

Supplementary Material for
13 Associated Motion in North America (including Mexico and Central America)
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Chapter 13 in

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(Empirical Approaches to Linguistic Typology 64). Berlin: De Gruyter Mouton.

This document of Supplemental Material describes markers of associated motion (hereafter AM) in each of the 94 languages that were found to express this notion in North America (plus one marginal case, Ktunaxa). The languages are grouped by language family, organized roughly geographically, starting in Central America and moving northward. Fig. 1 is a map showing the 94 languages.

Fig. 1
Map showing the 94 languages discussed in this chapter



S1. Chibchan

The Chibchan family straddles the boundary between North and South America, extending from northwest Colombia up to Costa Rica.

S1.1. Kuna (Chibchan; Panama)

Kuna has a construction involving compounding of verbs, the second verb of which must be one of four motion verbs and five stance verbs. Because the construction is limited to these nine verbs, I consider it grammaticalized. However, the only examples cited by Smith where one of these verbs combines with a verb that is not a motion verb and occurs with a sense of AM involves the verb *na* ‘go’, as in (S1).

- (S1) *an be=ga an ibmar saki-na-o-ye.*
 1SG 2SG=DAT 1SG thing steal-**GO**-PROS-QUOT
 ‘I will go and steal something for you.’ (Smith 2014: 195)

S1.2. Guatusa (Chibchan; Costa Rica)

Guatusa has two AM prefixes, an andative and a ventive. Both are used for prior AM, though there are also examples of the ventive being used as a directional. The example in (S2) illustrates the andative prefix *té*.¹

- (S2) *i-yú mi-p-té-lhúe.*
 3-INSTR 2-ANTIP-**GO**-throw
 ‘He went to throw it.’ (Constenla 1998: 124)

The example in (S3) illustrates the AM use of the ventive prefix.

- (S3) *mi-tonh-usírra*
 1-**COME**-talk
 ‘I came to talk.’ (Constenla 1998: 124)

The last example (S4) illustrates the directional use of the ventive, where it combines with a motion verb meaning ‘fall’ to denote the direction of the falling.

- (S4) *lacá=lha i-tonh-min.*
 ground=3.on 3-**COME**-fall
 ‘He came falling to the ground.’ (Constenla 1998: 124)

S2. Garifuna (Haurholm-Larsen 2016; Arawakan; Belize to Nicaragua)

Although Garifuna is technically a language of Central America, it is a member of the Arawakan family, most of whose languages are in South America. Garifuna has a single AM suffix *-yna*, indicating concurrent AM, as in (S5). Haurholm-Larsen glosses it as andative, although it is often not clear from such glosses whether the morpheme so

¹ Note that although a verb meaning ‘throw’ is a motion verb and in some languages can occur with directional morphemes to indicate the direction of the throwing motion, the use in (S2) involves prior associated motion, since the motion denoted by the andative morpheme is distinct and prior to the motion denoted by the verb *lhúe* ‘throw’.

glossed codes motion away from the deictic centre as opposed to being neutral with respect to direction. However, it does appear from the examples to have andative meaning.

- (S5) *bueno aban wé-ydi-n aríya-hè-yna wa-gíya pádnà.*
 well CONN 1PL-go.1SUBJ-USPEC look.for-DISTR-**ANDA** 1PL-DEM companion
 ‘Well, then we left, looking for company on our way’ (Haurholm-Larsen 2016: 225)

This suffix also occurs as a directional with motion verbs, as in (S6).

- (S6) *éybuge-yna l-ínya Aléru aban l-achúgera-gu-n yára*
 walk-**ANDA** 3MASC-COP Alero then 3MASC-stumble-REFL-UNSPEC.TENSE there
 ‘Alero is walking down the road and then stumbles there.’ (Haurholm-Larsen 2016: 236)

S3. Mayan

S3.1. Tzutujil (Mayan; Guatemala)

Tzutujil has a pair of AM prefixes, glossed ‘go’ and ‘come’ by Dayley (1985), illustrated in (S7) and (S8), which appear to express andative and ventive prior AM respectively.

- (S7) *x-in-ee-war-i*
 COMPL-1SG-**GO**-sleep-PERFECT
 ‘I went and slept’ (Dayley 1985: 98)

- (S8) *x-in-uj-war-i*
 COMPL-1SG-**COME**-sleep-PERFECT
 ‘I came and slept’ (Dayley 1985: 98)

It is not clear whether these prefixes can also be used as directionals. Dayley gives a paradigm of forms of the verb *eeleem* ‘go out, leave’, including the forms in (S9) and (S10).

- (S9) *x-in-ee-’eel-i*
 COMPL-1SG-**GO**-leave-PERFECT (Dayley 1985: 100)

- (S10) *x-in-uj-’eel-i*
 COMPL-1SG-**COME**-leave-PERFECT (Dayley 1985: 100)

Unfortunately, Dayley doesn’t gloss these forms so it is not clear whether they mean ‘go and leave’ and ‘come and leave’ or whether they mean ‘go out’ versus ‘come out’. The meanings ‘go and leave’ and ‘come and leave’ sound odd, so I suspect the forms in (S9) and (S10) mean the latter, in which case they are directionals. But we can’t be sure.

Dayley also mentions a set of 12 directional enclitic particles, including *qaaj*

‘down’ in (S11).

- (S11) *X-in-ee-war* *qaaj.*
 COMPL-1SG-GO-sleep **down**
 ‘I went down to sleep.’ (Dayley 1985: 266)

Note that the directional in (S11) adds direction to the AM prefix *ee-* ‘go’, not the verb stem for ‘sleep’. But the directional clitic *eel* ‘leave’ in (S12), obviously related to the verb - ‘*eel*’ ‘leave’ in (S9) and (S10), is behaving more like an AM morpheme denoting subsequent AM.

- (S12) *X-in-uj-wa’* *eel.*
 COMPL-1SG-COME-eat **leave**
 ‘I came to eat and left.’ (Dayley 1985: 266)

S3.2. Sipakapense (Mayan; Guatemala)

Sipakapense has three particles that Barrett (1999) calls directional clitics, which code three types of subsequent AM. The first one, *b’ik*, illustrated in (S13), indicates motion away from the deictic centre after the act denoted by the verb.

- (S13) *Mariy x-tz’ul-ij* *b’ik* *Wan*
 Mariy COMPL-hug-MODAL **DIR.GO** Wan
 ‘Mariy hugged Wan and left.’ (Barrett 1999: 131)

The second one *ul* denotes motion towards the deictic centre ending in arrival after the event denoted by the verb.

- (S14) *X-ø-tz’ub-j* *ul.*
 COMPL-3SG.ERG:3SG.ABS-kiss-MODAL **DIR.ARRIVE.HERE**
 ‘S/he kissed him/her before coming here.’ (Barrett 1999: 133)

The third one, *pon*, is similar to *ul* in denoting arrival, differing in that *pon* denotes arrival after motion away from the deictic centre, while *ul* denotes arrival after motion towards the deictic centre.

- (S15) *X-oq’* *pon.*
 COMPL.3SG-buy **DIR.ARRIVE.THERE**
 ‘S/he bought it before they (he/she) arrived.’ (Barrett 1999: 132)

Note, however, that the gloss to (S15) suggests that the one arriving need not be the same as the denotation of the subject of the verb. And although the gloss to (S14) implies that it is the subject of the verb that is arriving, it is possible that it need not be the subject arriving with *ul* either.

Note also that the set of particles that the three particles *b'ik*, *ul* and *pon* belong to also contain ones with purely directional meaning, as in (S16), similar to what was described above for the postverbal particles in Tzutujil.

- (S16) *X-ø-b'iin* ***qaj***.
 COMPL-3SG.ABS-walk **DIR.DOWN**
 'She walked there going down.' (Barrett 1999: 135)

S3.3. Kekchi (Stewart 1980, Hún Macz 2005; Mayan; Guatemala)

Kekchi has three AM prefixes, two denoting prior AM (ventive *ol-* illustrated in (S17) and andative *ox-*, illustrated in (S18)) and one, *nume7-*, illustrated in (S19) and (S20) that denotes prior plus subsequent AM of the passing-by type.

- (S17) *x-ol-in-x-b'oq*.
 COMPL-COME-1SG.ABS-3SG.ERG-call
 'He came to call me.' (Stewart 1980: 73)
- (S18) *x-ox-in-x-b'oq*.
 COMPL-GO-1SG.ABS-3SG.ERG-call
 'He went to call me.' (Stewart 1980: 73)
- (S19) *x-in-x-nume7-b'oq*.
 COMPL-1SG.ABS-3SG.ERG-WHILE.PASSING-call
 'He called me as he was passing.' (Stewart 1980: 73)
- (S20) *x-in-nume7-atin-q*.
 COMPL-1SG-WHILE.PASSING-bathe-DIR
 'I stopped to bathe while passing by.' (Stewart 1980: 74)

The ventive and andative prior AM prefixes can co-occur with the passing-by prefix to indicate the direction of the motion while passing by, illustrated in (S21) for the ventive prefix.

- (S21) *X-ol'-laj-ex-in'-nume'-sak'*.
 COMPL-COME-REPET-2PL-1SG-WHILE.PASSING-hit
 'As I was coming, I hit each one of you.' (Hún Macz 2005: 58)

It is not clear whether the andative and ventive prefixes can function as directionals with verbs where the motion is denoted by the verb itself rather than by the passing-by prefix.

S3.4. Mam (Mayan; Guatemala)

Mam has an andative prior AM suffix *-7kj*, which England (1983) glosses as 'PROC' for 'processive' but translates as 'go and', illustrated in (S22), in which it attaches to the verb *la* 'see'.

- (S22) *ma* *ø-txi7* *t-la-7kj* *axi7n* *t-uj* *plaas.*
REC.PAST 3SG.ABS-DIR 3SG.ERG-see-**PROC** corn 3SG-in market
'He went and saw the corn in the market.' (England 1983: 109)

Mam also has a second andative prior AM suffix -7tɿ which is specifically imperative, illustrated in (S23).

- (S23) *ø-ø-la-7tz-a* *axi7n t-uj* *plaa.s*
 3SG.ABS-2SG.ERG-see-**PROC.IMPRT**-2SG corn 3SG-in market
 ‘Go and see the corn in the market!’ (England 1983: 110)

S3.5 Ixil (Mayan; Guatemala)

Ixil has three preverbal AM particles. There is a prior AM ventive *ul*, as in (S24).

- (S24) *La ul un-muj u puaj.*
 POT COME 1SG.ERG-hide DEF money
 ‘I will come to hide the money.’ (Ayres 1991: 145)

There is also a prior AM andative *b'en*, as in (S25).

- (S25) *B'en e-muj-taj u puaj!*
 GO.NONPAST 2PL.ERG-hide-IMPRT DEF money
 'Go hide the money!' (Ayres 1991: 145)

The third AM particle *pal*, illustrated in (S26), involves prior plus subsequent AM of the passing-by type.

- (S26) *Nik pal tile*.
 PROG PASS see
 'See it as you're passing by.' (Ayres 1991: 138)

S3.6. Quiché (Mayan; Guatemala)

Quiché has two AM prefixes, a ventive prior AM prefix *ul-*, illustrated in (S27), and an andative prior AM prefix *e:-*, illustrated in (S28).

- (S27) *k-iš-**ul**-č'a:w-oq.*
INCOMPL-2PL-**DIR**.COME-talk-DIR
'You come to talk.' (Mondloch 1981: 88)
- (S28) *š-**e**:-č'a:w-a* *lah.*
COMPL-**DIR**.GO-talk-DIR 2SG.F
'You go to talk.' (Mondloch 1981: 88)

S3.7. Chuj (Mayan; Guatemala)

Hopkins (1967: 118-119) reports on three prefixes in Chuj which appear to be instances of AM, though because he does not provide interlinear glosses, it is not possible to cite analysed examples. One of them, *p'āt*, which he glosses ‘going’, occurs in an example sentence meaning ‘We will go down there to eat it’, so is probably a prior AM prefix. Another, *hūl*, which he glosses ‘coming’ occurs in an example sentence he glosses ‘I come to give y’all a visit’, again probably a prior AM prefix. The third, *ěk*, which Hopkins does not seem to provide an example of, he glosses ‘passing by’; this is apparently an instance of prior plus subsequent AM of the passing-by type.

S4. Otomanguean

AM is widespread in the Otomanguean family, most of the languages of which are spoken in Mexico. It is found in at least five branches of the family, Zapotecan, Chinantecan, Mixtecan, Matlatzincan, and Otomian. Six of the ten languages discussed here have more than two types of AM, which is somewhat atypical of North America.

S4.1. Ocuilteco (Matlatzincan, Otomanguean; Mexico)

Ocuilteco has a single AM affix, a prefix coding prior AM, which Muntzel refers to as a directional prefix, illustrated in (S29) and (S30).

- (S29) *kit-kwe-p-ti*.
 FUT-1PL.EXCL-**DIR**-sing
 ‘We (excl) will go sing.’ (Muntzel 1986: 128)

- (S30) *ki-li-p-ta* *ntyεço-hnA* *maltiš*.
 FUT-1SG-**DIR**-buy all-PL Tuesday
 ‘I go to buy every Tuesday’ (Muntzel 1986: 97)

S4.2. Tilapa Otomí (Otomian, Otomanguean; Mexico)²

Palancar (2012: 9) describes a three-way AM contrast in Tilapa Otomí, between what he calls andative, cislocative, and translocative, where he characterizes the andative as depicting “the subject as moving away from the speech act situation in order to perform the action”, the cislocative as depicting “the subject moving towards the speech act situation”, and the translocative as depicting “the subject as either doing the action in a different place than the speech act situation or as moving away to such a place”. It is not clear how the translocative differs from the andative, except that the translocative can denote an action that takes place in a different location and it is possible that the andative entails purpose while the translocative does not. It is possible that the real meaning of the translocative is simply that the action takes place in a different location and that the fact that some of the examples involve motion to that location is simply an implicature in

² See Hernández-Green and Palancar (this volume, Ch 14) for a detailed description of associated motion in Otomian languages, including Tilapa Otomí.

those cases. If this is the case, then the translocative does not really involve AM.

S4.3. Yosondúa Mixtec (Mixtecan, Otomanguan; Mexico)

Yosondúa Mixtec has a set of preverbal particles varying for mood and aspect that code prior AM andative versus ventive. These particles are based on forms of the verbs for ‘go’ and ‘come’ but have grammaticalized with reduced forms.

- (S31) *xan* *sucha* *da.*
 go.COMPL POT.swim 3SG.MASC
 ‘He went to swim.’ (Farris 1992: 53)

- (S32) *ni* *ki* *kihin* *da* *kisi* *fia.*
 COMPL **come.COMPL** POT.take 3SG.MASC cooking.pot 3SG.FEM
 ‘He came to get her cooking pot.’ (Farris 1992: 53)

The reduced form *xan* ‘go.COMPL’ in (S31) contrasts with the full completive form of the verb for ‘go’, namely *xahan*, while the reduced form *ki* ‘come.COMPL’ in (S32) contrasts with the full completive form of the verb for ‘come’, namely *kixi*.

S4.4. San Juan Guelavía Zapotec (Zapotecan, Otomanguan; Mexico)

San Juan Guelavía Zapotec has two prior AM prefixes, an andative and a ventive. The andative *i-* is illustrated in (S33).

- (S33) ... *te'ihby* *gwe'ell=ih* *b-i-zhiel=ëhnn* *zèèi'ny* *Cu'lbeersiiry* ...
 one time=DIST PFV-**GO**-find=1PL work Culver.City
 ‘... one time we went and found work Culver City, ...’ (Lillehaugen 2006: 82)

S4.5. San Bartolome Zoogocho Zapotec (Zapotecan, Otomanguan; Mexico)

San Bartolome Zoogocho Zapotec has a pair of AM prefixes coding prior AM, with contrasting andative and ventive meanings.

- (S34) *z-gh-elh=be'.*
 STAT-**ANDAT**-sing=3INF
 ‘He goes to sing.’ (Sonnenschein 2004: 108)

- (S35) *kate* *b-edey-a* *mansia* *yish=en'* ...
 when **COMPL-VENT**-take Amansia grinding.stone=DET
 ‘When Amansia came to take the grinding stone ...’ (Sonnenschein 2004: 156)

S4.6. Sochiapan Chinantec (Chinantecan, Otomanguan; Mexico)

Sochiapan Chinantec is one of five Chinantecan languages that I have data on as having AM prefixes. It has a set of andative and ventive prefixes coding prior AM which also

vary for tense, and mood and for person and number of subject. It also has a random motion concurrent AM prefix and a concurrent prefix that is neutral with respect to direction. Example (S36) illustrates a ventive prefix that also codes future tense and 1SG subject.

- (S36) *ɲiá^M-ɲliá^H* *tiá^L* *kĩ^Ĥ* *lá^M* *ɲiú^H*.
 VENT.IMPRT-push.INAN.IMPRT.2SUBJ SUPPL rock this friend
 ‘Please come and push this rock, friend.’ (Foris 2000: 109)

Example (S37) illustrates the fact that the ventive prefixes can also be used as directionals.

- (S37) *ɲa^L* *li^Ĥmuú^M* *ɲia^L-ɲu^{LM}* *siá^{ɲL}* *ɲɲiu^{LM}* *hná^{HL}*.
 MODR stop VENT.PRES-enter.PROH.2 again house:1SG.POSS 1SG
 ‘Don’t ever come into my home again!’ (Foris 2000: 156)

Example (S38) illustrates the andative being used for prior AM.

- (S38) *Kuá^M-hĩe^H* *rẽ^{ɲM}!*
 ANDAT.IMPRT-see.2 sibling.2POSS
 ‘Go see your sibling!’ (Foris 2000: 107)

None of the examples that Foris cites of the andative appear to involve concurrent AM, though since we find this with the ventive, this may simply be a gap in the data. In (S39), the andative appears to be functioning as a directional (unless the intended meaning is ‘go and enter’).

- (S39) *cá^M* *ɲi^L* *dá^M* *ka^L-ɲiĩ^H-ɲi^{LM}* *ɲiéi^{ɲL}*
 person that.ANIM VERIF PAST-ANDAT-enter.ANIM.3SG inside.3SG
ɲɲiu^{LM} *hná^{HL}*.
 house.1SG 1SG
 ‘It was definitely that person who entered my house.’ (Foris 2000: 368)

An interesting typological oddity of the ventive and andative AM prefixes in Sochiapan Chinantec is that the two can occur together in the same word, denoting a combination of prior plus subsequent AM, as in (S40) and (S41).³

- (S40) *Má^M* *kuá^M-ɲiĩ^H-ɲnia^{ɲM}* *cú^M* *ca^Lkuá^H* *ho^{ɲH}* *la^Lkău^M* ...
 PFV VENT.PAST-ANDAT.PAST-search.3 3PRO horse have.3 in.vicinity.of
 ‘S/he has returned from searching for her/his horse in the vicinity of
 [Quetzalapa].’ (Foris 2000: 232)

³ The ventive past tense prefix *kúá^M* in (S40) and (S41) is identical in form to the andative imperative in (S38), but the ventive past tense prefix is underlyingly *kúá^L*.

- (S41) *kuá^M-ŋi^H-kiãu^M* *cá^Mhuí^M* *θái^M* *ʔi^L* *tio^{ʔHL}* ...
 VENT.PAST-ANDAT.PAST-bring.3 townspeople sand COMP be.PRES.PL
 ‘The townspeople went and brought back sand [from along the river.]’ (Foris 2000: 233)

While the use of the andative in (S41) clearly involves prior AM, the ventive could be construed either as concurrent AM or as a directional. Note that when the andative and ventive combine, the ventive can denote subsequent AM, so it is instance of a morpheme that can denote direction, prior AM, concurrent AM, or subsequent AM. However, one might equally well view the combination of the two as coding prior plus subsequent AM of the round trip type.

Sochiapan Chinantec has two other AM prefixes, both involving concurrent AM. The first of these, *ñi³-*, Foris calls the ambulative, is illustrated in (S42). It involves moving around, i.e. random concurrent AM.

- (S42) *ñi^L-hui^{MH}* *cú^M* *ha^H* *ʔŋiú^L* *ʔi^L* *té^{ʔML}* *rãĩ^{ʔMH}*.
 AMB-whistle.3 3PRO among house COMP call.PRES.3 companion.3POSS
 ‘He walks around in the streets calling his companions.’ (Foris 2000: 104)

This prefix can also be used as a directional with motion verbs, as in (S43).

- (S43) *ʔe^L* *ta^{MH}* *ñi^L-ŋi^{ʔH}* *nú^M* *ŋi^H* *lá^{M?}*
 what work AMB-walk.2SG 2SG place this
 ‘Why are you walking around here?’ (Foris 2000: 104)

The second concurrent AM prefix, *hi^l-*, illustrated twice in (S44), is one that apparently differs from the ambulative prefix in that it only codes concurrent AM, while the ambulative codes random concurrent AM. Foris glosses it simply as ‘MOT’.

- (S44) *hãu^M* *huõu^{LM}* *cá^Mmĩ^L* *hmi^{ʔH}* *ʔH-ʔó^{ʔLM}* *ʔi^L* *ʔH-ʔo^M* ...
 so many.ANIM woman TERMIN MOT-shout.3 and MOT-cry.3
 ‘So many women were walking along shouting and crying ...’ (Foris 2000: 111)

This prefix can also occur with verbs of motion, as in (S45), which might seem surprising if it only codes motion, but Foris implies (p. 111) that this use is more common with inanimate subjects (where the motion is nonvolitional).

- (S45) *hlã^{ʔH}* *rẽ^M* *ʔH-cau^{LM}* *ʔmá^Mĩ^{ʔLM}* *lá^M*.
 really well MOT-go.3SG wagon this
 ‘This wagon really moves along well.’ (Foris 2000: 111)

It is also possible to combine this concurrent AM prefix *ʔH-* with a ventive prefix, as in (S46).

- (S46) *ó^{LM} bí^{2H} má^M ʔ^H-há^M-héi^{2LM} cú^M hui^{LM}.*
 yonder AFFIRM PFV MOT-VENT.PRES-slash.3 3PRO trail
 ‘From over there they are coming along slashing (the overgrowth beside) the trail.’ (Foris 2000:111)

The apparent meaning associated with this combination is ventive concurrent AM; i.e. the addition of the concurrent AM prefix changes the ventive from prior AM to concurrent AM. It is not clear whether it is also possible to combine the concurrent AM prefix with the andative prefix.

S4.7. Tepetotutla Chinantec (Chinantecan, Otomanguan; Mexico)

Tepetotutla Chinantec has a three-way contrast between andative prior AM, ventive prior AM, and prior plus subsequent AM of the round trip type. The first two of these involve sets of prefixes that also vary for tense-aspect, mood and subject. Examples of andative and ventive are given in (S47) and (S48).⁴

- (S47) *zi^L-lio^{2M} za^M.*
 GO.INCOMPL.3-bathe 3PRO
 ‘S/he will go and bathe.’ (Westley 1991: 21)
- (S48) *ka^M-o^L-ʔnio^{2M} za^M kui^{gMH}.*
 PAST-COME.COMPL-search.3 3PRO firewood
 ‘S/he/they came and looked for firewood’ (Westley 1991: 20)

The prefix which codes prior plus subsequent AM of the round trip type is illustrated in (S49) (glossed as ‘RT’).

- (S49) *ka^M-i^H-lio^{2LH} hnia^{2LH}.*
 PAST-RT-bathe.1PL 1PL.EXCL
 ‘We went and bathed and returned.’ (Westley 1991: 22)

S4.8. Comaltepec Chinantec (Chinantecan, Otomanguan; Mexico)

Comaltepec Chinantec also has andative and ventive prior AM prefixes that vary for aspect and subject. Two of them, the andative and ventive prefixes, are illustrated in (S50) and (S51).⁵

- (S50) *ka^L-ʔo^L-lá^L=a.*
 COMPL-GO.COMPL.1SUBJ-bathe=1SG
 ‘I went and bathed’ (Anderson 1989: 15)

⁴ The completive prefixes, like *o^L-* in (S48), do not vary for subject.

⁵ The ventive prefixes vary only for subject, not for aspect.

- (S51) *ka^L-ga^L-si^{2LH}=i.*
 COMPL-COME.1SG-untie=1SG
 ‘I came and untied it.’ (Anderson 1989: 16)

In addition, this language has two more unusual AM prefixes, meaning ‘to arrive and ...’, one that is andative, illustrated in (S52), and one that is ventive, illustrated in (S53).

- (S52) *kə:^L hmi:^{LH} ka^L-gi^L-guä^L tiú^H hui^{LM} dó^M.*
 one day PAST-ARRIVE.THERE-sit Peter road there
 ‘One day Peter arrived to sit there.’ (Anderson 1989: 16)

- (S53) *ka^L-gui^L-hé:n^L ʔi^L zä^L dó^M la^L-ŋin^M ʔin^{2LH} hó^{2L}.*
 PAST-ARRIVE.HERE-bring REL person that various kind animal
 ‘That man arrived here bringing all kinds of animals.’ (Anderson 1989: 16)

S4.9. Lealao Chinantec (Chinantecan, Otomanguan; Mexico)

Lealao Chinantec also has a three-way contrast of andative, ventive and ‘arrive’. The first two of these are illustrated in (S54) and (S55). Both involve prior AM.

- (S54) *ma^M-bi^H-lia:ʔ^L.*
 PAST-COME.COMPL.3-bathe.3
 ‘He came and bathed (today).’ (Anderson 1989: 15)
- (S55) *za^L-hmé:^M ta^H.*
 GO.INTENT.3-do work
 ‘He will go and work.’ (Anderson 1989: 16)

I could not find any examples in the source illustrating the third type of AM, involving arriving.

S4.10. Palantla Chinantec (Chinantecan, Otomanguan; Mexico)

Palantla Chinantec has prior AM andative and ventive prefixes, illustrated in (S56) and (S57).

- (S56) *hi¹-kyew²-za ʔma².*
 COME.INTENT.3-put-3 wood
 ‘He will come to place the wood (near here).’ (Merrifield 1968: 24)
- (S57) *za¹-kyéw¹-za ʔma².*
 GO.INTENT.3-put-3 wood
 ‘He will go and place the wood (away from here).’ (Merrifield 1968: 24)

S5. Tequistlatecan

S5.1. Lowland Chontal (O'Connor 2007; Tequistlatecan; Mexico)

According to O'Connor (2007), there are four suffixes in Lowland Chontal that she glosses as 'andative', 'venitive', 'dislocative', and 'cislocative'. Since the terms 'cislocative' and 'venitive' are often used in the same sense, her terminology is potentially confusing.

The cislocative suffix appears to be a purely directional suffix, without AM uses (despite O'Connor calling it an associated motion suffix), combining only with verbs of motion. The other three suffixes do have AM meanings. The andative suffix has prior andative meaning, as in (S58).

- (S58) *fa-s-pa=ya'*.
 plant-ANDAT-PFV.SG=1SG.AGT
 'I went and planted.' (O'Connor 2007: 113)

The ventive has both AM and directional uses. Its AM use is illustrated in (S59) (involving prior motion), its directional use in (S60).⁶

- (S59) *sago-way-jle'*.
 eat-VENT-IMPV.PL
 'Come and eat!' (O'Connor 2007: 131)

- (S60) *may-ñay-pa kaj- 'mi-pa lane'*.
 go-VENT-PFV.SG leave-into-PFV.SG road
 'He came back (when, because) she threw him out in the street.' (O'Connor 2007: 134)

It is not clear to me how the dislocative differs from the cislocative. Most of the instances that O'Connor provides of the dislocative suffix involve prior AM, as in (S61), like the cislocative.

- (S61) *fa-ta=ya'*.
 plant-DISLOC.SG=1SG.AGT
 'I will go and plant.' (O'Connor 2007: 114)

In (S62), the dislocative appears to have directional meaning, since it combines with a motion verb root meaning 'arrive'.

- (S62) *kway-go-ta' naa lan-músico.*
 arrive-APPL-DISLOC.PL EVID DET.PL-musician
 'The musicians arrived there.' (O'Connor 2007: 51)

⁶ The forms of the ventive suffix in (S59) and (S60) are allomorphs. It is not clear what conditions the allomorphy.

However, an alternative interpretation of its use in (S62) is that the andative motion precedes the arrival and hence that this example really is one involving prior AM.

S5.2. Tequixistlan Chontal (de Angulo and Freeland 1925; Tequistlatecan; Mexico)

Tequixistlan Chontal has a suffix *-kiç* that de Angulo and Freeland call an andative suffix, illustrated in (S63).

- (S63) *te-mu-kiç-ma*
 eat-CAUS-ANDAT-FUT
 ‘will go to feed’ (de Angulo and Freeland 1925: 240)

S6. Totonacan

The Totonacan languages are spoken near the central part of the east coast of Mexico. This family has among the more unusual AM affixes in North America, though the different languages are similar.

S6.1. Upper Necaxa Totonac (Totonacan; Mexico)

Upper Necaxa Totonac has three AM affixes, one for concurrent AM, one for prior plus subsequent AM of the round trip type and one for prior plus subsequent AM of the passing-by type. Beck glosses the concurrent AM suffix *-te:la* as ‘ambulative’ and characterizes it as ‘carrying out an action while moving along a path or performing an action at intervals along that path’, as in (S64).

- (S64) ... *le-n-l* *dulces* *wi:li:-te:la-l* *xa:* *ka:-lé:n-l* *ix-ta:ta.*
 take-PFV sweets put-AMB-PFV NEG PL.OBJ-take-PFV 3POSS-father
 ‘[One of his sisters,] she brought sweets and went along dropping them where their father was taking them.’ (Beck 2004: 75)

The second AM affix is a prior plus subsequent AM prefix of the round trip type, as in (S65).

- (S65) *ka-ki:-tayq* *la:su!*
 OPT-RT-take.2SUBJ.PFV rope
 ‘Go get a rope (and bring it back)!’ (Beck 2004: 77)

The third AM affix is a prior plus subsequent prefix of the passing-by type, *te:-*, that Beck glosses as ‘path’, as in (S66) and (S67).

- (S66) *ʔe:* *ʃu:wa* *antsa* *wiʃ* *na-te:-skúx-a* *antsa* ...
 and now there you FUT-PATH-work-IMPF there
 ‘and now you’ll go by there to work [as you go home].’ (Beck 2004: 76)

- (S67) *ʃu:n ma:n=tsa ʃu:n=tsa kin-te:-wan-ní-l wayaya gn-l.*
 PTCL only=now thus=now 1OBJ-PATH-say-BEN-PFV IDPH go-PFV
 ‘He just came by to say mean things to me and took off.’ (Beck 2004: 76)

Note that this affix can mean either going or coming and doing something while passing by somewhere.

S6.2. Filomena Mata Totonac (Totonacan; Mexico)

Filomena Mata Totonac has three AM affixes that are clearly cognate to the AM affixes in Upper Necaxa Totonac described in the preceding section. The first is a concurrent suffix *-tiila* ‘to do something while walking’, illustrated in (S68).

- (S68) *kittli-tiilá.*
 sing-AMB
 ‘He walks along singing.’ (McFarland 2009: 144)

Note that while McFarland calls this an ambulative suffix, because it is described as doing something while walking, it differs from many morphemes called ambulative in that it apparently denotes (or can denote) nonrandom motion.

The second is the prior plus subsequent AM prefix of the round trip type, *kii-*, illustrated in (S69) and (S70).⁷

- (S69) *kii-kaa-štlawan-áw.*
 RT-LOC-adorn-1PL
 ‘We went to adorn the place and returned.’ (McFarland 2009: 143)

- (S70) *hkiywaayánči*
k-kii-waa-nan-čĭ-lĭ
 1SUBJ-RT-eat-HAB-here-PFV
 ‘I came here to eat and returned.’ (McFarland 2009: 143)

The third AM affix in this language is a prior plus subsequent AM prefix of the passing by type, illustrated in (S71).

- (S71) *kiliittimaapuuwášni* *mpála.*
kin-tii-līi-maa-puu-waş-nī-lĭ *pala*
 1OBJ-PASS-INSTR-CAUS-LOC-dig-DAT-PFV shovel
 ‘He passed by to make me dig with a shovel.’ (McFarland 2009: 143)

⁷ The locative prefix *kaa-* in (S69) is an applicative prefix and apparently not relevant to associated motion.

S6.3. Misantla Totonac (Totonacan; Mexico)

Misantla has two AM prefixes that are identical in form to two of the AM suffixes in the two Totonacan languages discussed in the preceding two sections. The prefix *kii-* has the same meaning as the corresponding prefix in those two languages, namely to go and do something and then return, as in (S72).⁸

- (S72) *kiiʔiɰwɔl*
kii-iɰwɔ-la(t)
 INT-buy-PFV
 ‘s/he went to buy X (and returned)’ (Mackay 1999: 327)

However, although the second prefix *tii-* is homophonous or similar to the prior plus subsequent AM prefixes of the passing-by type in the two preceding languages, Mackay’s characterization of the Misantla Totonac prefix suggests that it has a somewhat different meaning, namely, that of subsequent AM, as in (S73).

- (S73) *ʔut tiištɔχɔ*
ut tii-stuqu
 3SG LEAVE-sew
 ‘s/he leaves having sewn X’ (Mackay 1999: 330)

S6.4. Huehuetla Tepehua (Totonacan; Mexico)

Huehuetla Tepehua has a prior plus subsequent AM prefix of the round trip type, *ki:-*, similar to those in the three preceding languages, as in (S74).

- (S74) *ta-ki:-pu:xkaju-n.*
 3PL.SUBJ-RT-search.for:PFV-2OBJ
 ‘They went looking for you (and came back).’ (Kung 2007: 160)

It also has a concurrent AM suffix *-t’ajun*, characterized as ambulative by Kung (2007), illustrated in (S75).

- (S75) *tiix laqxtu=ch juu lhii-t’aqap’a-t’ajun.*
 why alone=ALREADY REL APPLIC-get.drunk-AMB.IPFV
 ‘Why do you go around getting drunk?’ (Kung 2007: 291)

However, while the glosses for the ambulative suffixes in Upper Necaxa and Filomena Totonac suggest nonrandom concurrent motion, the ambulative suffix in Huehuetla Tepehua seems to convey random concurrent motion. This is clearer in (S76), where it functions as a directional, combining with a motion verb *ʔalhtanan* ‘walk’.

⁸ Mackay glosses the prefix *kii-* by ‘INT’ for ‘intensive’, the idea being that someone goes somewhere with the intention of doing something. The prior plus subsequent meaning only occurs in the perfective. In the imperfective, it only has prior meaning.

- (S76) *maa x-7alhtanan-t'ajun juu laka-x-taanqaa juu*
 REPORT PAST-walk-AMB.IMPV ART CASE-3POSS-bottom ART
laka-kin-lakakapen-an.
 CASE-1POSS-coffee.field-PL
 'He went around walking below my coffee fields.' (Kung 2007: 291)

Clearly, (S76) does not mean that he walked while he was walking. Rather, the ambulative apparently codes the random direction of the walking.

S6.5. Tlachichilco Tepehua (Totonacan; Mexico)

Tlachichilco Tepehua shares one AM affix with the four preceding languages, a prior plus subsequent AM prefix *ki:-*, which Watters glosses as 'RET' for 'return', as in (S77).

- (S77) *lah-ki:-st'a-l*
 3PL.OBJ-RET-sell-PFV
 'X went, sold them, and returned.' (Watters 1988: 248)

The language also has what looks like a construction for concurrent AM, involving a compound with the verb for 'go', as in (S78).

- (S78) *caqš-'an*
 cut-GO
 'go along, cutting it' (Watters 1988: 94)

However, the language seems to have fairly productive compounding of verbs, so it's not clear that the construction in (S78) is grammaticalized.

S7. Uto-Aztecan

AM marking is common in Uto-Aztecan languages, a family that extends from central Mexico up to the southwestern United States.

S7.1. Huasteca Nahuatl (Beller and Beller 1979; Aztecan, Uto-Aztecan; Mexico)

Huasteca Nahuatl has andative and ventive prior AM suffixes that vary for completive versus incompletive aspect. The examples in (S79) and (S80), illustrate the andative suffixes.

- (S79) *ši-neč-kowi-li-ti* *seboyas.*
 IMPRT-1SG.OBJ-buy-APPLIC-GO.INCOMPL onion
 'Go buy onions for me.' (Beller and Beller 1979: 282)
- (S80) *mil-teki-ti-to.*
 field-work-VERB-GO.COMPL
 'He went to work in his field.' (Beller and Beller 1979: 282)

One of the ventive suffixes is illustrated in (S81).

- (S81) *ni-h-namaka-ko e-tl čikweyi-ya.*
 1SG-3SG-sell-COME.COMPL bean-ABS eight-ago
 ‘I came and sold beans last week.’ (Beller and Beller 1979: 282)

There is another construction that might be considered an instance of AM, in which the verb *ya* ‘go’ can combine with another verb (sometimes with an intervening “connective” morpheme) to express AM, as in (S82)

- (S82) *ni-tlakowa-ti-ya-s*
 1SG-buy-CONN-go-FUT
 ‘I go and buy’ or ‘I buy as I go’ (Beller and Beller 1979: 232)

As indicated by the gloss, the meaning is either prior AM or concurrent AM.

The same construction is possible with the verb *walah* ‘come’, as in (S83).

- (S83) *ni-h-walika-ti-walah-ki.*
 1SG-3SG-bring-CONN-come-PAST
 ‘I brought it as I came.’ (Beller and Beller 1979: 285)

The same is also possible with the verb *kisa* ‘leave’, as in (S84).

- (S84) *ni-h-wika-ti-kisa-s.*
 1SG-3SG-take-CONN-leave-FUT
 ‘I will take it on leaving.’ (Beller and Beller 1979: 284)

If this is productive compounding with any verb of motion, it is less clear that we would want to consider this a case of AM, since the construction would seem less grammaticalized.

S7.2. Tetelcingo Nahuatl (Aztecan, Uto-Aztecan; Mexico)

Tetelcingo Nahuatl has a ventive prefix which Tuggy (1979) glosses as ‘hither’, which is homophonous with the verb stem for ‘come’ and which codes prior AM in (S85), concurrent AM in (S86) and (S87), and direction in (S88) and (S89).

- (S85) *šl-k-cahčl-lɪ ihkɪ-u kiemɪ ni-k-wal-ɪhto.*
 IMPRT-3SG.OBJ-shout-APPLIC be-DIST like 1SG-3SG.OBJ-HITHER-say
 ‘Shout to him like I came and said to.’ (Tuggy 1979: 129)

- (S86) *k-wal-teh-tieki-li* *in-u* *pah-tli* *koš*
 3SG.OBJ-**HITHER**-REPET-pour-APPLIC DEM-DIST medicine-ABS whether
ɔ-cin-tli.
 water-DIM.HON-ABS
 ‘He comes sprinkling that medicine on him if it is liquid.’ (Tuggy 1979: 132)
- (S87) *wal-yewa-ta-ya.*
HITHER-sit.DUR-DUR-IMPF
 ‘He was coming seated.’ (Tuggy 1979: 84)
- (S88) *por taha ti-wala ye ni-wal-temu-k.*
 for 2SG 2SG-come already 1SG-**HITHER**-descend-PFV
 ‘Because you came, I’ve managed to get down here.’ (Tuggy 1979: 134)
- (S89) *in-i-nɔn-ka tli ti-k-wal-ika-k*
 DEM-PROX-PROX-be that 2SG-3SG.OBJ-**HITHER**-carry-PFV
 ‘this here that you brought’ (Tuggy 1979: 126)

Whether the prefix *wal* is directional or concurrent AM in (S89) depends on whether the verb *ika* ‘carry’ counts as a motion verb. If this verb is like the English verb *carry* in entailing motion, then *wal* in (S89) is a directional. On the other hand, if the verb really meant ‘hold’, then one could consider *wal* as expressing concurrent AM. However, in (S90), the verb (*w*)*ika* seems to be unambiguously a motion verb, so (S89) seems to be an example illustrating the use of *wal* as a directional.

- (S90) *yeka o-ki-wika-k.*
 someone PAST-3SG.OBJ-carry-PFV
 ‘Somebody took it.’ (Tuggy 1979: 78)

S7.3. Cora (Corachol, Uto-Aztecan; Mexico)

Cora has a prior andative AM prefix *a’*- ‘away’ illustrated in (S91).

- (S91) *áuuḥ vliṭ’e a’-u-ta-hée-va ta-váuhsi-m^{wa}a’a.*
 LOC rains **AWAY**-COMPL-PFV-call-HAB 1PL-elder-PL
 ‘Go off and call back here your elders, The Rains.’ (Casad 1984: 203)

This prefix is also used as a directional, as in (S92).

- (S92) *á’-u-ye’i-mi m^{wéeci} ham^{wan}.*
AWAY-COMPL-go-DESID you with
 ‘He wants to go with you.’ (Casad 1984: 240)

There are also two suffixes, *-me* and *-n^{ye}*, that Casad describes as meaning ‘to go around doing X’ and ‘to come around doing X’ respectively, which sounds like random

concurrent AM. However, most examples with these two suffixes do not seem to have that as their meaning, so their function is unclear.

S7.4. Central Tarahumara (Tarahumaran, Uto-Aztecan; Mexico)

Central Tarahumara has a single AM suffix *-simi* ~ *-si* ~ *-s* (based on the verb *simi* ‘go’), which Caballero (2008) consistently glosses as concurrent AM, as in (S93) and (S94).

- (S93) *we ko 'á-simi.*
 INTENS eat-MOT
 ‘They are going along eating.’ (Caballero 2008: 418)

- (S94) *nihé mi sú-s-ti-ma sipúči ...*
 1SG 2SG sew-MOT-CAUS-FUT skirt
 ‘I will go along making you sew the skirt, ...’ (Caballero 2008: 355)

S7.5. Lowland Tarahumara (Valdez Jara 2013; Tarahumaran, Uto-Aztecan; Mexico)

The facts in Lowland Tarahumara are similar to those in the closely related language Central Tarahumara. The use of the suffix *-si* ~ *-simi* as a marker of concurrent AM is illustrated in (S95).

- (S95) *maha-ga basí-si-le=turu.*
 scare-CONT throw.stones.at-ASSOC.MOT-PAST=FOCUS
 ‘Scared, they went throwing stones at him.’ (Valdez Jara 2013: 177)

However, Valdez Jara cites an example where this suffix appears to be functioning as a directional, given in (S96).

- (S96) *lége ma-si-é-ko warú rosobócu-go-me gasá-tiri.*
 downwards run-ASSOC.MOT-PAST-IRREAL big grey-CONT-PTCPL grass-LOC
 ‘It ran away, the big grey one, by the grass.’ (Valdez Jara 2013: 177)

S7.6. Mayo (de Wolf 1997; Cahitan, Uto-Aztecan; Mexico)

Mayo has a single prior AM category, with two suffixes varying with the number of the subject, *-se* for the singular, *-bo* for the plural, illustrated in (S97) and (S98).

- (S97) *béhha hí'i-b^wa-se-k.*
 already INDEF.OBJ-eat-go.SG-PAST
 ‘He went to eat.’ (de Wolf 1997: 106)
- (S98) *béhha=m hí'i-b^wa-bo-k.*
 already=3PL INDEF.OBJ-eat-go.PL-PAST
 ‘They went to eat.’ (de Wolf 1997: 107)

Note that there is no inherent direction associated with the motion denoted by this suffix; de Wolf's sentence gloss for (S99) uses 'vengo' ('I come').

- (S99) *'énči=ne téhoa-se.*
 2SG.OBJ=1SG warn-**go**.SG
 'I come to warn you.' (de Wolf 1997: 106)

S7.7. Yaqui (Cahitan, Uto-Aztecan; Mexico)

Yaqui has two suffixes for prior AM, clearly similar to the suffixes described in the preceding section in Mayo, namely singular *-se* and plural *-vo*, the first of which is illustrated in (S100). Trueman glosses them with 'PURP' for 'purpose'.⁹

- (S100) *Aman=ne aa=vit-se.*
 there=1SG 3SG=see-**PURP**.SG
 'I will be going there to see him/her.' (Trueman 2015: 116)

S7.8. Southeastern Tepehuan (Tepiman, Uto-Aztecan; Mexico)

Like the three Uto-Aztecan languages discussed in the preceding three sections, Southeastern Tepehuan has a prior AM suffix which varies for the number of the subject, *-(mi)ra* when singular, *-po* when plural. These are illustrated in (S101) and (S102). Note that the ventive particle *bai* in (S101) is not associated motion, but is a directional, giving the direction of the motion conveyed by the AM suffix.¹⁰

- (S101) *Mo=ñ bai' va-m-tañ-mira-' gu vacax ...*
 uncertain=1SG VENT COMPL-2SG-order-**PURP**.SG-FUT ART meat
 'I may come and buy some meat ...' (Willett 1991: 170)
- (S102) *Tová-tam=ach tu-sava'n-po-' ji'cchi gu cosas.*
 turkey-place=1PL DUR-buy-**PURP**.PL-FUT a.few ART things
 'We're going to Turkey Town to buy a few things.' (Willett 1991: 130)

⁹ The gloss to (S100) suggests prior motion with purpose. Some contributors to this volume (e.g. Lovstrand and Ross, this volume, ch. 3) do not consider motion with purpose to be instances of associated motion. I do not distinguish motion with purpose from motion without an implication of purpose, largely because it is in general difficult to determine from sources whether purpose is part of the meaning of morphemes in question. The fact that examples may receive English translations implying purpose may reflect nothing more than an implicature in context, rather than purpose being part of the meaning of the morpheme in question. However, Trueman's glossing for the suffix *-se* in Yaqui does imply that this suffix specifically codes prior motion with purpose. Similar comments apply to the prior motion suffixes in Southeastern Tepehuan, Cupeño, Nez Perce, and Karok discussed in §S7.8, §S7.10, §S9.2, and §S17 below respectively.

¹⁰ Willett glosses the associated motion suffixes as OBJ for 'objective', the idea that someone goes somewhere with the objective of performing the act denoted by the verb stem. Since I use the gloss OBJ elsewhere for 'object', I have replaced his gloss OBJ by PURP.

Southeastern Tepehuan also has a nonproductive concurrent AM suffix *-tu' ~ -chu'*, illustrated in (S103).

- (S103) *dai-chu'*
sit-MOT
'to ride (seated)' (Willett 1991: 135)

S7.9. Eudeve (Opata-Eudeve, Uto-Aztecan; Mexico)

Eudeve has a prior AM suffix *-dono* illustrated in (S104).

- (S104) *hiosua-dono-mru-ne.*
paint-GO-IPVF-LSG
'I went to paint.' (Shaul 1991: 99)

S7.10. Cupeño (Cupan, Uto-Aztecan; California, USA)

Cupeño has five suffixes that Hill (2005) calls 'motion suffixes', though it is not clear that all five function as AM suffixes. The first is a prior AM suffix, what Hill (2005) calls a purposive motion suffix *-lu(')* (glossed 'MOTP'), illustrated in (S105) and (S106).

- (S105) *Tek-pe-lu-qal.*
empty-3SG-MOTP-PAST.IPVF.SG
'He would go to empty it.' (Hill 2005: 268)

- (S106) *Ne'=ne tewq-lu'-vichu-qa.*
1SG.SUBJ=1SG.ERG see-MOTP-DESID-PRES.SG
'I want to go and see.' (Hill 2005: 269)

It is not clear whether this suffix is andative or neutral with respect to direction, though Hill usually glosses examples with it using forms of the English verb 'go'. I assume that it is andative, since there is a second AM suffix that denotes ventive prior AM, as in (S107).

- (S107) *Hanaka pem-enew tan-pe'-men-mi'aw.*
again 3PL-with dance-3PL-PL-ARRIVE
'Again they came and danced with them.' (Hill 2005: 273)

This suffix is also used as a directional, as in (S108).

- (S108) *Yaw-mi'aw-wene pem-nemxa-y.*
carry-ARRIVE-HABIT 3PL-treasure-OBJ
'They would bring their treasures.' (Hill 2005: 274)

It is possible for both *-mi'aw* used as a directional and the prior andative suffix to co-occur in the same verb, as in (S109).

- (S109) *Mu=ku'ut axwa-nga aya pi-yaw-mi'aw-lu*
 and=REPORT DEM.NONVIS-in then 3SG.OBJ-carry-ARRIVE-MOTP
ne-t pe-ve.
 chief-NONPOSS 3SG-on

‘He went to bring it there to the chief.’ (Hill 2005: 272)

The ventive suffix *-mi'aw* is being used as a directional in (S109), similar to its use in (S108). Although the combination of *yaw* ‘carry’ and the ventive suffix *-mi'aw* in (S109) denotes a motion event of bringing, the motion denoted by the AM suffix *-lu* is a separate motion event, preceding the event of bringing.

The third AM suffix is one that Hill glosses with ‘MOTG’ (for ‘motion going’) and describes the meaning as ‘go off doing, go around doing’. When used with a non-motion verb, it appears to denote random concurrent AM, as in (S110).

- (S110) *Pa-hal-ngiy-qal.*
 3SG-look-MOTG-PAST.IPVF.SG
 ‘He went looking around.’ (Hill 2005: 269)

This suffix also occurs as a directional with motion verbs, as in (S111), where it denotes random motion.

- (S111) *Way-pem-yi-ngiy-wen.*
 swim-3PL-THEME-MOTG-PAST.IPVF.PL
 ‘They were swimming around.’ (Hill 2005: 270)

In (S112), however, it seems to denote andative motion.

- (S112) *Mu=ku'ut pe-m peta'a-nim=e keng-pem-yi-ngiy.*
 and=REPORT DET-PL all-PL=CONTRAST fly-3PL-THEME-MOTG
 ‘And, it is said, they all flew away.’ (Hill 2005: 338)

In (S113), it seems to have both the andative sense of motion away as well as random motion.

- (S113) *Ta'a-la'a-la'a-la'a-pe-yi-ngiy.*
 stagger-REPET-REPET-REPET-3SG-THEME-MOTG
 ‘He went off staggering.’ (Hill 2005: 270)

It is also possible to combine this suffix with the ventive suffix *-mi'aw* illustrated above in (S107) to (S109), where this combination denotes subsequent AM, with the apparent meaning ‘they turned around, they set off towards here’.

- (S114) *Mu=ku'ut pe-m pe-ye wi-w*
 and=REPORT 3SG-PL 3SG-mother two-REDUP
men-pe'-mi'aw-ngiy. ...
 turn.around-3PL-ARRIVE-GO.OFF/AROUND

‘Then it is reported that he and his mother came back ...’ (Hill 2005: 128)

The fourth AM suffix is a ventive concurrent AM suffix *-veneq* ~ *-vemax*, illustrated in (S115). Hill glosses this suffix with ‘MOTCA’ for ‘motion coming along’ and describes it as meaning ‘come along VERBing’.

- (S115) *Qwa'i-veneq.*
 eat-MOTCA
 ‘He came eating something on the way.’ (Hill 2005: 271)

This suffix is also used as a directional with motion verbs, as in (S116).

- (S116) *Mu=ku'ut pe' kawisi-sh pe-chas /hwin-veneq pe-yik.*
 and=REPORT DET fox-NONPOSS 3SG-crawl-MOTCA 3SG-to
 ‘And it is said Fox came crawling toward him.’ (Hill 2005: 271)

The fifth AM suffix is *-neq*, which Hill glosses with ‘MOTC’ for ‘motion coming’ and describes as meaning ‘to come while doing something’. While Hill’s characterization of this implies that it is a concurrent AM suffix, the only examples I found with this suffix are on verbs of motion, as in (S117).

- (S117) *Kanaasta=ku'ut ay'ani-sh pem-yaw-neq.*
 basket=REPORT big-NON.POSS 3PL-carry-MOTC
 ‘They brought a big basket.’ (Hill 2005: 271)

It is not clear whether this is simply an accidental property of the examples cited or whether this suffix only occurs on motion verbs.

S7.11. Luiseño (Cupan, Uto-Aztecan; California, USA)

Luiseño has a prior AM suffix *-yi* that is restricted to imperatives, illustrated in (S118).

- (S118) *yáx-yi póy!*
 say-GO.IMPRT 3SG.ACC
 ‘Go and tell him.’ (Davis 1973: 151)

S7.12. Shoshone (Numic, Uto-Aztecan; western United States)

Shoshone has five suffixes that Shaul (2012) characterizes as directional. Shaul cites few examples illustrating them and four of the five only have examples with motion verbs, so

it is not clear whether they can be used for AM. However, there is one clear case, of an andative prior AM suffix *-gwa(n)*, illustrated in (S119).

- (S119) *Ne reka-gwan-do'i.*
 1SG eat-**DIR**-FUT
 'I'm going somewhere to eat.' (Shaul 2012: 108)

This suffix is also used as a directional, as in (S120).

- (S120) *Go'é-gwan daga Ijape!*
 return-**DIR** only coyote
 'Just go back (where you came from), Coyote.' (Shaul 2012: 108)

S7.13. Panamint (Numic, Uto-Aztecan; California, United States)

Panamint¹¹ has seven suffixes for AM. One is a ventive suffix *-kin* illustrated in (S121), where it denotes prior AM.

- (S121) *Sümü-ttü-sü ma tükka-kin-tu'ih.*
 one-NUM-ABS 3SG.OBJ eat-**COME.AND**-FUT
 'One will come and eat it.' (Dayley 1989: 65)

In (S122), however, it codes concurrent AM.¹²

- (S122) *hipi-kkin*
 drink-**HITHER**
 'coming drinking' (Dayley 1989: 421)

This suffix is also used as a directional, as in (S123) and (S124).

- (S123) *Satü süngkia-kin-na.*
 that stagger-**HITHER**-NONFUT
 'He is coming staggering.' (Dayley 1989: 66)

- (S124) *Patümmu piiya hima-kkin-tu'ih.*
 liquor.buyer beer carry:PL.OBJ-**HITHER**-FUT
 'The liquor buyer will bring some beers.' (Dayley 1989: 65)

There is also an andative suffix *-(k)kwan* illustrated in (S125) and (S126). In (S125), it involves prior AM, while in (S126), it appears to involve concurrent AM.

¹¹ Panamint is also known as Tümpisa Shoshone, though this name is potentially confusing since it might imply that Panamint is a dialect of Shoshone, which it is not.

¹² Dayley does not gloss individual morphemes consistently. For example, he glosses the suffix *-(k)kin* in (S121) as 'come and', where it is used for prior associated motion, but as 'hither' when it is used for concurrent associated motion, as in (S122), or as a directional, as in (S123). I use his glosses throughout.

- (S125) *Nü hipi-kwan-tu'ih.*
 1sg drink-GO.AND-FUT
 'I will go and drink.' (Dayley 1989: 66)
- (S126) *Nüü ma kwüü-kkwan-tu'ih.*
 1SG 3SG.OBJ catch-AWAY-FUT
 'I'm going away catching it.' (Dayley 1989: 66)

The andative suffix is also used as a directional, as in (S127) and (S128).

- (S127) *Ma tüpuni, tammü mia-kkwan-tu'ih.*
 IMPER wake.up 1PL.INCL go-AWAY-FUT
 'Wake up so we can go.' (Dayley 1989: 50)
- (S128) *Mungku mimi'a-kwan-tu'ih.*
 2DU go.DUAL-AWAY-FUT
 'You two are going away.' (Dayley 1989: 130)

The remaining five suffixes are also used for concurrent AM. Two of them are clearly used for random concurrent AM. The first of them, *-kon ~ -koC*, is illustrated in (S129).

- (S129) *Sa-tü sa-kka u pakka-ngkü-kop-pühantü.*
 that-SUBJ.SG that-OBJ.SG 3SG.OBJ kill-APPLIC-AROUND-PAST
 'He went around killing that for him.' (Dayley 1989: 65)

This suffix is also used as a directional with motion verbs, as in (S130).

- (S130) *Supe'e kaakki yütsü-kom-mi-nna.*
 that.time crow fly-AROUND-ITER-NONFUT
 'Then crow was flying all around.' (Dayley 1989: 65)

The second concurrent AM suffix *-kwai* is similar in meaning to the previous one, illustrated in (S131).

- (S131) *Nüü etüm-pa'e-tü püü, nü wasüwükki-kwai-ppüh.*
 1SG gun-have-SUBORD EMPH 1SG hunt-AROUND-PFV
 'If I had a gun, I would be hunting around.' (Dayley 1989: 65)

It is not clear how it differs in meaning from the suffix illustrated in (S129).

The third concurrent AM suffix *-nai'i(h)* is illustrated in (S132) and (S133).

- (S132) *Nü piapü pai katü-**nnai'i**-nna.*
 1SG mare on sit-IN.MOT-NONFUT
 'I am riding on the mare.' (Dayley 1989: 85)

- (S133) *Sa-tü pai tsai-nnaa-nai'ih.*
 that-SUBJ.SG water.OBJ hold-CONT-IN.MOT
 ‘She is carrying water.’ (Dayley 1989: 83)

The fourth is a similar suffix *-(n)nooh* that denotes ‘continuous, while in motion’, illustrated in (S134) and (S135).

- (S134) *Nü nukkwintim pa'a katü-nooh-on-to'eh.*
 1SG train on sit-CONT.IN.MOT-DEF-FUT
 ‘I will get to ride on a train.’ (Dayley 1989: 84)

- (S135) *hipi-nnooh*
 drink-GO.ALONG
 ‘go along drinking’ (Dayley 1989: 421)

Dayley’s description of the suffixes illustrated in (S132) to (S135) suggests that they are neutral with respect to direction, that they do not code random motion. However, both of these suffixes also occur as directionals on motion verbs, as in (S136) to (S138), where they appear to denote random motion.

- (S136) *Piammüttsi küntu mapa-nai'i-ppühantü.*
 baby yesterday crawl-IN.MOT-PAST
 ‘Yesterday the baby was crawling around.’ (Dayley 1989: 85)

- (S137) *So'oppütü yoti-nnoo-nna.*
 many fly-IN.MOT-NONFUT
 ‘Many are flying around.’ (Dayley 1989: 160)

- (S138) *Sa-tü pünna summo'a noon-nai'i-nna.*
 that-SUBJ.SG POSS.REFL clothes carry.on.back-IN.MOT-NONFUT
 ‘She is carrying her own clothes around on her back.’ (Dayley 1989: 85)

Example (S139) is similar, except that here the verb root does not denote motion, but the motion derives from the use of the ventive suffix.

- (S139) *Sa-tü tu-kutti-nnoo-hin-na.*
 that-SUBJ.SG ANTIPASS-shoot-CONT.IN.MOT-HITHER-NONFUT
 ‘He is coming along shooting things.’ (Dayley 1989: 84)

Finally, there is a verb *nuwi* ‘to walk around’ that combines with other verb roots to denote concurrent AM while walking around, as in (S140) and (S141). It appears to be an instance of random concurrent AM.

- (S140) *Sa-tüü tüü-wasü-**nnuwi**.*
 that-SUBJ.SG ANTIPASS-kill-WALK.AROUND
 ‘He is going around killing things.’ (Dayley 1989: 111)

- (S141) *Su-tüü u kappinnangkwatü katü-**nnuwi-tü**.*
 that.NONVIS-SUBJ.SG 3SG outside sit-WALK.AROUND-PAST
 ‘She was sitting around outside.’ (Dayley 1989: 85)

(I assume that the English ‘sitting round’ in the sentence gloss for (S141) implies that she was not sitting in just one place and hence was sitting in different places and walking from one place to another.)

Finally, similar to combining the verb ‘walk around’ with other verb stems, I should note that Panamint also uses the verbs for ‘stand’ and ‘sit’ in combination with another verb stem to denote the idea of doing something while standing or sitting, as in (S142) and (S143).

- (S142) *Sa-tüü tühüya u pakka-ppühantü u tükka-**wünü-kwa**.*
 that-SUBJ.SG deer 3SG kill-PAST 3SG eat-stand.DUR-when
 ‘He killed the deer as it was standing eating.’ (Dayley 1989: 85)

- (S143) *Üü ha mukuatu-**kattü**?*
 2SG Q think-sit.DUR
 ‘Are you sitting thinking?’ (Dayley 1989: 45)

S7.14. Northern Paiute (Numic, Uto-Aztecan; western United States)

Northern Paiute has a set of suffixes that Thornes (2003) calls directional suffixes. While some of these appear to be exclusively directional, some of them have AM uses. First, there is an andative prior AM suffix *-ga* ~ *-kya* (that Thornes calls translocative), illustrated in (S144).

- (S144) *tammi=sakwa winai-**ga**-kwi.*
 1PL.INCL=HORT fish-TRNSL-FUT
 ‘Let’s go fishing.’ (Thornes 2003: 92)

This suffix is also used as a directional, as in (S145) and (S146).

- (S145) *yaisi owiu yotsi-u-**ga**-pyakwi tui=hau=tui.*
 then there fly.SG-PUNC-TRNSL-HABIT any=how=any
 ‘... and it would fly off from there in every direction.’ (Thornes 2003: 186)

- (S146) *hanno=sakwo ta wii-**kya**.*
 where=HORT 1DU descend-TRNSL
 ‘Which way should we go down?’ (Thornes 2003: 408)

There is a second AM suffix *-nimi*, which denotes random concurrent AM. This suffix is more specifically singular, with a second suffix denoting plural random motion. It involves concurrent motion, as in (S147) and (S148).

- (S147) *tihōawai-nimi ni*
 hunt-RANDOM.SG 1SG
 ‘I’ve been hunting around.’ (Thornes 2003: 417)

- (S148) *himma i wati-wini-nimi?*
 what 2SG look.for-CONT.SG-RANDOM.SG
 ‘What are you looking around for?’ (Thornes 2003: 480)

But this suffix is also used as a directional with motion verbs, as in (S149) and (S150).

- (S149) *obi tia? nimmi-?nimi-?yakwi paana kai mi=punni ...*
 DEM thusly wander-RANDOM.SG-HABIT PROH NEG PL=see.DUR
 ‘So he would wander around, but didn’t see them ...’ (Thornes 2003: 462)

- (S150) *u-ma kwitzo?ai ka oo yodzi-kya?i-nimi-?yakwi, mi?i.*
 3-INSTR survive PTCL so fly.sg-around-RANDOM.SG-HAB QUOT
 ‘By living on that, it would fly all around, they say.’ (Thornes 2003: 507)

Northern Paiute has a ventive suffix as well, but all examples cited appear to be directional and there is no evidence that this suffix can be used for AM.

S8. Utian

The Utian family is a small family of Miwokan and Costanoan languages spoken in California. It is sometimes grouped with a controversial Penutian family.

S8.1. Sierra Miwok (Miwokan, Utian, California Penutian?; California, United States)

Sierra Miwok has three AM suffixes, andative and ventive prior AM suffixes and a ventive subsequent AM suffix. The andative prior AM suffix *-y* is illustrated in (S151).

- (S151) *šíỵe-y-mà·š*
 see-ANDAT-1PL
 ‘let’s go to see’ (Freeland 1951: 141)

The ventive prior AM suffix *-i* is illustrated in (S152).

- (S152) *šíỵ·eŋ-i-t*
 see-VENT-1SG
 ‘I have come to see’ (Freeland 1951: 70)

The ventive subsequent suffix *-tu* (which Freeland calls ‘reventive’) is illustrated in (S153).

- (S153) *šiyéŋ-tu-t*
 see-REVENT-1SG
 ‘I have come after seeing’ (Freeland 1951: 71)

S8.2. Lake Miwok (Miwokan, Utian, Penutian?; California, United States)

Lake Miwok has a prior AM suffix *-ti ~ -ši*, illustrated in (S154) and (S155).

- (S154) *ʔokén-ti*
 catch-ANDAT
 ‘to go after someone’ (Callaghan 1963: 230)
- (S155) *wilík-ši*
 get-ANDAT
 ‘to go and get something’ (Callaghan 1963: 230)

Although Callaghan refers to this suffix as andative, it is not clear whether it is truly andative as opposed to being neutral with respect to direction.

S8.3. Mutsun (Costanoan, Utian, Penutian?; California, United States)

Mutsun has both andative and ventive prior AM suffixes. The andative suffix is *-na ~ yku* and is illustrated in (S156) and (S157).¹³

- (S156) *ʔoʔo-na-ka* *yu-ki-se*.
 gather-ANDAT-1SG acorn-OBJ
 ‘I go to gather acorns.’ (Okrand 1977: 237)
- (S157) *makse* *ʔawra-yku-n* *rammay*.
 1PL.EXCL sit-ANDAT-PAST inside
 ‘We went to be [literally ‘sit’] inside.’ (Okrand 1977: 238)

The ventive suffix *-yni* is illustrated in (S158).

- (S158) *ka-n=mes* *haywe-yni-n*.
 1SG=2SG.OBJ see-VENT-PAST
 ‘I came to see you.’ (Okrand 1977: 240)

Mutsun also has a distinct andative imperative suffix *-yis*, illustrated in (S159).

¹³ The form *-yku* occurs before tense suffixes, the form *-na* elsewhere. This could be treated as two distinct suffixes that also code past versus nonpast.

- (S159) *tapru-yis!*
gather.wood-ANDAT.IMPRT
'Go to gather wood!' (Okrand 1977: 287)

S9. Plateau Penutian

Plateau Penutian is a group of languages spoken in the state of Oregon in the western United States. For those who believe in the more controversial Penutian family, it is a branch of that family.

S9.1. Klamath (Plateau Penutian; western United States (Oregon))

Klamath has both andative and ventive prior AM suffixes, as in (S160) and (S161).

- (S160) *sna-n-t'ac-laq-ca*
CAUS-hit.with.round-trap-down-GOING.TO
'goes to trap (an animal)' (Barker 1964: 152)

- (S161) *pal-gi*
eat-COMING.TO
'comes to eat' (Barker 1964: 152)

S9.2. Nez Perce (Rude 1985, Cash 2004; Sahaptian, Plateau Penutian; western United States (Oregon))

Nez Perce has four AM suffixes. One is an andative prior AM suffix *-té*, illustrated in (S162).

- (S162) *ʔipét'e-te-se*
scrape-GO.AWAY.TO-IPFV.PRES.SG
'I go to scrape' (Cash 2004: 74)

There is a second prior AM suffix *-eyi*, illustrated in (S163); unlike the preceding suffix, this seems to be neutral with respect to direction.

- (S163) *'iin-'ax kúnk'u he-exné-eyi-k-s.*
1SG-DESID always 3-see-MOVE.IN.ORDER.TO-??-PERFECT
'I want him always to come around to see me.' (Rude 1985: 58)

Nez Perce also has a ventive subsequent AM suffix *-we*, illustrated in (S164).

- (S164) *ʔimí-we-se*
camp.for.digging.roots-RETURN.FROM-IMPV.PRES.SG
'I am returning from digging roots' (Cash 2004: 74)

Finally, it has a suffix *-á·t* which is used with transitive verbs when the object is passing by, as in (S165).

- (S165) *hi-wehin-á·t-six*
 3NOM-bark-**AS.OBJECT.PASSES.BY**-IMPV.PRES-PL
 ‘They are barking as we went by.’ (Cash 2004: 73)

S9.3. Northern Sahaptin (Sahaptian, Plateau Penutian; western U.S.)

Northern Sahaptin has four AM affixes. First, there is an andative prior AM suffix *-ata ~ -ta* illustrated in (S166).

- (S166) *i-wə́np-ata-na*
 3SG-get-**GO.AWAY.IN.ORDER.TO**-PAST
 ‘he went to get it’ (Jacobs 1931: 198)

Second, there is a concurrent AM prefix *ya-* illustrated in (S167) and (S168).

- (S167) *i-ya'-wə́xei-na*
 3SG-**WHILE.GOING.ALONG**-lose-PAST
 ‘he lost it going along’ (Jacobs 1931: 157)

- (S168) *a'-ya-pik-ca-na*
 3:3-**WHILE.GOING.ALONG**-hold-DUR-PAST
 ‘she held them as she went on’ (Jacobs 1931: 157)

Third, there is a prefix *wε'·-*, illustrated in (S169) and (S170) that Jacobs characterizes the meaning of as “motion away parallel to or immediately after the completion of the verbal action” (p. 149). In other words, it is concurrent or subsequent AM.

- (S169) *i-wε'·-t'łqwəD-na*
 3SG-**MOT**-catch-PAST
 ‘he caught it as it went’ (Jacobs 1931: 149)

- (S170) *i-wε'·-wina'-utp-a*
 3SG-**MOT**-hurriedly-dress-PAST
 ‘he dressed hurriedly and went’ (Jacobs 1931: 149)

Note that in the concurrent example in (S169), the motion is of the object of the verb, not the subject. Despite Jacobs’ characterization, he cites one example where his gloss suggests prior AM, given in (S171).

- (S171) *i-wε'·-wi-caBni-ya*
 3SG-**MOT**-many-ask-PAST
 ‘he went and asked many people’ (Jacobs 1931: 149)

Finally, there is a ventive subsequent AM suffix *-wi*, illustrated in (S172).

- (S172) *i-təmna'-wi-ya*
 3SG-pick.berries-RETURN-PAST
 ‘she came back from berry picking’ (Jacobs 1931: 198)

S9.4. Yakima (Sahaptian, Plateau Penutian; Oregon, U.S.)

Yakima has a concurrent AM prefix illustrated in (S173).

- (S173) *mími pa-wyá-pshata-na áyat-ma.*
 long.ago 3PL-WHILE.GOING-gather-PAST woman-PL
 ‘Long ago, women went along gathering.’ (Jansen 2010: 77)

S10. Chinookan

The Chinookan languages were a small family of closely related languages that were spoken in the southwestern part of the state of Washington in the western United States. They are sometimes grouped in the controversial Penutian family.

S10.1. Lower Chinook (Chinookan, Penutian?; west coast of United States (Washington state))

Boas (1911) cites a prior AM suffix *-am*, illustrated in (S174).

- (S174) *a-tc-i'-t-kL-am*
 AOR-3SG.MASC.SUBJ-3SG.MASC.OBJ-VENT-carry-GO.TO
 ‘he came to take him’ (Boas 1911: 594)

Note that the prefix *t-* in (S174), glossed as ventive, is a directional prefix, not a prefix coding AM, representing the fact that the direction of the motion denoted by the AM suffix *-am* is towards the deictic centre. This implies that the prior AM suffix *-am* is neutral with respect to direction.

S10.2. Kathlamet (Chinookan, Penutian?; Washington state, west coast of United States)

Kathlamet has a prior AM suffix *-am* ~ *-mam*, illustrated in (S175), that is clearly the same as the suffix in Lower Chinook described in the preceding section.

- (S175) *i-s-x-quát-am*
 AOR-3DU-REFL-bathe-GO.TO
 ‘they went to bathe’ (Hymes 1955: 259)

This suffix has a second function as a completive. This suffix also occurs on motion verbs, as in (S176), but I assume that this involves completive meaning, since it only seems to occur with motion verbs that are translated with English past tense forms.

- (S176) *i-n-Xa-t-kʔuá-mam*
 AOR-1SG-REFL-VENT-go.home-COMPL
 ‘I came home’ (Hymes 1955: 180)

S11. Chumashan

The Chumashan languages were a small family of languages spoken in the southern coast of California.

S11.1. Barbareño Chumash (Wash 2001, Beeler 1976; Chumashan; California, United States)

Wash (2001) describes a process of glottalizing a consonant within a verb stem to convey andative prior AM, as in *kuti* ‘to see’, *kut’i* ‘to go and see’ and *xonon* ‘to steal’, *xon’on* ‘to go out to steal’. Beeler (1976: 265) describes an andative prior AM imperative suffix -*la* as in *aqtip-la* ‘make.fire-ANDAT.IMPRT’.

S11.2. Ineseño Chumash (Chumashan; California, United States)

Applegate (1972) describes two AM prefixes in Ineseño Chumash, an andative *yal-* and a ventive *akti-*. The andative is illustrated in (S177), the ventive in (S178).

- (S177) *k-yal-ax-yik-us*
 1SG-GO-QUICKLY-give-3OBJ
 ‘I go to give it to him’ (Applegate 1972: 345)

- (S178) *s-akti-kep’*
 3SG-COME-bathe
 ‘he comes to bathe’ (Applegate 1972: 339)

In (S178), the ventive prefix involves prior AM. But it can also be used as a directional. In fact the normal way to express ‘come’ in this language is to combine the ventive prefix with the verb stem for ‘go’, as in (S179).

- (S179) *kay-wun’ siš-akti-na?*
 3-PL 3DU-COME-go
 ‘The two of them are coming.’ (Applegate 1972: 560)

The ventive is also used in one of the ways to express ‘bring’, as in (S180) (though this is also built on the stem for ‘go’ in the sense of ‘go with’).

- (S180) *s-akti-nu-na-lit* *asuksuk'u?*
 3SG.SUBJ-COME-CONCOM-go-1SG.OBJ something
 ‘He brings me something.’ (Applegate 1972: 172)

S12. Wappo (Thompson et al 2006; Yuki-Wappo; California, U.S.)

Wappo has two prior AM suffixes. The first, illustrated in (S181), is an ordinary prior AM morpheme, while the second, illustrated in (S182), has the meaning to ‘go out to do something’.

- (S181) *olol-miti?*
 dance-GO.DO
 ‘to go in order to dance’ (Thompson et al 2006: 67)

- (S182) *heyh-ime?*
 saw-GO.OUT.TO
 ‘to go out to saw’ (Thompson et al 2006: 65)

S13. Yana (Sapir 1910, 1923; Isolate; California, U.S.)

Yana has three AM suffixes. There is an andative prior AM suffix *-du ~ -ru*, illustrated in (S183), a ventive prior AM suffix *-m'dja*, illustrated in (S184), and a concurrent AM suffix *-dja* illustrated in (S185).

- (S183) *dā's-i-ru-εi*
 catch.salmon-GO.AND-pursuit
 ‘they went to catch salmon’ (Sapir 1910: 23)
- (S184) *dīwa'-m'dja-wik'ɪk'*
 see-COME.AND-2PL:1PL:IMPRT
 ‘do you all come and see us’ (Sapir 1910: 181)
- (S185) *ēlau-dja-*
 sing-MOVEMENT.WHILE-
 ‘to walk singing’ (Sapir 1923: 281)

S14. Kashaya (Pomoan; California, United States)

Kashaya is a member of the Pomoan family, another small family of languages spoken in California. It has an AM suffix *-a·dad* denoting concurrent AM, as in (S186).

- (S186) *pihmoy-á·dad-u*
 smile-MOT-VERB
 ‘to smile while walking along’ (Oswalt 1961: 208)

S15. Palaihnihan

The Palaihnihan family is a family consisting of two languages spoken in the interior of northern California.

S15.1. Atsugewi (Palaihnihan; California, United States)

Atsugewi has a prior AM suffix *-cic*, illustrated in (S187).

- (S187) *s- 'ci-m 'ur-cic*
 1SG-FUT.INTENT-with.hands-fluid.come.out-GO.AND
 ‘I will go milk the cow’ (Talmy 1972: 450)

S15.2. Achumawi (de Angulo and Freeland 1930; Palaihnihan; California, United States)

De Angulo and Freeland (1930), in a brief description of the language, list a number of AM verbal suffixes, *-dzùm ~ -dzùg* ‘to do a thing while going along’, *-dùw* ‘to do a thing while going from place to place’, and *-â-dz* ‘to go and do’. The first two of these are both concurrent AM suffixes; it is not clear how they differ. They also list a suffix *-ê-l* ‘to do something while carrying an object’, which might also be considered a type of AM.

S16. Chimariko (Isolate; California, U.S.)

Chimariko has an unusual sort of andative prior AM suffix *-(yu)wu*, which means ‘to go back somewhere to do something’, as in (S188).

- (S188) *n-ixoda-yuwu*
 IMPRT.SG-watch-RET
 ‘go back and look at him!’ (Jany 2009: 108)

This suffix appears to add to the basic andative prior AM meaning the presupposition that the subject has already traveled in the opposite direction and will be returning to the starting point of this earlier movement. This suffix seems to be specifically andative since not only do all the examples involve going back, but there is a verb *aʔatok* meaning specifically ‘come back’, illustrated in (S189).

- (S189) *h-aʔatok-yaʔ-kon*
 3-return.hither-AGAIN-FUT
 ‘He is going to come back.’ (Jany 2009: 42)

The andative suffix also appears to function as a directional, since it occurs with the motion verb *atqa* ‘take away’ in (S190) and with the verb *iwō* ‘fall over’ in (S191).

- (S190) *h-atqa-wu-k-ta* *šəvəl-op.*
 3-take.away-RET-PAST-3PL.NONSPEC shovel-DEF
 ‘They took the shovel away from him.’ (Jany 2009: 211)

- (S191) *h-iwo-wu-k-ta*
 3-fall.over-RET-DIR-ASP
 ‘He fell over backwards.’ (Jany 2009: 41)

S17. Karok (Isolate; California, U.S.)

Karok has a prior AM suffix illustrated in (S192).

- (S192) *ʔíh-aṛ*
 dance-GO.IN.ORDER.TO
 ‘to go in order to dance’ (Bright 1957: 106)

This suffix is neutral with respect to direction. To express the same with ventive meaning, an additional ventive directional suffix is added, as in (S193).

- (S193) *ʔíh-aṛ-uk*
 dance-GO.IN.ORDER.TO-VENT
 ‘to come in order to dance’ (Bright 1957: 106)

S18. Shasta (Isolate; California, United States)

Shasta (Silver 1966) is a language isolate formerly spoken in northern California. Shasta has a prior AM suffix *-a-mi ~ i-ma* that occurs in *t'e-wáka-mi* ‘he is going to go and look in the water’ and *čim-á-ki-ma* ‘let’s go and see them’.

S19. Washo (Isolate; western United States)

Washo is a language isolate spoken in the western United States (along the border of northern California and Nevada). It has two AM suffixes, the first of which is a prior plus subsequent AM suffix *-(i)* of the round trip type, illustrated in (S194) and (S195).

- (S194) *beguíweʔ-il*
 buy-GO.AND.RETURN
 ‘to go and buy something and return’ (Jacobsen 1964: 567)

- (S195) *démlu ge-ʔs-il*
 food IMPRT-take-GO.AND.RETURN
 ‘Go get food!’ (Jacobsen 1964: 567)

There is a second AM suffix in Washo, *-giš*, which Jacobsen describes simply as involving motion. Some of the examples seem to involve concurrent AM, as in (S196).

- (S196) *g-í-gi-duwé-weʔ-giš-aʔ*
 IMPRT-see-look.for-PL-MOT-AOR
 ‘Go along looking for them!’ (Jacobsen 1964: 286)

At least one example seems to involve prior AM, given in (S197).

- (S197) *lé-mdek-giš-uwe-hi*
 1-dig.up-MOT-AWAY-FUT
 ‘I’m going to go dig something up’ (Jacobsen 1964: 660)

But other examples occur with motion verbs, where the examples seem to involve concurrent AM, since Jacobsen frequently glosses them with the word ‘along’, as in (S198) and (S199).

- (S198) *mala-w-áwit-giš-i*
 jump-PL-OVER-MOT-IPFV
 ‘he’s jumping along over things’ (Jacobsen 1964: 297)

- (S199) *ga-kM-ókot-giš.*
 IMPER-run-SLOWLY-MOTION
 ‘Run along slowly!’ (Jacobsen 1964: 305)

S20. Acoma (Keresan; southwest United States (New Mexico))

Acoma has a prior AM suffix which Miller (1965) represents underlying as *-qeeY*, but which seems to usually surface as *-e*, illustrated in (S200).

- (S200) *s'-ikûuyáw-e*
 1-thread-GO.TO
 ‘I went to thread it’ (Miller 1965: 31)

S21. Kiowa (Kiowa-Tanoan; central United States)

Kiowa has a prior AM suffix *-hó·* illustrated in (S201).¹⁴

- (S201) *dè-ól-tʰá·-hò·-tò*
 1SG-hair-cut-GO.TO-FUT
 ‘I will go and get a haircut’ (Watkins 1984: 181)

S22. Caddo (Caddoan; south-central United States)

Caddo has two prior AM suffixes, a general one *-nih ~ -hih ~ -ih*, illustrated in (S202), and an intensive future one *-sat*, illustrated in (S203).

- (S202) *hí-háy-waʔd-ih*
 HORT-ANIM.PAT-hunt-ANDAT
 ‘let him go hunt’ (Melnar 2004: 102)

¹⁴ Watkins cites the andative suffix as having high tone, but it appears low in (S201).

- (S203) *ci-t-áyyúh-sat*
 1AGT-APPLIC-tell-INTENT.ANDAT
 ‘I’m going to go tell him’ (Melnar 2004: 102)

S23. Tonkawa (Isolate; south-central U.S.)

Tonkawa has a pair of suffixes *-ta* and *-na* which are ventive and andative and appear to be concurrent AM suffixes, as in *naw-ta* ‘to come along setting fires’, *naw-na* ‘to go off setting fires’, *na-xsok-ta* ‘to come raiding’, and *na-xsok-na* ‘to go off raiding’. These also function as directionals, as in *yancicxil-ta* ‘to come running’ and *yancicxil-na* ‘to run off’.

S24. Natchez (Isolate; southeastern United States (Mississippi, Louisiana))

Natchez has a prior AM prefix *ca-k-*, illustrated in (S204), which Kimball describes the meaning of as ‘go and do’

- (S204) *ca·k-kin-ki-š-i-i-?elu·*
 PRIOR-something-hunt-PL.SUBJ:SG.OBJ-1OPT
 ‘let us go and hunt something.’ (Kimball 2005: 406)

S25. Muskogean

The Muskogean languages are or were spoken in the southeastern United States.

S25.1. Koasati (Muskogean; southeastern United States)

Koasati has both andative and ventive prior AM prefixes. The andative prefix *oht-* ~ *oh-* ~ *o-* is illustrated in (S205).

- (S205) *oht-onokbahlí-hco-k* *ommi-hco-toho-k*
 GO.AND-imprison-HAB-SS be-HAB-SS-DIST.PAST
 ‘They were going in order to put him in prison.’ (Kimball 1991: 148)

The ventive prefix *i:t-* ~ *it-* ~ *i-* is illustrated in (S206).

- (S206) ... *it-lopótli-t* *alí:ya-k*
 COME.AND-pass.through-SS go.SG-DIST.PAST
 ‘... and he came and passed through and went off.’ (Kimball 1991: 149)

S25.2. Choctaw (Muskogean; southeastern United States)

Choctaw has two prior AM preverbal particles, probably cognate to the Koasati prefixes, an andative particle *ot*, illustrated in (S207), and a ventive particle *at*, illustrated in (S208).

- (S207) *Ot ahpáali-cha!*
 GO.AND kiss-IMPRT
 ‘Go and kiss her!’ (Broadwell 2006: 194)
- (S208) *Hattak-at tachi’ at apa-tok.*
 man-SUBJ corn COME.AND eat-PAST
 ‘The men came and ate corn.’ (Broadwell 2006: 257)

S25.3. Creek (Muskogean; southeastern United States)

Creek has four prefixes that Martin (2011) calls directionals, three of which function as prior AM markers. Two are andative and one is ventive. The two andative prefixes differ in terms of the distance moved, one for greater distances and one for shorter distances. The andative for longer distances, *it-*, is illustrated in (S209), the andative for shorter distances, *la-*, is illustrated in (S210).¹⁵

- (S209) *ma óywa atĩ:ⁿk-os-a:n it-hôyɩ-in* ...
 that water up.to-DIM-REF ANDAT-stand.SG.RESULT-DS
 ‘He went to the water’s edge and stood ...’ (Martin 2011: 342)
- (S210) *la:-hopoy-itá*
 ANDAT-look.for-INF
 ‘to go a short distance and look for’ (Martin 2011: 325)

The ventive prefix is illustrated in (S211), where it has prior AM meaning.

- (S211) ... *ma ’cilakko-calá:h-i-ta:t mô:m-os-in*
 that horse-spotted-DUR-FOCUS be.so:RESULT-DIM-DS
y-in-hoyêyɩ-in ...
 VENT-DAT-stand.SG.PFV-DS
 ‘... the spotted horse came and stood before him ...’ (Martin 2011: 324)

However, the ventive can also be used as a directional, as in (S212).

- (S212) ... *y-o:ss-ít.*
 VENT-go.out.SG.VENT-SS
 ‘[He would return to exactly where he had gone under] and come out.’ (Martin 2011: 234)

S26. Iroquoian

The Iroquoian languages fall into two branches, a northern branch spoken in the state of New York in the northeastern United States and adjacent areas in Canada, and a southern

¹⁵ Martin glosses all three morphemes as ‘DIR’ for ‘directional’.

branch consisting of one language, Cherokee, originally spoken in the state of North Carolina in the southeastern United States but now primarily spoken in Oklahoma in the south-central United States. Most of the Northern Iroquoian languages are genealogically quite close to each other.

S26.1. Seneca (Northern Iroquoian; New York state, northeastern U.S.)

Seneca has three AM constructions.¹⁶ First, there is an andative prior AM construction that involves a suffix which in abstract terms takes a number of forms, the most common of which are *-h* and *-hn*, but morphophonemic rules frequently lead to changes where the *h* is no longer there overtly in the surface form.

- (S213) *waënödékönyá:nö'*
wa'-hën-atekhönya-hn-
 FACTUAL-3PL.MASC-eat-ANDAT-PUNCTUAL
 'they went and ate' (Chafe 2015: 72)

- (S214) *wa:dowä:ta'*
wa'-h-atorat-h-
 FACTUAL-3SG.MASC-hunt-ANDAT-PUNCTUAL
 'he went hunting' (Chafe 2015: 71)

Second, there is a ventive prior AM construction, which involves the use of the andative suffix plus a second purposive suffix. The meaning of this combination of the andative suffix and the purposive suffix varies depending on whether a prefix precedes the pronominal prefix and, if one does, what prefix precedes the pronominal prefixes (such as the factual prefix in (S213) and (S214)). When there is a prefix preceding the pronominal prefix, the meaning is not one of AM. But when there is no prefix preceding the pronominal prefix, the meaning is that of ventive AM, as in (S215).

- (S215) *hatówäte'*
h-atorat-h-e-
 3SG.MASC-hunt-ANDAT-PURP-PUNCTUAL
 'he came to hunt' (Chafe 2015: 73)

The third AM construction, illustrated in (S216), is an “ambulative” concurrent AM suffix, with the more specific meaning ‘while walking’.

- (S216) *hadó:ne'*
h-atö-hne-
 3SG.MASC-say-AMB-STAT
 'he says it while walking' (Chafe 2015: 74)

¹⁶ Because of the fusional nature of the phonology, I will give what I have constructed as partially morphophonemic representations based on Chafe’s discussion (partially since he describes some allomorphy in terms of allomorphic alternants but other allomorphy he describes in terms of morphophonemic rules).

S26.2. Oneida (Northern Iroquoian; New York state, northeastern U.S.)

Oneida has a dislocative prior AM suffix *-hn* clearly cognate to the andative suffix in Seneca, illustrated in (S217).

- (S217) *wahatekhunyá-na*
wa-ha-atekhuny-hn-a?
 AOR-3SG.M-eat-DISLOC-PUNC
 ‘he is going in order to eat’ (Abbott 2000: 15)

S26.3. Cayuga (Mithun and Henry 1982; Northern Iroquoian; New York state, northeastern U.S.)

Mithun and Henry (1982) describe a suffix *-hna* ~ *-hsa* ~ *-ha* meaning ‘go and’, as in *sekdóhnah* ‘go and see’ and *señihahsah* ‘go and borrow’ (p. 435).

S26.4. Mohawk (Northern Iroquoian; New York state, northeastern U.S., and eastern Canada)

Mohawk has a suffix that Hopkins (1988) calls a purposive suffix which is used for prior AM, as in (S218).

- (S218) *k-at-awv-he-s-hk^w?*
 1AGT-SEMI.REFL-swim-PURP-HAB-FORMER.PAST
 ‘I used to go swimming’ (Hopkins 1988: 157)

S26.5. Wyandot (Northern Iroquoian; originally in Ontario, Canada)

Kopris describes a suffix that he labels dislocative that is used for prior AM, which has various forms, including *-?d*, as in (S219).

- (S219) *s-a-h-akáht-à-?d-a?*
 REPET-FACT=MASC.SG.AGT-see-JOIN-DISLOC-PUNC
 ‘he went back to see’ (Kopris 2001: 316)

S26.6. Cherokee (Montgomery-Anderson 2008; Southern Iroquoian; southeastern U.S.)

Cherokee has three AM suffixes, an andative prior AM suffix, as in (S220), a ventive prior AM suffix, as in (S221), and an “ambulative” random concurrent AM suffix, as in (S222). All three vary with tense-aspect.

- (S220) *oðkinalstayvhn'vsv*
ookinii-ali-stayvhn'vs-vv'ʔi
 1DU.INCL.PAT-MID-fix.a.meal:COMPL-ANDAT:IMMED.PAST
 'we went to eat' (Montgomery-Anderson 2008: 387)
- (S221) *uùnaskoósíhlv*
uunii-askoós-ūhl-vv'ʔi
 3PL.PAT-dig.COMPL-VENT.COMPL-EXP.PAST
 'they came to dig' (Montgomery-Anderson 2008: 389)
- (S222) *aàtatéesthaniútóðha*
a-atatée-sthan-iútóðha
 3AGT-bounce-CAUS.COMPL-AMB:PRES.CONT
 'She's dribbling it.' (literally 'She's going around causing it to bounce.'
 (Montgomery-Anderson 2008: 385)

S27. Wakashan

The Wakashan languages are spoken on Vancouver Island on the west coast of Canada and on the adjacent mainland in Canada and the northwestern corner of the continental United States.

S27.1. Makah (Southern Wakashan; northwestern U.S.)

Makah has a imperative prior AM second position clitic =č(i) illustrated in (S223)

- (S223) *č'u-č'u-tk-ił=č=ʔi*
 REDUP-wash-at.hands-PFV=GO.IMPRT=IMPRT.2SG
 'Go wash your hands.' (Davidson 2002: 294)

S27.2. Nuuchahnulth (Southern Wakashan; west coast of Canada)

Nuuchahnulth has two andative prior AM suffixes, illustrated in (S224) and (S225), and a ventive prior AM suffix, illustrated in (S226). It is not clear what the difference in meaning is between the two andative suffixes.

- (S224) *ʔaakuuł-csuu* *ʔučq-čuu-ʔak-ʔi* *ʕaanus-ʔi*.
 borrow-GO.AND fog.bag-POSS-DEF crane-DEF
 'You people go and borrow the fog-bag of Crane.' (Stonham 2005: 377)
- (S225) *ʔaakuuł-č'i* *ʕahʔin-ʔak* *ʔiihtuup*.
 borrow-GO.AND diver-POSS whale
 'Go and borrow Whale's diver.' (Stonham 2005: 38)

- (S226) *qaʔule-ʔik* *ʕučim.*
 pry.off.rock-COME.AND mussel
 ‘Come and dig mussels.’ (Stonham 2005: 255)

All three appear to be specifically imperative suffixes.

S27.3. Kwak’wala (Northern Wakashan; west coast of Canada)

Kwak’wala has three suffixes that Rosenblum calls directional suffixes, two of which could be characterized as functioning as AM suffixes. They function somewhat differently from AM affixes in other languages in that Kwak’wala roots do not distinguish nouns, verbs and other word class types, so that affixes more freely attach to semantically different types of roots, and AM suffixes can attach to roots which have motion as part of their meaning and roots that do not. One of these suffixes, *-(g)aʔl*, Rosenblum describes as directional-telic, denoting motion towards a goal. In (S227), it occurs with a motion root *la* ‘go’.

- (S227) *láʕagal’it*
la-čəw-gaʔl-it
 go-in-DIR.TEL-INDOOR
 ‘to go into house’ (Rosenblum 2015: 233)

In (S228), in contrast, it combines with a root *paq-* ‘flat along a horizontal plane’ that does not include motion as part of its meaning and hence the suffix *-gaʔl* adds the sense of motion to the word.

- (S228) *páχʔaʕiʔ*
paq-(g)aʔl-ʕiʔ
 flat_horiz-DIR.TEL-MOT.LIQUID
 ‘to fall flat on water’ (Rosenblum 2015: 305)

Note that the root *paq-* ‘flat along a horizontal plane’ does not denote a property (the way an adjective does) but rather the shape and spatial orientation of the subject. Similarly, in (S229), *-gaʔl* combines with a root *hən-* ‘up vessel’ which denotes the shape and spatial orientation of what is functioning syntactically as an object here.¹⁷

¹⁷ A number of the clitics in the Kwak’wala examples belong semantically and syntactically with the word that follows but attach phonologically to the word that precedes (Anderson 1984). For example, the primary object case marker $\Rightarrow\chi a$ on the proper name *Paloma* in (S229) marks *nəʔənGačič* ‘basket’ as the primary object, even though it attaches phonologically to the subject *Paloma*.

- (S229) *lámox* *hánámgal'iloχda*
lā-ʔám=oχ *hán-ám-gaʔl=ʔil=oχda*
 AUX-OLD.INFO=3SUBJ up.vessel-PL-**DIR.TEL**=INDOOR=3SUBJ
- Palomaχa* *nəʔənGačix* *laχ^wa* *wálqəʔedʔilasix.*
Paloma=χa *nəʔənGačix* *la=χ^wa* *wálqəʔedʔilasix.*
 Paloma=PRIM.OBJ basket PREP=DEM couch

‘Paloma put the baskets on the comfy couch.’ (Rosenblum 2015: 311)

Note that although *-gaʔl* adds motion to the verb in (S229), it is not AM in the sense of adding motion to an event, since the root does not denote an event; compare the use of the root *hán-* ‘upright vessel’ in (S229) with its use in (S230), where it denotes the shape and spatial orientation of the subject and no event is involved.

- (S230) *hánsgəmoχda* *dəmsisgəmx* *láxoχ* *ləkáχ.*
hán-sgə́m=oχda *dəmsisgə́m=χ* *lá=χoχ* *ləká=χ.*
 upright.vessel-ROUND=S.DEM bottle=DEM PREP=DEM rock=DEM
 ‘The bottle is on the rock.’ (Rosenblum 2015: 167)

In other words *-gaʔl* in (S228) and (S229) is not only adding motion; it is also converting the predicate to one denoting an event.

The second suffix in Kwak’wala that could be considered as coding AM, *-gə́l*, Rosenblum characterizes as directional-atelic and differs from *-gaʔl* in that it denotes motion, but without a goal of the motion. In (S231), it combines with the same root *hán* ‘upright vessel’ illustrated in (S229) and (S230).

- (S231) *hánámgalʔil*
hán-(g)ə́l-ʔil
 upright.vessel-**DIR.ATEL**-INDOOR
 ‘to take vessel from floor’ (Rosenblum 2015: 90)

In (S232), it combines with the stative root *gə́y* ‘be at’.

- (S232) *gə́yámgaliləla*
gə́y-ə́m-(g)ə́l-ʔil-əla
 be.at-PL.LOC-**DIR.ATEL**-INDOOR-CONT
 ‘plural walking/moving about in house’ (Rosenblum 2015: 297)

Lik *-gaʔl* in (S228) and (S229), it is not only adding motion to the meaning of the verb, but converting a verb that does not denote an event into one denoting an event.

In (S233), in contrast, *-gə́l* is added to a root that does denote an event and has the sense of prior AM or concurrent AM.

- (S233) *hāmsayalagəlis*
hāms-(gə)ʔala-(g)əṭ-ʔis
 pick.berry-LOOK.FOR-**DIR.ATEL**-OUTDOOR
 ‘go looking for berries’ (Rosenblum 2015: 297)
- (S234) ... *ʔálegəls* *laχida* *wəqəs.*
ʔale-gəṭ-!s *la=χida* *wəqes.*
 look.for-**DIR.ATEL**-GROUND PREP=DEM frog
 ‘[The boy and his dog left the house and] went to look for frog.’ (Rosenblum 2015: 309)

It is not clear from the sentence glosses for these two examples whether this should be considered prior or concurrent AM; I treat it as concurrent AM for the purposes of this study.

Finally, in (S235) and (S236), -*gəṭ* is added to motion verbs. In (S235), it has directional meaning (‘along’ rather than ‘to’ or ‘from’).

- (S235) *qadʔəṭxiweʔ*
qas-ʔ(g)əṭ-xiweʔ
 walk-**DIR.ATEL**-TOP.EDGE
 ‘walk along the ridge of hill’ (Rosenblum 2015: 302)

And in (S236), it also has directional meaning, indicating motion away from the ground, represented by the final suffix.

- (S236) *ʔəṭəl's*
ʔəṭ-(g)əṭ-!s
 fly-**DIR.ATEL**-GROUND
 ‘to fly (up) from the ground’ (Rosenblum 2015: 302)

It should be clear that although these two suffixes add motion to a verb not denoting motion, they are quite different from AM affixes in other languages in that they are often added to verbs that do not denote events. For the purposes of this study, I will treat the second suffix as coding AM, since it can combine with non-motion verbs denoting events to code prior AM. But in the absence of evidence that the first suffix can do this, I will not treat it as coding AM.

S28. Ktunaxa (own data, Boas 1918; Isolate; western North America, straddling border between Canada and U.S.)

Ktunaxa (also known as Kutenai) has what are borderline cases of AM. For reasons discussed below, I decided not to treat Ktunaxa as having AM in the sense of a grammaticalized construction. Consider the examples in (S237) to (S239).

- (S237) *Hu=ł* *č'i-na-ł* *ʔup-il-nał.*
 1.SUBJ=IRREAL **set.off-go-PRVB** die-TRANS-1PL
 'Let's go kill him.'
- (S238) *hu=sł* *č'i-ka-ł* *čukat-i* *papa-nis.*
 1.SUBJ=DUR **set.off-come-PRVB** take-INDIC grandson-2POSS
 'I came over to marry your grandson.'
- (S239) *taxa-s* *č'i-ka-ł* *haqwıl-nam-is-ni.*
 then-OBV **set.off-come-PRVB** dance-INDEF.SUBJ-OBV.SUBJ-INDIC
 'Now they started dancing toward him'

The words *č'inal* and *č'ikal* in (S237) and (S238) function like typical AM morphemes, coding prior andative motion and ventive motion respectively, though in (S239) *č'ikal* is functioning as a directional or a marker of concurrent motion. My goal here is to describe the ways in which they are like and unlike typical instances of AM.

One way in which they are atypical is that they are separate words. They belong to a class of words I call preverbs (Dryer 1996), since they bear striking similarity to words called preverbs in Algonquian languages. Most preverbs have meanings that could be described as grammatical rather than lexical (e.g. 'not', 'durative', 'future', 'very', 'able'), though the set of preverbs also includes words with the meaning of manner adverbs (like 'quickly'). They are also tightly connected to the verb, not only prosodically but also because they occur between a number of grammatical clitics, such as the subordinative and first person subject clitic *hu=* and the irrealis clitic *=ł* in (S237), and the verb. These are ways in which they appear to be grammaticalized.

They are derived, however, from the verbs for 'go' and 'come', illustrated in (S240) and (S241), where they bear inflectional suffixes (*-ala* '1pl' in (S240), *-i* 'indicative' in (S241)).

- (S240) *hu=ł* *č'i-na-x-ala* *niltuk'p* *ʔa-kitla-ʔis.*
 1.SUBJ=IRREAL **set.off-go-MOT-1PL** antelope house-3POSS
 'Let us go to Antelope's tent!' (Boas 1918: Text 29)
- (S241) *č'i-ka-x-i* *niʔ* *titqat'.*
set.off-come-MOT-INDIC DEF man
 'That man came.'

But the preverbs in (S237) to (S239) are not verbs grammatically and do not occur with verbal inflections. To that extent, they are grammaticalized.

There is another consideration, however, that makes these preverbs seem less grammaticalized. Namely, the ability to derive a preverb denoting prior motion from a motion verb seems to be relatively productive among motion verbs that code direction, broadly interpreted. The examples in (S242) to (S250) illustrate other preverbs denoting

prior AM, all derived in an analogous way from verbs. These are *wał* ‘to arrive (coming) and do something’, *łaxał* ‘to arrive (going) and do something’, *ʔuquxał* ‘to go inside a container or vehicle and do something’ (though in (S244) it involves going inside a garden), *qahał* ‘to go by a place and do something, to go around and do something’, *ʔanał* ‘to go out and do something’, *ti-nał* ‘to go into something (normally a house or teepee) and do something’, *qunał* ‘to go to a specific place and do something’, *ʔałqanał* ‘to go across and do something’, and *sukqawa-kal* ‘to come to the right place to do something’. The preverbs in (S246) to (S250) contains the same directional roots *na* ‘go’ and *ka* ‘come’ that distinguish the two preverbs *ϕ’inał* and *ϕ’ikał* illustrated in (S237) and (S238) above.

(S242) *wa-l* *ʔik-ni*.
arrive.and-PRVB eat-INDIC
‘He arrived (coming) to eat.’

(S243) *łaxa-l* *ʔupx-ni* *Santa-s* *sa-kłuʔ-s-i*
arrive.and-PRVB see-INDIC Blackfoot-OBV have.village-OBV.SUBJ-INDIC

wanaqna-ni
battle-INDIC

‘They arrived (going) at a Blackfeet village and they attacked them.’

(S244) *n=’uquxa-l* *ʔi-kϕik* *ʔiyamu* *ʔa-kmuk’u-nis-mil*.
INDIC=go.in.and=PRVB graze hooved.animal garden-2POSS-OBV
‘The cow went into your garden to graze.’

(S245) *niʔ-s* *la* *qaha-l* *ʔuna-x-i*.
DEF-OBV back go.around.and-PRVB down-go-MOT-INDIC
‘It went around and went down.’

(S246) *n=’a-na-l* *kqan-wisqaʔ-ni*.
INDIC=out-go.and-PRVB around-stand-INDIC
‘He went out and stood around.’

(S247) *taxa-s* *niʔ-s* *k=ti-na-l* *ϕukat-il*.
then-OBV DEF-OBV SUBORD=enter-go-PRVB take-PASSV
‘Then when she went in to marry him.’

(S248) *pał* *ʔat=sł* *qu-na-l* *ʔupxa-s-i=ϕ* ...
MIRAT HAB=DUR there-go.and-PRVB see-OBV.SUBJ-INDIC
‘She would go there to see him and ...’

- (S249) *niɬtahaɬ-niɬtik* *ʔat* *qa-na-l* *ʔaɬqa-na-l* *yuxa-x-i*
 boy-PL HAB there-go-PRVB cross-go-PRVB on.top-MOT-INDIC
ʔi-s *yunu-s.*
 that-OBV top-OBV

‘The young men used to go across there and up that hill.’

- (S250) *suk-qawa-ka-l* *ʔisaknu-n.*
 good-there-come-PRVB sit-IMPRT.2SG
 ‘Come sit in a good place or spot.’

I think that it is probable that there are many other prior AM preverbs not attested in my data. For example, I cite the preverb *qunat* ‘to go to a particular place and do something’ in (S248), based on the verb *qunaxi* ‘to go to a particular place’. But there is a verb *qukaxi* ‘to come to a particular place’. I suspect that there is a corresponding preverb *qukaɬ* ‘to come to a particular place and do something’ that is simply not attested in my data.

Note that the preverbs in question cannot be formed from just any motion verb. As far as I know, it is not possible to form preverbs out of motion verbs that code a particular manner of motion, like the verb *aɬqahaq* ‘to swim across’.

To sum up, these preverbs in Ktunaxa somewhat resemble constructions in many languages where verbs of motion can combine with other verbs, like ‘go and do something’ in English, but differ in that they are not verbs. However, they differ from typical AM constructions in that they are not affixes phonologically and seem to allow productively the formation of preverbs from verbs of motion that code direction but not manner. For these reasons, I do not treat them as coding AM for the purposes of this study.¹⁸

S29. Algic

The Algic family contains three branches, two consisting of two languages spoken in northern California on the west coast of the United States, namely Yurok and Wiyot, the third the Algonquian languages, which spread across a large area in Canada and the northern United States from the Rocky Mountains to the Atlantic Ocean. §S29.1. describes AM in Yurok and Wiyot, while §S29.3 to §S29.13 describe AM in Algonquian languages.

There are some resemblances between the situation described for Ktunaxa in the preceding section and Algonquian languages in that verbs in Algonquian languages are preceded by preverbs that follow a number of grammatical clitics and precede the verb and in that in some languages, there are preverbs for expressing AM. But different

¹⁸ In Dryer (2002), I classify these preverbs as associated motion preverbs. For the purposes of that study, where I am classifying the Ktunaxa preverbs semantically, the designation of them as associated motion preverbs seems appropriate.

languages vary to the extent to which preverbs are bound to the verb, represented as prefixes in some languages, and, as far as I know, do not exhibit the sort of productivity I described for Ktunaxa. Hence AM preverbs in Algonquian languages are better candidates as markers of AM than preverbs in Ktunaxa. In addition, there are “initial roots” in some Algonquian languages which serve as markers of AM, although in some Algonquian languages, the distinction between preverbs and initial roots is sometimes difficult to make.

S29.1. Yurok (Isolate within Algic; California, western U.S.)

Yurok has a prior AM preverb *nue*, illustrated in (S251).

- (S251) *Nue hlkoʼ*.
 GO.AND gather.acorns.3SG
 ‘S/he went to gather acorns.’ (Garrett 2014: 200)

This preverb is neutral as to direction and includes cases where the motion is towards the speaker, as in (S252).¹⁹

- (S252) *Kolʼ nueʼ nep-s!*
 something GO.AND eat-IMPRT.SG
 ‘Come eat!’ (Garrett 2014: 42)

There is also future AM preverb *keetue*, illustrated in (S253).

- (S253) *Keetue hkluuʼmoh*.
 FUT:GO.AND gather.acorns.1COLL
 ‘We are going gathering acorns.’ (Garrett 2014: 86)

S29.2. Wiyot (Isolate within Algic; California, U.S.)

Wiyot has a prefix *va-* meaning ‘to go to do something’ as in *va-laʼpl-il* ‘she is going to pick berries’ (Reichard 1925: 54). It has a second AM prefix, *gwī-*, which means ‘to do something upon arriving’, as in *gwī-klaʼm-il* ‘upon arrival, he saw’ (Reichard 1925: 57). This appears to count as a ventive prior AM morpheme.

S29.3. Blackfoot (Algonquian, Algic; Alberta, western Canada)

Blackfoot has a prior AM prefix *mato-* ~ *oto-*, illustrated in (S254).

- (S254) *Áakotaapinniiwa apísiyi*.
yáak-oto-apinn-ii-wa apísi-yi
 FUT-GO-adjust-DIRECT-3SG rope-OBV
 ‘He will go adjust the rope.’ (Frantz 1991: 88)

¹⁹ It is not clear why the form for the associated motion particle *nue* ends in a glottal stop in (S252). This word otherwise occurs without a final glottal stop in examples in Garrett (2014).

S29.4. Arapaho (Cowell and Ross 2008; Algonquian, Algic; west-central U.S.)

Arapaho has two prior AM preverbs, an andative preverb *woni-* (referred to as ‘allative’ by Cowell and Ross 2008) and a ventive preverb *no ’u-* (glossed as ‘arrive’ by Cowell and Ross) that are prefixes phonologically, illustrated in (S255) and (S256).

- (S255) *niiwonóonotoowúúnoot*
nii-woni-onotoowuun-oot
 HAB-ALLAT-consume.APPLIC-3SG->OBV
 ‘It goes over and eats their [food]’ (Cowell and Ross 2008: 222)

- (S256) *nóó’eenétiθéθen*
no’u-eeñetiθ-eθen
 ARRIVE-talk.to-1SG->2SG
 ‘I have come to talk to you’ (Cowell and Ross 2008: 211)

S29.5. Cheyenne (Algonquian, Algic; west-central U.S.)

Cheyenne has both a prior AM andative preverb and ventive preverb, both represented as prefixes. The ventive is illustrated in (S257), though I have not attempted to analyse the last part glossed ‘play’.

- (S257) *tse-méo-hóe’-evo’soo’e.*
 CONJ-EARLY.MORNING-COME-play
 ‘He will come out to play early in the morning.’ (Leman 1979: 180)

S29.6. Shawnee (Algonquian, Algic; central U.S.)

Shawnee has a prior AM prefix (or preverb?) *pa-*, illustrated in (S258).

- (S258) *ho-paa-pa’-[w]ii-ta-ma-ekw-a-hi* *ni-me’šoom’-θa.*
 3-REPET-GO-say-TI-TA-INV-DIRECT-OBV.PL 1POSS-grandfather-person
 ‘My grandfather went to tell them (something) (repeatedly).’ (Andrews 1994: 57)

S29.7. Kickapoo (Algonquian, Algic; central U.S.)

Voorhis (1974) mentions a preverb *mái-* ‘go and’, as in *niihmáipakaanehkeepena* ‘we will go gather pecans’ (p. 117) and a preverb *pieci-* ‘come and’, as in *nepiecanemehkaakooki* ‘they came and shook hands with me’ (p. 119).

S29.8. Menomini (Algonquian, Algic; central U.S.)

Menominee (Bloomfield 1962) has six AM preverbs. The first is *awe-h-* ‘go away and’, in *awe-h-anohki-w* ‘he goes off to work’ and *we-matan awe-h-ne-weh* ‘he has gone off to

see his brother’ (p. 218). The second is a ventive preverb *pes-* ~ *pec-*, as in *pes-me-cehsow* ‘he comes here to eat’ and *neqnema-w ne-pes-ohse-hkam* ‘I have come here to get some tobacco’ (p. 217). In these two preceding examples, this preverb denotes prior AM, but it also combines with motion verbs as a directional, as in *pec-piate-t* ‘when he arrived here’ and *eneq pes-ke-wε’yah* ‘then he came back here’. The third is a preverb *pemi-n-* ~ *pepi-m-* that Bloomfield glosses as ‘linear movement through space or time’ (p. 218). In some examples, Bloomfield’s sentence gloss implies that this preverb denotes prior AM (as in *ne-pe-mim-ose-hton* ‘I go and arrange it’ and *pepi-m-pene-nam* ‘he went and took it down’) but the sentence gloss for *pemi-m-ota-hpenam* ‘he goes and picks it up (and then proceeds further)’ suggests a prior plus subsequent AM interpretation of the passing-by type. Bloomfield glosses the fourth AM preverb *ap-* ~ *tap-* as representing ‘the act as occurring in a side trip or as a special errand’ and the sentence gloss for the one example he cites, given in (S259), suggests that it denotes a combination of prior plus subsequent AM of the round trip type (this is clearer for the cognate preverb *a-pi* in Meswaki discussed in the next section).

- (S259) *nepe-w ne-tap-mene-m*
 water 1.SUBJ-SIDE.TRIP-drink-1SG
 ‘I am going off to take a drink of water (and will then come back).’ (Bloomfield 1962: 219)

The last two preverbs both apparently denote concurrent AM and it is unclear how they differ in meaning. Bloomfield glosses the preverb *enem-* as ‘movement along a course in space or through the course of time’, as in *enem-nana-peno-htam* ‘he sings it over as he goes along’ (p. 219). The other, *papa-m-*, he glosses as ‘going about’, as in *papa-m-kepo-hkehseh* ‘going about and getting wet in the dew’ and *ne-pa-pam-nato-ne-hok* ‘he goes about seeking me’ (p. 219). The sentence glosses suggest that the difference might be that *enem-* denotes nonrandom concurrent AM, while *papa-m-* denotes more random motion.

S29.9. Meskwaki (Algonquian, Algie; central U.S.)

Meskwaki has six preverbs that Dahlstrom (no date) labels as directionals, four of which function as markers of AM. At least three of them are clearly cognate to AM preverbs in Menomini described in the preceding section. However, they are separate words phonologically in Meskwaki, bearing second-position clitics, and can even be separated from the verb by other words, although Dahlstrom often represents them orthographically like prefixes.

The first preverb is a ventive preverb *pye-či* illustrated in (S260).

- (S260) *n-o-hkoma ne-pye-či-natom-ek-w-a.*
 1POSS-mother.in.law 1-COME-summon-INV-3-SG
 ‘My mother came and asked me to come over.’ (Dahlstrom no date: 118)

In (S261), it is separated from the verb by the noun *keta-nesa* ‘your daughter’.

- (S261) *ne-pye-či ke-ta-nesa wa-pam-a-pena*
 1SUBJ-COME 2POSS-daughter look.at-1PL->3
 ‘We have come to see your daughter.’ (Dahlstrom no date: 186)

The andative prior AM preverb is illustrated in (S262).

- (S262) *n-i-h=mawi aših-a-w-a ne-mehte-h-a na-hka*
 1SUBJ-FUT=GO.TO make-DIR-3-SG 1POSS-bow-SG also
n-i-p-ani.
 1POSS-arrow-INAN.PL

‘I will go make my bow and arrows.’ (Dahlstrom no date: 55)

The third AM preverb, *ki-wi*, denotes random concurrent AM, as in (S263).

- (S263) *ni-ka-ni-mami-ši-ha ahki e-h-ki-wi-awatenamaw-a-č-i* ...
 leading-attendant earth AOR-AROUND-hand.something.to-DIR-3->3OBV-MODE
 ‘The leading attendant went around handing earth [which was loose to those who had eaten].’ (Dahlstrom no date: 325)

The fourth AM preverb, *a-pi*, Dahlstrom glosses as ‘go in order to, and return’ and hence is prior plus subsequent AM of the round trip type.

S29.10. Ojibwa (Algonquian, Algic; eastern Canada and U.S.)

Ojibwa has a number of AM preverbs or roots (“initials”). The first is a prior AM andative preverb *wa-*, illustrated in (S264).

- (S264) *wgi-wašam:an wdayan.*
w-gi:-wa-ašam-a:-an w-day-an.
 3-PAST-GO-feed-ANIM.OBJ-OBV.OBJ 3POSS-dog-OBV
 ‘He went to feed his dog.’ (Rhodes 1976: 252)

There is a corresponding ventive preverb *bi-* illustrated in (S265).

- (S265) *gi:biwi:sni.*
gi:-bi-wi:sni-w.
 PAST-COME-eat-3
 ‘He came to eat.’ (Rhodes 1976: 252)

This preverb can also be used as a directional with motion verbs, as in (S266).

- (S266) *w-gike-nd-a:n wi:-bi-dgošn-ini-d bi:ye:n-an.*
 3-know-OBV.OBJ FUT-COME-arrive-OBV-3 Peter-OBV
 ‘He knows that Peter will come.’ (Rhodes 1976: 203)

There is also an AM initial root *biba:-* ~ *biba:m-* meaning ‘to go around doing something’, i.e. random concurrent AM, illustrated in (S267).

- (S267) *bba:-mo:nhaškkiwe:.*
biba:-mo:nah-maškikiw-e:-w.
 AROUND-dig-medicine-INCORP-3
 ‘He is gathering medicinal herbs.’ (Rhodes 1976: 265)

This root can also be used as a directional, as in (S268).

- (S268) *bba:mbato:.*
biba:m-bato:-w.
 AROUND-run-3
 ‘He is running around.’ (Rhodes 1976: 244)

S29.11. Cree (Algonquian, Algie; Canada)

Cree has a prior AM preverb *nitawi-* illustrated in (S269).

- (S269) *piko ka-nitawi-atoskê-yân anohc.*
 necessary IRREAL-GO.AND-work-1 today
 ‘I have to go to work.’ (Cook 2014: 299)

Cree also has a ventive preverb *pê-* illustrated in (S270).

- (S270) *nipâpa wîsakisin pîkonam oskât pê-wîcihinân.*
ni-pâpa wîsakisin-w pîkon-am-w o-skât pê-wîcihi-nân.
 1POSS-father fall-3 break-INAN.OBJ-3 3POSS-leg COME-help-1PL
 ‘My father fell and broke his leg, come and help us!’ (Cook 2014: 89)

However, this preverb can also be used as a directional with motion verbs, as in (S271).

- (S271) *ê-pê-kîwê-t Jeff ni-kî-mîciso-nân.*
 CH.CONJ-COME-go.home Jeff 1SUBJ-PAST-eat-1PL
 ‘When Jeff came home, then we ate.’ (Cook 2014: 79)

The two AM preverbs can co-occur, as in (S272).

- (S272) ... *pâmwayêš pê-nitaw-âyamihâ-yêk!*
 before COME-GO-pray-2PL
 ‘... before you come here to pray.’ (Cook 2014: 279)

This implies that the preverb *nitaw(i)-* is neutral with respect to direction, except that in the absence of the preverb *pê-*, the direction will be assumed to be andative, although in such case the direction is coded by the absence of *pê-* rather than by *nitaw(i)-*.

S29.12. Montagnais (Algonquian, Algic; Québec, eastern Canada)

Montagnais (Clark 1982) has a prior AM prefix *nātsh(i)-* (presumably cognate to the similar preverb in Cree), as in *ninātshi-uītamuāu* ‘I’m going to go over and tell him’.

S29.13. Malecite-Passamaquoddy (Algonquian, Algic; Maine, northeastern U.S., and New Brunswick, eastern Canada)

Malecite-Passamaquoddy has three AM preverbs, which are phonologically bound to the verb. The first is a prior AM preverb *naci-* ~ *nat-* (again presumably cognate to the similar preverbs in Cree and Montagnais) illustrated in (S273).

(S273) *náci-ksám-əw-an*

GO-saw-TRANS.ANIM-3.PASS

‘he goes somewhere to have it sawn for him’ (LeSourd 1993: 390)

LeSourd is explicit about this preverb not coding direction, meaning either ‘go and’ or ‘come and’ as illustrated by the sentence gloss for (S274).

(S274) *nát-ewət-ów-an*

GO-arrange-TRANS.ANIM-DIRECT

‘he comes (or goes) and gets it for the other’ (LeSourd 1993: 378)

This language also has a specifically ventive preverb *pét-* ~ *péc* ~ *péci-*, illustrated in (S275), that derives from the verb for ‘arrive’.

(S275) *h-pét-təmím-a-l*

3-ARRIVE-hire-DIRECT-3OBV

‘he comes and hires the other’ (LeSourd 1993: 282)

This preverb can apparently code prior AM, as in (S275), or concurrent AM, as in (S276).

(S276) *pét-témo*

ARRIVE-cry.3

‘he comes crying’ (LeSourd 1993: 283)

This preverb also combines with motion verbs, functioning as a directional, as in (S277) and (S278).

(S277) *péc-óhse*

ARRIVE-walk.3

‘he comes walking’ (LeSourd 1993: 378)

- (S278) *pécí-ph-â*
 ARRIVE-carry-PASSV.3
 ‘he arrives being carried’ (LeSourd 1993: 68)

The third AM preverb is *áp-* is one that denotes prior plus subsequent AM of the round trip type, as in (S279).

- (S279) *ht-áp-támím-a-l*
 3-GO-hire-DIRECT-3OBV
 ‘he goes somewhere and hires the other (and returns)’ (LeSourd 1993: 173)

S30. Eskimo-Aleut

S30.1. West Greenlandic (Inuit, Eskimo-Aleut; Greenland)

West Greenlandic has a prior AM suffix *-artu(r)*, illustrated in (S280) and (S281).

- (S280) ... *níqi pisiari-artu-qqu-aa.*
 meat buy-GO.AND-TELL.TO-3SG->3SG:INDIC
 ‘He told [the person that he lived with] to go and buy the meat.’ (Fortescue 1984: 54)

This suffix appears to be neutral with respect to direction, given the sentence gloss with ‘come’ in (S281).

- (S281) *niri-artu-rusup-pit?*
 eat-GO.AND-WANT-2SG.Q
 ‘Do you want to come and eat?’ (Fortescue 1984: 4)

S30.2. Central Alaskan Yupik Eskimo (Yupik Eskimo, Eskimo-Aleut; Alaska, U.S.)

Central Alaskan Yupik Eskimo has a similar prior AM suffix *-yartu* illustrated in (S282).

- (S282) *qag-na qimugta petug-yartu-rru.*
 outside-ABS.SG dog.ABS.SG tie-GO.TO-OPT.2SG->3SG
 ‘Go and tie up the (moving and visible) dog outside.’ (Miyaoka 2012: 357)

S30.3. Siberian Yupik Eskimo (de Reuse 1988; Yupik Eskimo, Eskimo-Aleut; eastern Siberia and Alaska, U.S.)

Siberian Yupik Eskimo has a prior AM suffix *-yagh* illustrated in (S283).

- (S283) *inghu-yagh-tuq*
 pick.berries-GO.AND-INDIC.3SG
 ‘he went to pick berries’ (de Reuse 1988: 123)

Abbreviations

1	first person
1COLL	first person collective
1DU	first person dual
1OBJ	first person object
1PL	first person plural
1PL->3	first person plural acting on third person
1POSS	first person possessor
1SG	first person singular
1SG->2SG	first person singular acting on second person singular
1SUBJ	first person subject
2	second person
2PL	second person plural
2POSS	second person possessor
2SG	second person singular
2SG->3SG	second person singular acting on third person singular
2SUBJ	second person subject
3	third person
3.ON	third person 'on'
3AGT	third person agent
3DU	third person dual
3M	third person masculine
3NOM	third person nominative
3OBJ	third person object
3OBV	third person obviative
3PL	third person plural
3POSS	third person possessive
3PRO	third person pronoun
3SG	third person singular
3SG->3SG	third person singular acting on third person singular
3SG->OBV	third person singular acting on obviative
ABS	absolute
ACC	accusative
AFFIRM	affirmative
AGT	agent, agentive
ALLAT	allative
AMB	ambulative
ANDAT	andative
ANIM	animate
AOR	aorist
APPLIC	applicative
ART	article
ASP	aspect
ASSOC.MOT	associated motion
AUX	auxiliary

BEN	benefactive
CAUS	causative
CH.CONJ	changed conjunct
CLSFR	classifier
COME.AND	come and do
COMP	complementizer
COMPL	completive
CONCOM	concomitant action
CONN	connector/connective
CONT	continuative
COP	copula
DAT	dative
DEF	definite
DEM	demonstrative
DESID	desiderative
DET	determiner
DIM	diminutive
DIR	directional
DIR.ATEL	atelic directional
DIRECT	direct (as opposed to inverse)
DIR.FAR	directional far away
DIR.SHORT	directional short distance away
DIR.TEL	telic directional
DIRECT	direct (as opposed to inverse)
DISLOC	dislocative
DIST	distal
DIST.PAST	distant past
DISTR	distributive
DS	different subject
DUR	durative
ELV	ellative
ERG	ergative
EVID	evidential
EXCL	exclusive
EXP.PAST	experienced past
F	feminine
FEM	feminine
FUT	future
GO.AND	go and do
GO.AND.RETURN	go and do and then return
HABIT	habitual
HON	honorific
HORT	hortative
IDPH	ideophone
IMMED.PAST	immediate past
IMPRT	imperative

INAN	inanimate
INCL	inclusive
INCOMPL	incompletive
INCORP	incorporation
INDEF	indefinite
INDIC	indicative
INF	infinitive
IN.MOT	in motion
INSTR	instrumental
INT	intensive
INTENS	intensifier
INTENT	future intensive
INV	inverse
IPFV	imperfective
IRREAL	irrealis
ITER	iterative
JOIN	joiner vowel
LOC	locative
M	masculine
MASC	masculine
MID	middle
MIRAT	mirative
MODR	moderative
MOT	motion
MOTCA	motion coming along VERBing
MOT.LIQUID	motion on top of a liquid
MOTG	motion going
MOTP	purposive motion
NEG	negative
NOM	nominative
NONFUT	nonfuture
NONPOSS	not possessed
NONSPEC	nonspecific
NONVIS	nonvisible
NUM	numeral
OBJ	object
OBV	obviative
OLD.INFO	old information
OPT	optative
PASS	passing by
PASSV	passive
PAT	patient
PFV	perfective
PL	plural
POSS	possessor
POT	potential

PREP	preposition
PRES	present
PRIM.OBJ	primary object
PROC	processive
PROG	progressive
PROH	prohibitive
PROX	proximal
PRVB	preverb
PTCL	particle
PTCPL	participle
PUNC	past punctiliar
PURP	purpose
PVB	preverb
Q	question
QUOT	quotative
REC.PAST	recent past
REDUP	reduplication
REF	referential
REFL	reflexive
REL	relativizer
REPET	repetitive
REPORT	reportative, reported speech
RES.PFV	resultative perfective
RESULT	resultative
RET	returnative
RETURN	returnative
REVENIT	revenitive (ventive subsequent motion)
RT	round trip
SEMI.REFL	semi-reflexive
SG	singular
SS	same subject
STAT	stative
SUBORD	subordinate
SUPPL	supplication
TERMIN	terminative
TA	transitive animate (i.e. animate object)
TI	transitive inanimate (i.e. inanimate object)
TRANS	transitive
TRNSL	translocative
UNSPEC	unspecified
USPEC	underspecified verb
VBLZ	verbalizer
VENT	ventive
VERIF	verificational

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References for those items cited in the Supplementary Materials (a separate list of references for those items cited in the main body of the chapter immediately follows the main body).

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