat O' |

- "associated motion" markers not discussed in the general typological literature
- unlike for directional systems, "Talmy's "verb-framed / satellite-framed" framework not applicable for "associated motion" systems because it only accounts for motion events involving motion verbs
(5) French motion + path verbs - verb framed

| V root <br> L'enfant <br> monte |  |  |  |
| :---: | :---: | :---: | :---: |
| Figure | Motion | dans | sa chambre. |

(6) English path particles - satellite framed

|  | V root | SATELLITE |  |
| :---: | :---: | :---: | :---: |
| The child | goes | up | into |
| Figure | Motion room. | Path |  |

(2) Cavineña "associated motion" - ???

|  |  | V root | SATELLITE |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Tudya | $=$ ekwana | ba | -ti | -kware | takure. |  |
| then | $=1 \mathrm{PL}$ | see | -GO.TEMP | -REM.PAST | chicken |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | Figure |  | Motion | Path |  |  |

'Then we went to see the chicken (in the back of the bus).' ga034

- "associated motion" markers typically grammaticalize from verbs

Table 1. Correspondences between motion suffixes and motion verbs in Cavineña

| Suffixes |  | Independent verbs |  |
| :--- | :--- | :--- | :--- |
| -ti/-nati | 'GO.TEMP' | kwa | 'go temporarily' |
| -na | 'COME.TEMP' | je | 'come temporarily' |
| - diru | 'GO.PERM' | diru | 'go permanently' |
| -eti | 'COME.PERM' | jeti | 'come permanently' |
| - -kena | 'LEAVE' | ? |  |
| - aje | 'GO.DISTR' | aje | 'walk' |
| -be | 'COME.TEMP.DISTR' | $\boldsymbol{b e}$ (?) | 'bring' |
| -etibe | 'COME.PERM.DISTR' | ? |  |
| -tsa | 'COME(O)' | ? |  |
| -dadi | 'GO(O)' | dadi (?) | 'find' |

- but: "associated motion" markers are not verbs anymore!
=> we are not talking about verb compounding/serialization (at least synchronically)
- "associated motion" markers are very frequent in Amerindian languages, reported under various names, including the misleading term "directional":

North: Atsugewi (Hokan, California, Talmy 1985, 2007)
Meso: $\quad$ Olutec (Mixe-zoquean, Mexico, Zavala 2000) Oaxaca Chontal (Isolate, Mexico, O’Connor 2007)
South: Asheninca (Arawak, Peru, J. Payne 1982) Cavineña (Tacanan, Bolivia) Matses (Panoan, Peru, Fleck 2003: 364) Reyesano (Tacanan, Bolivia, Guillaume 2006b) Yagua (Peba-Yagua, Peru, T. Payne 1984, Payne \& Payne 396-398) and many others...

- "associated motion" markers in other areas of the world:

Central Australia (Koch 1984, Tunbridge 1988, Wilkins 1991, 2006, Nordlinger 2001)
Chadic languages of Africa (Parson 1960/61, Frajzyngier 1993 and p.c.)

### 2.2 Semantics of "associated motion" markers in Cavineña (Cf. Appendix)

System semantically particularly complex, that involves:
1 - the figure (moving entity): subject (S/A) or object (O) argument;
2 - the manner of realization of the verb stem event: punctual or distributed;
3 - the orientation of the motion : 'towards' or 'away from' a reference point;
4 - the "stability" of the motion target: temporary or permanent;
5 - the location of the verb stem event vis-à-vis the target or the source of the motion: 'move and V ' or ' V while moving' or ' V and move'

## 3 S/A-related motion suffixes - punctual verb stem event

Table 2. S/A-related motion suffixes - punctual realization

| -ti/-nati | 'GO.TEMP' |
| :--- | :--- |
| - -diru | 'GO.PERM' |
| $-n a$ | 'COME.TEMP' |
| - eti | 'COME.PERM' |
| -kena | 'LEAVE' |

Semantic constrasts:
(1) orientation of the motion (§3.1)
(2) "stability" of the location that is targeted by the motion (§3.2)
(3) location of the verb stem event vis-à-vis the target or the source of the motion (§3.3)

### 3.1 Orientation of the motion

- specify a motion that is deictically oriented, i.e., directed either away from or towards the deictic center (DC)

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-ti, -nati, -diru motion away from the DC
-na, -eti motion towards DC
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- DC is the location of the speaker at the time of speech
a. Kwa-kwe AltoIvon=ju! Ba-ti-kwe tu-wa Chakubu=kwana!
go-IMP.SG AltoIvón=LOC see-GO.TEMP-IMP.SG there-LOC Chácobo.person=PL
'Go to Alto Ivón! Go and meet (lit. see) the Chácobo people there!' pa002
b. Ita [jeeke bicho] ba-na-kwe!

ATT.GETTER this beast see-COME.TEMP-IMP.SG
'Come and see this beast!' ij012

## 3.2 "Stability" of the targeted location

- the motion targets different kinds of locations in terms of their "stability"

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-ti, -nati, -na motion targets "unstable" (temporary) locations
-diru, -eti motion targets "stable" (permanent) locations
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- compare (7a) and (7b) ("unstable" locations) with (8a) and (8b) ("stable" locations)
(8) a. Jadya=eke =tuna tu-wa ani-diru-wa $\quad$ [ekwana-ja iyakwa epu=ju].
thus $=$ PERL $=3$ PL there-LOC sit-GO.PERM-PERF 1PL-GEN now village=LOC
'This is why they (our Cavineña ancestors) have settled (lit. gone to sit) there, where our village is now.' hs047

| b. Ba-eti-kware | $=$ tu-ra | $=\emptyset$ | amena | ike | ari-ari. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| see-COME.PERM-REM.PAST | $=3$ SG-ERG | $=1$ SG | BM | 1SG | big-REDUP |

'(When my older brother returned back home, after many years), he saw me much bigger (than at the time he had left).' nk054

### 3.3 Location of the verb stem event vis-à-vis the source and/or the target of the motion

- specification of where the verb stem event takes place vis-à-vis the source and/or the target of the motion.
$-t i \quad$ verb stem event takes place at the target of the motion
=> 'go and/to V, arrive and V, V while arriving'
-nati verb stem event takes place between the source and the target of the motion
=> 'V while going, V on the way'
-kena the verb stem event takes place at the source of the motion
=> 'V and move, V while leaving'
- -ti versus -nati:
(9) a. Verb stem event at target of motion
... kwa-kware ike bei=ju wikamutya=ra. go-REM.PAST 1SG lake=LOC fish=PURP.MOT

Tu-wa $=$ tuke $=\varnothing$ ba-ti-kware [peadya rau]... there-LOC $=3 \mathrm{SG}=1 \mathrm{SG}$ see-GO.TEMP-REM.PAST one egret
‘... I went fishing at the lake. Arriving there, I saw an egret...' s1012-013
b. Verb stem event between source and target of motion
[Jukuri turu ebari] =tuke $=\varnothing$ mee=ju ba-nati-kware.
coati big.male big $=3 \mathrm{SG}=1 \mathrm{SG}$ saltlick=LOC see-GO.TEMP-REM.PAST
'While I was going (to see my family,) I saw a big male coati in a saltlick.' mj119

- -kena
a. Pa-kena-kware [Rosa tu-ja familia shana-ya=ke]. cry-LEAVE-REM.PAST Rosa 3SG-GEN family leave-IMPFV=LIG
'Rosa cried as she was leaving her family.' n2.0887
b. [Refresco=kamadya] =tuke =Ø iji-kena-wa. soft.drink=RESTR $=3 \mathrm{SG} \quad=1 \mathrm{SG}$ drink-LEAVE-PERF
'I just had a soft-drink as I was leaving (my house).' lv033
$-n a$, -diru, -eti verb stem event takes place either at the target of the motion or between the source and the target of the motion
$=>$ 'go and/to V , arrive and $\mathrm{V}, \mathrm{V}$ while arriving' or,
$=>$ ' V while going, V on the way'
- illustration with -eti ‘COME.PERM':
(11) Verb stem event at target of motion
a. ... jamani amena ani-eti-wa
tu-wa.
vulture BM sit-COME.PERM-PERF there-LOC
'(Seeing me like dead,) the vulture came and sat there (in order to eat me).' sd055
$\begin{array}{cll}\text { b. ...[bakwa=ja } & \text { kapana] } & \begin{array}{l}\text { [armario dyake] } \\ \text { viper=GEN }\end{array} \\ \text { cupboard ON } & \text { iya-eti-kware... } \\ \text { put-COME.PERM-REM.PAST }\end{array}$
'.. arriving (home, ) he put the rattle (lit. bell) of the rattlesnake (lit. viper) on top of a cupboard.' vi030
(12) Verb stem event between source and target of motion
a. Tudya ekatse tawi-eti-kware [e-diji patyapatya].
then 3DL sleep-COME.PERM-REM.PAST NPF-path IN.MIDDLE.OF
'They slept midway along the path.' ts007
b. Tudya =tu jeti-nuka-ya=ke ba-eti-kware e-kike=ju
then $=3$ SG come-REITR-IMPFV=LIG see-COME.PERM-REM.PAST NPF-forest=LOC
[tumeke bakwa cascabel].
that viper rattlesnake
'Then, as he was coming back home (from delivering goods to his nephews at the school center), he saw that rattlesnake (lit. viper) in the forest.' vi005


## 4 S/A-related motion suffixes - distributed verb stem event

- punctual versus distributed
- punctual: verb stem event takes place only once in a particular location somewhere along a motion path, either at the source, or at the target, or in between
- distributed: verb stem event is distributed (or realized continuously) between the source and the target of the motion.

Table 3. S/A-related motion suffixes - distributed realization

| -aje | 'GO.DISTR' |
| :--- | :--- |
| -be | 'COME.TEMP.DISTR' |
| -etibe | 'COME.PERM.DISTR' |

- contrasting -nati (punctual) and -aje (distributed)
(13)
a. Kwa-baka-nuka-tsu =pa =tu ba-aje-kware
go-SHORT-REITR-SS =REP =3SG see-GO.DISTR-PAST
[kwanubi=kwana=ja e-mekware].
animal=PL=GEN NPF-trace
'He kept going and soon started to see traces of animals.' se029
b. [Yawa pupi-da=ju] =pa
ground clean-ASF(=LIG)=LOC =REP

$$
\begin{array}{lll}
{[\text { kwanubi=kwana=ja }} & \text { e-tsau=kwana] } & \text { ba-nati-wa. } \\
\text { animal=PL=GEN } & \text { NPF-bone=PL } & \text { see-GO.TEMP-PERF }
\end{array}
$$

'(Then, after going a bit further, he ended up in a clearing and there,) on the clean ground, he saw the bones of animals.' se030c

- distributed or continuous
(14) distributed

| $[$ Ike | mia-keja | je-ya=ke] | neti-be-wa. |
| :--- | :--- | :--- | :--- |
| 1SG | 2SG-ALL | come-IMPFV=LIG | stand-COME.TEMP.DISTR-PERF |

'As I was coming to you, I had to stop (lit. stand) many times on the way (to do various things. So this is why I am late).' n3.0497
(15) continuous

| Jadya $=$ tu | amena | ara-be-kware | e-ra. |
| :--- | :--- | :--- | :--- |
| thus | $=3$ SG | BM | eat-COME.TEMP.DISTR-REM.PAST | 1SG-ERG

'So I was coming and eating (motacú nuts) along the way.' mp029

### 4.1 Orientation of the motion

```
-aje motion away from the DC
-be, -etibe motion towards DC
```

(16) Tudya diru-baka-tsu kike-tere-aje-kware maju-diru=ishu. then go-SHORT-SS shout-COMP-GO.DISTR-REM.PAST die-GO.PERM=PURP.GNL
'Then, he (the jaguar I had shot) went away a short distance, screaming with pain intermittently before he died.' mt012
(17)

Nereka-da [e-kwe e-bakujuna] tsajaja-be-ya.
miserable-ASF 1SG-GEN 1-daughter run-COME.TEMP.DISTR-IMPFV
'My daughter was coming back to me, running now and then, miserably (through the terrible pampa path, in order to meet me back).' ka018

## 4.2 'Stability" of the targeted location

```
-be motion targets "unstable" (temporary) locations
-etibe motion targets "stable" (permanent) locations
-aje unspecified
```

- compare -be in (17) with -etibe in (18)

| E-diji=ju | ike | jara-etibe-chine. |
| :--- | :--- | :--- |
| NPF-path=LOC | 1SG | lie-COME.PERM.DISTR-REC.PAST |

'I lay on the path many times on my way back home (because I had a strong fever).' pf079

## 5 O-related motion suffixes

- Figure is O argument

Table 4. O-related motion suffixes

| $-t s a$ | 'COME(O)' |
| :--- | :--- |
| $-d a d i$ | 'GO(O)' |

These two suffixes have the following semantic and distributional characteristics:
1 - they are only used with transitive verbs;
2 - the orientation of the motion is not deictic: the reference point is the location of the A argument, regardless of the location of the speaker;
3 - the verb stem event is realized punctually;
4 - there is no distinction in terms of the "stability" of the targeted location nor in terms of the location of the verb stem event vis-à-vis the source or the target of the motion.
a. Tume =pa =taa =tu-ja =tu
then $=$ REP $=$ EMPH $=3$ SG-DAT $=3$ SG

| ba-tsa-ya | ekwita... |
| :--- | :--- |
| see-COME(O)-IMPFV | person |

'Then he ${ }_{\mathrm{i}}$ saw a man coming towards him $_{\mathrm{i}}$.' cp013a
b. [Peadya ekwita] =tuke = $\varnothing$ ba-dadi-wa...
one person $=3 \mathrm{SG}=1 \mathrm{SG}$ see-GO(O)-PERF
'I saw a man going away from me (with the duck he had stolen).' ju008

- additional examples:
(20)

$$
\begin{array}{cl}
\text { a. } \begin{array}{cl}
{[\text { E-kwe e-bakujuna=ekana=ra }]} & =\varnothing \\
\text { 1SG-GEN } & 1 \text {-daughter=PL=ERG }
\end{array}=1 \text { SG } \\
\text { dunu-tsa-chine=dya. } & \\
\text { surround-COME(O)-REC.PAST=FOC }
\end{array}
$$

(When I arrived home after a long journey,) my daughters surrounded me.' ka541
$\begin{array}{clll}\text { b. ...tyuwi=ju } & \text { buka=ra } & \text { mada } & \text { karu-dadi-kware. } \\ \text { nape=LOC } & \text { furet=ERG } & \text { agouti } & \text { bite-GO(O)-REM.PAST }\end{array}$
'(From the top of a tree, I was observing a furet chasing an agouti. I saw) the furet bit the agouti on the nape (from behind).' ms020

## 6 Discourse function of "associated motion" markers

- "echo" phenomenon with semantically corresponding independent verbs of motion in the same sentence or contiguous sentences
(9a) I went to fish. I saw-GO an egret.
(12b) As he was coming back home, he saw-COME that rattlesnake.
(13a) He kept going and soon started to see-GO traces of animals.
(14) As I was coming to you, I had to stop-COME many times on the way.
(16) The jaguar went away a short distance, screaming-GO with pain before he died-GO.
- the same phenomenon was noted in Central Australian languages by Wilkins (1991), who interprete it as a device for foregrounding the verb stem event.
" $[I]$ t is not the main function of 'associated motion' forms to present and elaborate information about a motion event. Just as tense [...] functions to locate events within the flow of time, the category of 'associated motion' functions to locate events within the flow of space." (p. 251)
- Payne's (1984) study of "locational markers" in Yagua (Peba-Yagua, Peru):
=> "discourse structuring device"
"texts can have a locational structure, ie. a potentially hierarchical text structure based on locational relations between various units (like logical and temporal relations)" (p. 167)
"locational scenes are spatially defined areas of attention, parallel to scenes in drama, i.e., the subunits of a play normally bounded by a lowering and subsequent raising of the curtain." (p. 162)
"[Yagua has] morphological signals of scene changes in story-telling process" (p. 164) "great importance of orienting any text in space"
- Illustration in Cavineña: Story of Mr. Crisanto and the Rattlesnake


## 7 Conclusions

- category of "associated motion" $\neq$ from better known category of "directional"
- absent from general typological work but not rare cross-linguistically
- primarily a discourse category: spatial orientation of events vis-à-vis each others
- Cavineña "associated motion" system particularly developped


## Story of Mr. Crisanto and the Rattlesnake (Cavineña)

(1) Mr. Crisanto had three nephews who were studying in a remote school. vi001-003
(2) One day he went to the school to bring them food. vi004

## SCENE 1: THE FOREST

(3) As he was coming back home, he saw-COME a rattlesnake, in the forest. vi005
(4) The rattlesnake almost bit him. vi006
(5) Then Mr. Crisanto cut a stick and killed the snake. vi007-009

## SCENE 2: THE EDGE OF THE PAMPA

(6) Then, as he was coming back again, he saw-COME another snake, at the edge of the pampa. vi010
(7) The same thing happened: the snake almost bit him. vi011

## SCENE 3: NEAR THE RATTLESNAKE

(8) This time, Mr. Crisanto, approached-GO the rattlesnake, cut-GO its rattle with a knife, tookGO the bell with him and left the snake in the path. vi012-014

## SCENE 4: A WOOD IN THE PAMPA

(9) Then, he kept coming back, (stopped) and slept-COME (for the night) in a wood of the pampa. vi015
(10) His house was far away from the school. vi016
(11) As dawn was breaking he heard the noise of leaves moving. vi017
(12) He looked carefully around him and saw a rattlesnake who was turning around his mosquito net. vi018-19
(13) He immediately jumped out of his mosquito net, got ready and left the rattlesnake. vi020-2122

## SCENE 5: A LOG

(14) And he kept coming back. He came back a short distance and (stopped and) ate-COME his food on top of a log. (As he was doing so,) he saw-COME(O) again a rattlesnake who was going in the path. vi024
(15) He was really surprised and left it again. vi023-27

## SCENE 6: THE HOME OF MR. CRISANTO

(16) He kept going toward his house. Then he arrived (lit. was-COME) at his house. vi028-29
(17) Then he put-COME the rattlesnake's bell on top of a cupboard, having tightly tied it inside a piece of clothe. vi030
(18) Then he went to sleep. vi031
(19) His house was in good shape. There was no way a snake could enter it. But when he woke up, he saw the damn rattlesnake lying underneath the cupboard! vi032-033

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## 9 Abbreviations

| $=$ | clitic boundary | LOC | locative |
| :---: | :---: | :---: | :---: |
| ( ) | material that does not appear on the surface (used in the glossing line) | LOC.APPROX <br> LOC.GNL <br> MAN | locative approximative general locative manner |
| [ | multiple-word constituent | NEG | negative |
| A | transitive subject | NP | noun phrase |
| ABIL | abilitative | NPF | (dummy) noun prefix |
| ADVERS | adversative | NSG | non-singular |
| AFFTN | affection | O | object |
| ALWS | always | ONOM | onomatopoeia |
| ANTIPASS | antipassive | PASS | passive |
| APPROX | approximative | PERF | perfect |
| ASF | (dummy) adjective suffix | PERL | perlative |
| ASSOC | associative | PERM | permanently |
| Att.getter | attention getter | PL/pl | plural |
| AUGM | augmentative | POT | potential |
| caus | causative | PROP | proparalepsis |
| CAUS.INVLT | causative of involvement | PROX | proximal |
| CC | copula complement | PURP.GNL | general purpose |
| COMP | completive | PURP.MOT | purpose of motion |
| CONDIT | conditional | QUEST | question (marker) |
| CONTR | contrastive | REC.PAST | recent past |
| CONT.EVID | contrary to evidence | REDUP | reduplication |
| DAT | dative | REF | reflexive |
| DC | deictic center | REITR | reiterative |
| DESID | desiderative | REM.PAST | remote past |
| DIM | diminutive | REP | reportative |
| DISEMPH | disemphatic | RES | resultative |
| DISTR | distributive | RESTR | restrictive |
| DL/dl | dual | S | intransitive subject |
| DS | different subject | SG | singular |
| E | extended argument | SIMLR | similarity |
| EMPH | emphatic | SS | same subject |
| ERG | ergative | STRG.EMPH | strong emphasis |
| FILL | (lexical) filler | TEMP | temporarily |
| FB | father's brother | UNCERT | uncertain |
| FM | formative | 1,2,3 | $1^{\text {st }}, 2^{\text {nd }}, 3^{\text {rd }}$ person |
| FOC | focus |  |  |
| FRUST | frustrative |  |  |
| GEN | genitive |  |  |
| HORT | hortative |  |  |
| IMP | imperative |  |  |
| IMPFV | imperfective |  |  |
| INCOMP | incompletive |  |  |
| INT | interrogative |  |  |
| INTENS | intensifier |  |  |
| JUSS | jussive |  |  |
| LIG | ligature |  |  |


[^0]:    ${ }^{1}$ Following Talmy (1985, 2000, 2007), motion (here "translational" motion, as opposed to "self-contained" motion) refers to the spatiotemporal displacement of an entity (or figure) vis-à-vis a ground object, from a source (origin) to a target (goal, endpoint). Path concerns the specification of the course followed by the figure during its displacement with regards to different landmarks, e.g., vis-à-vis the deictic center (towards vs. away from), vis-à-vis an enclosure (in vs. out), vis-à-vis the vertical axis (up vs. down), etc.

