Lauren W. Reed and Kate L. Lindsey

9 "Now the story's turning around": Associated motion and directionality in Ende, a language of Papua New Guinea

Abstract: In this paper, we provide one of the first descriptions of associated motion in a Papuan language. Ende, a language of southern Papua New Guinea, has one directional affix that codes path towards the deictic centre when combined with verbs of motion or transfer. When this affix is combined with other verbs, it gives rise to interpretations of an associated, secondary motion event. This type of "deictic associated motion" was first explicitly described by Belkadi (2015) in several languages of Africa. Ende's deictic associated motion system is unlike prototypical associated motion systems, such as that in Kaytetye (Pama-Nyungan, Australia), in that Ende does not have dedicated affixes that code associated motion. Instead, Ende's associated motion expression relies on inference on the part of speakers and hearers to give rise to the motion readings. Accordingly, we propose the terms *dedicated associated motion* and *inferential associated motion* to distinguish these two very different associated motion systems, one of which relies on dedicated affixes or other structures, and the other, which relies on speakers' and hearers' inferences.

Keywords: associated motion, directionality, deictic associated motion, Ende, Papua New Guinea, Papuan languages

1 Introduction

Associated motion was first described by Koch (1984) in Kaytetye (Pama-Nyungan, Australia). In Kaytetye, associated motion is a grammatical category expressed by a set of dedicated affixes, which associate the main verb with a secondary event of motion. This motion event is specified temporally in relation to the main verb. In the first example below, the motion follows the action of the main verb, while in the second, the motion precedes the action of the main verb.

- (1) Alperre-le=lke enpe-layte-nke. foliage-Loc=then cover-**DO&GO**-PRS 'He covers him (a dead companion) with leaves before he goes off.' (Kaytetye; Koch, this volume, ex [10a])
- (2) Are-nke=lke wethapenye are-**yene**-nke weve-le=pe. re look-prs=then 3sg.erg thus look-GO&DO-PRS animal-ERG=TOP 'It (euro) looks then, the animal then goes and has a look.' (Kaytetye; Koch, this volume, ex [3])

Associated motion has since been explicitly described in other Australian languages, including Adnyamathanha (Tunbridge 1988) and Arrernte (Wilkins 1989, 1991), and in several languages of South America (Guillaume 2016) including Cavineña (Guillaume 2008) and Mojeño Trinitario (Rose 2015). Prototypical associated motion systems such as these have dedicated affixes whose only function is to code motion associated with a verb event.

Languages may also have directional systems, where they have one or more morphemes that code direction. The direction may be oriented in absolute space or oriented deictically. For example, Matukar Panau (Austronesian, Papua New Guinea) has directional morphemes that code a seaward or inland distinction, as well as morphemes which code path to or away from the deictic centre (Barth & Anderson 2015). Directionals prototypically code path and do not code motion.

However, Belkadi (2015) describes a phenomenon in the South American language Quechua and several African languages where deictic directional morphemes can give rise to associated motion readings. That is, depending on the inherent semantics of the host verb and the pragmatic context, a deictic directional morpheme can express a separate, secondary motion event that is oriented temporally in relation to the main verb, as exemplified in (3):

(3) *t-cdh* =d di tamyra 3sgf-dance.prf =**VEN** in wedding 'She danced at the party and came back.' (Tagbaylit Berber; Belkadi 2015: 59)

While this function of directionals has been identified in the past (Payne 1982; Haviland 1993: 42-43; Lichtenberk 2003: 160-166; Bourdin 2006), Belkadi (2015) was the first to explicitly link it to associated motion as a grammatical category, terming it D-AM or deictic associated motion (Belkadi 2015: 50, 2016: 49, this volume).

This paper presents the way in which associated motion is expressed in Ende, a Papuan language of Papua New Guinea. Ende is one of six varieties in the Pahoturi River language family in southern New Guinea and is spoken by around 600 people living in three villages in remote rural Western Province. Ende people are primarily subsistence farmers who supplement their palm sago production and slash-and-burn agriculture with hunting and fishing. Ende is still being acquired by children. Papua New Guinea is a known hotspot of linguistic diversity, and southern New Guinea even more so (Evans & Klamer 2012; Evans 2012).

Ende has one directional affix which codes motion towards the deictic centre. When the marker is used with a verb of motion or transfer, as in (4), it codes directionality. However, when it is used with a verb that is not of motion or transfer, as in (5), it gives rise to a secondary, associated motion meaning.

- (4) *Ine* ulle da ade gongällbänän tater ingoll bogo а ine ure=da ade go-nərbən-ən tater=inor bogo а water big=nom 3sg.nom then REM-rise-3sgS and mat=sim ngädnanngädnan devarnän. ŋəd-nan~ŋəd-nan d-ej-a-r-n-ən ADV~roll-PLS REM-VEN-SGS-go.SGS-DUR-3SGS 'The water rose up and came rolling in like a mat.' (J. Sowati 2016: 8)
- (5) Ngämlle sokpa de yazgi. ŋəmre sokpa=de **j**-a-zgi tobacco=ACC FUT.VEN.2SG>3SG-RT.EXT-wrap 1SG.DAT 'Wrap and bring that tobacco to me.' (S. Jerry 2016: 3)

This pattern is similar to that expressed by the Tagbaylit Berber deictic directional morpheme in (3), which indexes two separate events: (i) the dancing and (ii) the return. Similarly, in (5), the Ende directional affix gives rise to an interpretation where there is (i) a main event (wrapping) and (ii) a secondary associated motion event (bringing). Like Taqbaylit Berber, Ende uses its deictic directional marker to index associated motion; hence, like Tagbaylit Berber, Ende exhibits what Belkadi (2016) terms "deictic associated motion".

Associated motion has only been briefly described in one Papuan language, the isolate Yélî Dnye of Rossel Island (Levinson 2006: 197–199) (see also Dryer's [this volume, ch. 4] analysis of Imonda [Border, Papua New Guinea]). Belkadi (2015: 69) mainly surveyed languages in Africa and was concerned that deictic associated motion might be "quite geographically concentrated". In this paper, we present the first extended description of associated motion in a Papuan language. In doing so, we explicitly identify deictic associated motion in a geographically and genetically unrelated language to those surveyed by Belkadi (2015). (See also Schokkin, Vidal & Payne, and Dryer [this volume, ch. 13], for descriptions of deictic associated motion in other non-African languages.)

We also propose alternative terms to those posited by Belkadi (2015, 2016). Belkadi (2015: 45) termed dedicated associated motion systems such as that in Kaytetye as "AM expressed by inflectional affixes" or *I-AM*. Belkadi (2015, 2016: 49) termed systems like Tagbaylit Berber and Ende, which repurpose directional morphemes, as D-AM or deictic associated motion. We hold that these terms are confusing. So-called deictic associated motion systems regularly make use of inflectional affixes, as Ende does. In addition, dedicated associated motion markers in some languages are not inflectional affixes but are instead derivational affixes (see Osgarby, this volume), particles, clitics, or auxiliaries. Guillaume (2016: 99-100) proffers an example of the same from Baure (Arawak, Bolivia), where an "intentional particle" expresses prior motion:

(6) *ač* ri=im=ro yiti ač kač ri=nik and 3sg.F=put=3sg.M chili and **go** 3sg.F=eat 'And she put chili in it [the food] and she [another woman] went to eat.' (Baure; Danielson 2007: 277, as cited in Guillaume 2016: 100)

Furthermore, some languages express associated motion using serial verb constructions (see Lovestrand & Ross, this volume). Hence, in light of this variability of means for expressing AM cross-linguistically, we propose the term dedicated associated motion rather than I-AM for systems such as those in Kaytetye, Cavineña, and Baure, where markers exist with no other function than to express associated motion.

The term "deictic associated motion" is also imprecise because many dedicated associated motion markers also have a deictic component. Consider the following pair of examples from Cavineña (Tacanan, Bolivia), which feature two dedicated associated motion markers coding prior motion:

- Tudya =ekwana ba-ti-kware (7) takure then see-go.TEMP-REM chicken 'So we went to see the chicken (in the back of the bus).' (Cavineña; Guillaume 2008: 212)
- (8) *Jadya=tibu=dya* =mikwana ba-**na**-wa thus=reason=FOC =2PL see-come.TEMP-PERF 'This is why I have come to see you (plural) (here in your village).' (Cavineña; Guillaume 2008: 212)

The affixes -ti and -na are respectively dedicated associated motion markers, but they are also deictically oriented: -ti away from the deictic centre and -na towards it. Hence, the term "deictic associated motion" for non-dedicated systems (such as Taqbaylit Berber and Ende) is confusing, as the associated motion suffixes in (7) and (8) are both dedicated and deictic.

Belkadi (this volume) clarifies that the terms "D-AM" and "deictic associated motion" are meant to refer to associated motion systems where a single form encodes either associated motion or deictic directionality depending on the context. At the same time, she notes that "canonical AM" (or I-AM) is often deictically oriented. Given the fact that deictic orientation can figure in both D-AM and I-AM systems, we suggest that rather than incorporating the term "deictic" in the name for only one of these systems, it would be less analytically opaque to select a different term altogether. As such, inspired by Haviland (1993: 43), we propose inferential associated motion as a designation for systems such as that in Ende, which, in order to express associated motion, repurpose morphemes that have other primary functions. The term "inferential" highlights how pragmatics and context drive the way in which deictic directionals give rise to associated motion meanings.

The paper is structured as follows. In section 2, we present the form of the Ende ventive. In section 3, we illustrate cases where the Ende ventive morpheme has a canonical directional function. In contrast, in section 4, we present those cases in which the ventive morpheme has an inferential associated motion function. Those cases that do not fit neatly into either category are described in section 5, and in section 6, we discuss our findings and revisit our proposed new terminology. This study is grounded in a corpus of naturalistic speech, primarily narratives, collected over 11 months from 2015 to 2018 in Limol, Western Province, Papua New Guinea (Lindsey 2015). All examples in the paper are naturally occurring utterances arising from the corpus except for (38), which was elicited.

2 Form of the ventive prefix

The form of the ventive prefix has three allomorphs. The underlying form *i*- is realised as y-/j/ when word-initial and immediately preceding a vowel (9), as ey-/ej-/ when word-medial but still before a vowel (10), and as i- elsewhere, that is when immediately preceding a consonant (11). When the prefix is realised as

¹ The Ende orthography is used for in-text language examples. IPA equivalents of nontransparent orthographs include: $\langle \ddot{a} \rangle = /\theta$, $\langle dd \rangle = /(\hat{q}z)$, $\langle ll \rangle = /\gamma$, $\langle ng \rangle = /\eta$, $\langle ny \rangle = /\eta$, $\langle tt \rangle = /\gamma$ f(x) = f(x) =

a high /i/ vowel, it triggers height-sensitive vowel harmony throughout the verb (see Lindsey [2019: 190]; and cf. a similar system in Idi in Gast [2017]).

(9) Ag me yuwenyan. **j**u-wen-an ag=me morning=Loc REC.VEN.3sgP-take-3sgA² 'In the morning, he brought it back.' (B. Zakae 2016a: 12)

- (10) *Gall* d**ey**agllaenalla gänyo. gar d-**ej**-a-graj-n-ara gəno REM-VEN.3SGP-RT.EXT-paddle-DUR-1NSGA here canoe 'We paddled the canoe here.' (W. Warama 2016: 27)
- (11)Skul a sens de b**i**wenvän. skul=a sens=de b-**i**-wen-ən school=NOM change=ACC FUT-VEN.3sgP-take-3sgA 'Education will bring change here.' (E. Sali 2018: 95)

The ventive prefix is limited in its distribution in two ways. Semantically, the ventive prefix does not occur in transitive verbs with first- or second-person patients. This constraint is evidenced by contrasting the (a) and (b) examples in (12) and (13), which have a first-person and third-person patient, respectively. Note how the andative (a) and ventive (b) forms are identical in (12) but differ in (13). Of note, here we use "andative" to refer to motion with a non-specific or deictically unmarked path (see Guillaume & Koch, this volume).

(12) a. Ngänäm gänyo datramän. d-a-tram-ən nənəm gəno 1SG.ACC here REM-RT.EXT-lead-3sgA 'He brought me here.' (C. Soma 2018: 25)

² Ende verbal morphology contains multiple types of distributed exponence, complicating a one-to-one gloss of form to meaning. Since the verbal morphology is not the topic of this paper, the glosses have been simplified. Only the intended meaning is glossed, not all the meanings possible with the shown form.

- b. Ngänäm danglläbänän abo datramän abo nənəm d-a-ŋrəbən-ən d-a-tram-ən then REM-RT.EXT-lead-3sgA 1SG.ACC REM-RT.EXT-get-3SGA do sel ma we. do sel ma=we there cell place=ALL 'He got me and then took me to jail.' (Y. Sowati 2018: 22)
- (13) a. Gänyaolle dindugän bogo. Ngämo mang bom d-indug-ən man=bomgənaore bogo пәто towards.here REM-run-3sgS 3SG.NOM 1.SG.POSS brother=3sg.acc ditramän. ngattong d-i-tram-ən nafson REM-VEN.3SGP-lead-3SGA first 'He ran this way. He brought my brother first.' (P. Wäziag 2018: 59)
 - b. Ine da kälsre de duli. däbe llig dätramän ine=da dəbe kəlsre=de d-ə-tram-ən duli rig water=nom that child small=ACC REM-3sGP-lead-3sGA there 'The water took that small child there.' (T. Warama 2016: 21)

Structurally, the ventive prefix is constrained in two ways: (i) it must replace a patient agreement prefix and (ii) it may precede a transitive root extension, but not an intransitive one. The exact mechanics of this are not at issue for this paper. In summary, the Ende ventive marker has three phonologically-conditioned allomorphs, i-, ev-, and v-, which occur only in transitive prefix templates indexing third-person or dummy patients, either by replacing the patient agreement prefixes or by preceding a transitive root extension.

3 Directionality

Ende has one directional, which codes orientation towards the deictic centre. Terms by which this is known in the literature include *ventive*, *venitive*, *cislocative*, centripetal, and hither. The ventive can be contrasted with motion away from the deictic centre, referred to as andative, itive, translocative, centrifugal, and thither (see Guillaume & Koch, this volume). In this paper, we understand motion as fundamentally involving the displacement of an entity (Frawley 1992: 171). In their canonical form, directionals do not code motion, but only path (Guillaume 2016:

13–14). Jackendoff (1983: 163) describes how path may consist of a "path-function" and a "reference-object" or "reference place". In the following English example. *from* is the path function and *under the table* is the reference place:

(14)The mouse ran from under the table. (Jackendoff 1983: 163)

Critically, here, the preposition from does not encode motion. Instead, motion is encoded by the semantics of the verb. Similarly, Talmy (1975: 181) defines path as "the respect in which one object is considered as moving or located to another object".

In Ende, the deictic centre may be the speaker (15). It may be the location where the speaker is, was, or will be in, or the typical place where the speaker is, usually the village of Limol, where much of the corpus was recorded (16). In narratives, a third-party protagonist may be the deictic centre (17). Figure 1 shows the context in which example (17) was uttered.

- (15) Ngämo nag d**ey**arän ada, "Wiya." d-ei-a-r-ən пәто nag ada wiya 1sg.poss friend REM-VEN-RT.EXT-go-3SGS like.this come.IMP 'My friend came to me and said, "Come!" (Dareda 2016: 18.1)
- (16) Ngämi baebol skul i **v**aralla baibol skul=i i-a-r-ara ŋəmi 1NSG.EXCL.NOM bible school=all rec.ven-rt.ext-go.sgS-1nsgS abo ngäna gänyaolle Llimoll e dedam abo rimor=e dedam nəna gənaore 1sg.nom then towards.here Limol=ALL here naentin eiti varan, wan. **i-**a-r-an najntin ejti wan REC.VEN-RT.EXT-go-1SGS nineteen eighty one 'We went to bible school, and then I came back here to Limol, in 1981.' (D. Sobam 2018b: 122)
- (17)Ge lla da abo yaran abo, mälla da abo abo ra=da **j-**a-r-an məra=da ge this man=NOM then REC.VEN-RT.EXT-go-3SGS then woman=ACC llig a nabllenegan abo. wa n-a-bre-neg-an abo wa rig=achild=ACC REC-RT.EXT-greet-SG>PL-1|3SGA then and 'Then this man came and greeted his wife and child.' (D. Sobam 2018a: 77–78)



Figure 1: #15 Real Return (San Roque et al. 2012).

As shown in examples (4) and (15–17), the Ende ventive is often found with motion verbs and adds a path specification to the motion already expressed by the verb. However, it may occur with stative verbs with no motion component, denoting the orientation of the event, as in (18).

(18) *Ubi* d**i**dämawän gänyaolle. ubi d-**i**-dəma-wən gənaore 3NSG.NOM REM-VEN-sit.pl-3PLS this.way 'They were sitting down facing this way.' (T. Warama 2018: 99)

In Ende, verbs of transfer such as 'haul' and 'carry' entail motion. When the Ende ventive is used in these contexts, it adds a path specification to the motion entailed by the verb, as in the following examples.

(19) Käsre mälla da gobällän wayati kəsre məra=da ao-bər-ən waiati then woman=NOM REM-go.PLS-3PLS watermelon devangmerevo. d-ej-a-nmer-ejo

REM-VEN-RT.EXT-haul-3NSGA

'Then the women went and hauled the watermelons back here.' (J. Dareda 2016: 93)

(20) Däbem matta d**i**gegiyu gänyowe de dahem mafsa d-i-geg-iyu de gəno=we that.acc shoulder REM-VEN.3sgP-AUX-3NSGA here=ALL FOC Kurupel pate. kurupel pat=e Kurupel body=ALL 'They carried him on their shoulders here to Kurupel.' (W. Kurupel 2017a: 76)

Many narratives in the Ende corpus involve a departure and a return to a place, usually the village of Limol. The title of this paper quotes Ende speaker Wendy Bewag, who remarked that the ventive morpheme means that "now the story's turning around". That is, the switch from unmarked verbs to ventively marked verbs signal to the hearer that the path of the action has now switched towards the deictic centre. In the following examples, drawn from a single narrative, the verb is first used in a neutral sense (21) and then oriented to the deictic centre to indicate that the protagonists are now returning (22).

- (21) *Gall* dagllaenalla do gongkaemam Parade. d-a-graj-n-ara do qo-nkajm-mam Parade gar canoe REM-RT.EXT-paddle-DUR-1NSGA there REM-start-1PLS Parade 'We paddled the canoe (away from the village) until we got to Parade.' (W. Warama 2016: 9)
- (22) *Gall* d**ey**agllaenalla gänyo-o, Eramang gall gar d-**ej**-a-graj-n-ara gəno-o eramaŋ gar canoe REM-VEN-RT.EXT-paddle-DUR-1NSGA here-voc Eramang canoe tap ma. tap ma moor place 'We paddled back all the way here to Eramang canoe mooring place.' (W. Warama 2016: 27)

Example (23) is drawn from a story in part about a cure for an illness, where a crocodile tooth is shot at a man's back, and a cassowary chick is then removed from the man's chest, curing the illness.

- (23) a. Käsre bägäl de d**i**wenyän käza ngoe kasre bəgəl=de d-**i**-wen-ən kəza noi then bow=acc rem-ven.3sgP-carry-3sgA crocodile tooth itrel att. ereya tär peyang er=eia tər=pejan itrel=afs where=cop.pst.sgS string=com sickness=abl 'Then [the healer] brought a bow and a healing crocodile tooth tied with string.'
 - b. *Ttatta* pallall e dedme deyazuwän. dedme d-ei-a-zu-wən *fsafsa* parar=e lower.back direction=ALL there.Loc REM-VEN-RT.EXT-shoot-3SGA '[The healer] shot it into [Sali's] back.'
 - c. Sali bo llig de guwo watt dirom sali=bo auwo=afs € dirom rıq=de Sali=3sg.poss inside=ABL cassowary child=ACC ekaekong digezänän. eka~eka=an d-i-gezən-ən ADV~sound=ATT REM-VEN.3sgP-take.out.NPL-3sgA '[The healer] took the chirping cassowary chick out of Sali's body.'
 - d. Sali abo ai gogän. sali abo ai go-g-ən Sali then good REM-AUX-3SGS 'Then, Sali became well.' (W. Kurupel 2017a: 82–84, 87, 98)

In both (23a) and (23b), Sali, the sick man, is the deictic centre. Accordingly, the use of the ventive indexes motion towards Sali. The use of the ventive in (23c) also indexes directionality, but it is less clear who the deictic centre is. Example (23c) could be read as a shift in the deictic centre to the healer, who brings the chick out towards himself. Alternatively, this could be seen as a continuation of Sali as the deictic centre, as the cassowary chick emerges into his field of vision. Crosslinguistically, deictic directionals have been found to mark a contrast of visibility (Fortis & Fagard 2010: 10).

Similarly, the event in (24) involves a hook, which is extracted towards the deictic centre. However, it is unclear whether the deictic centre is Karama Popo, the cutter who removed the hook, or both Karama Popo and the speaker, as the hook emerges into both of their fields of view and hence towards them.

(24) Karama Popo eraya bogo ava karama popo er=aja bogo aj=ja Karama Popo where=cop.pst.sgS 3sg.nom who=cop.pst.sgS dapellaemnän, dägagevo, dägagevo, d-a-perajm-n-ən d-ə-gag-ejo d-ə-gag-ejo REM-RT.EXT-cut-DUR-3SGA REM-3SGP-AUX-3NSGA REM-3SGP-AUX-3NSGA tudi käp de däbe d**i**gezänevo. tudi kəp=de dəbe d-i-gezən-ejo fishing hook=ACC that REM-VEN.3sgP-take.out.NPL-3NSGA 'Karama Popo was the one who cut me open. They cut and cut and took the fish hook out.' (W. Bewag 2017: 63)

All the previous examples in this section index actual motion, where an entity moves in real space and time. In Ende, motion and corresponding path can also be metaphorical, as in (25).

(25) Oke, ge ttoen a oha taem e deyarän, oba d-ej-a-r-ən oke ge fsoin=a taim=e okay this story=nom 3nsg.poss time=all rem-ven-rt.ext-go.sg-3sgS deyarän, devarän. d-**ej**-a-r-ən d-**ej**-a-r-ən REM-VEN-RT.EXT-go.SGS-3SGS REM-VEN-RT.EXT-go.SG-3SGS 'Okay, this story has been coming all the way to their time.' (R. Kurupel 2017: 16)

In this section, we have described how the Ende ventive is used in a classic directional sense; that is, where it codes path only. Any motion or non-motion is expressed not by the directional morpheme, but by the semantics of the host verb. We now turn to examples where the Ende ventive codes not only path but also associates a motion event with the main verb.

4 Inferential associated motion

When the Ende ventive is combined with a verb that has no motion semantics, it adds a secondary motion event to the clause, in addition to a path specification (see Guillaume & Koch, this volume; Dryer, this volume, ch. 4; Belkadi, this volume). We call this an inferential associated motion system because it is based on inference and implicature. Ende's inferential associated motion system can give rise to the association of a motion event occurring prior to, subsequent to, or simultaneous with the action of the host verb. The moving entity or "figure of the event" (Talmy 1975: 181) may be an intransitive subject, transitive object, or transitive subject and object together. In this next section, we systematically explore each of these possibilities in Ende and contextualise them in terms of associated motion typological tendencies.

In the following example, the speaker is running from a bright light that is pursuing him through the forest.

```
(26) Däbe
                      ngäna
                                ddone devangttäneg
     dəb=e
                      ŋəna
                                аzone
                                       d-ej-a-ŋ͡fsə-nəg
     that=cop.pst.sgS 1sg.nom not
                                        REM-VEN-RT.EXT-count-SG>PL
     ada llo
               tubu
                       deya
                                               o
     ada ro
               tubu
                       da=iia
                                               0
     like tree stump INT.DEM=COP.PST.SGS
                                               OR
     kupkup
               deya.
     kup~kup
               da=ija
     DIM~hole INT.DEM=COP.PST.SGS
     'I didn't count how many small logs or potholes there were as I was coming
     back.' (Sowati Kurupel 2017: 48)
```

In (26), when the ventive directional is added to the verb 'count', the resulting reading is that there is concurrent motion associated with the counting. In other words, the speaker is in motion while he is counting. Here, the ventive codes two properties: motion and orientation of that motion towards the deictic centre. Similarly, in (27), the ventive on the verb 'hide' results in a prior motion reading associated with the hiding.

(27) a. Mänmän a komlla ten ada gotbanegän, mənmən=a komra ten ada go-tba-negən girl.PL=NOM two ten like.this REM-plan-3PLS "Ibi tatuma ibi wi dag." ibi ibi=wi tatuma da=q1NSG.INCL.NOM washing.place GO=ALL INT.DEM=COP.PRS.PLS 'Twenty girls were planning, "Let's go bathe."

- b. Käsre ada gognegän, gobällän. tatuma kəsre ada go-g-negən tatuma go-bər-ən then like.this REM-AUX-3PLS washing.place REM-go.PL-3PLS 'Then they went like this, they went to the bathing spot.'
- c. Lla da d**i**tgewän ada mänmän, "Gidre!" Gidre!" ra=da d-i-tge-wən ada mənmən gidre gidre man=NOM REM-VEN-hide-3PLS like.this girl.PL enemv enemv 'Men had come and hid, and the girls went, "Enemy! Enemy!" (P. Wäziag 2016: 1)

In terms of the moving entity, associated motion of intransitive subjects or transitive subjects without their object (as in [26] and [27]) are rare in the Ende corpus. However, associated motion of either transitive objects alone, or transitive subjects and objects together, are more common. It is perhaps significant, then, that the slot that the directional morpheme usurps in the Ende verbal complex is one customarily dedicated to object marking (see section 2).

As discussed in section 3, in Ende, verbs of transfer such as *kongkom* 'carry' and matta dägag 'shoulder' entail movement. In these verbs, the subject and the object move together (as in [19] and [20]). Given that Ende verbs of transfer already entail movement, by our definition, the ventive in these sentences is coding path only and not motion (see Dryer [this volume, ch. 4], for a related discussion). Conversely, in the following examples, the host verbs are 'search' (28), 'dig' (29), and 'pick' (30). These are actions, but they do not necessarily entail motion like actions such as 'go' (15-17), 'haul' (19) or 'paddle' (21, 22). When the directional morpheme is combined with the former set of verbs, a secondary motion event is entailed. In other words, the motion event associated with the main verb is expressed by the directional morpheme alone.

- (28) Mani di n**i**yagnegnan. mani=di n-i-jag-neg-n-an money=ACC REC-VEN.3PLP-search-SG>PL-DUR-3SGA 'She searched for and brought back money.' (Sarbi Kurupel 2018: 315)
- (29) Gaguma we abo b**i**daebneyo. abo b-**i**-d-ajb-n-ejo gaguma=we yamhouse=ALL then IRR-VEN.3PLP-dig.out.NPL-NSG>PL-DUR-3NSGA 'They would dig the yams and bring them to the yamhouse.' (J. Dareda 2017: 74)

(30) Ngämo lla da **y**addänan nge а **i**-a-dzən-an пәто ra=da ne а 1sg.poss man=nom coconut rec.ven-rt.ext-pick-3sgA and imneimne ngäna wätät vu. imne~imne ŋəna wətət ju 1sg.nom food ADV~after fire 'My husband picked and brought a coconut, and afterwards, I cooked.' (M. Bewag 2018: 227)

In examples (27–30), with perception and utterance verbs, the transitive subject and the transitive object move in conjunction. However, in the following examples, the transitive subject is stationary, and the transitive object is the moving entity. The context in which example (31) was uttered can be seen in Figure 1 (also used to show the context for [17]).

- (31) 0 lligda ikop d**ev**addägnän. bogo rıg-da bogo ikop d-**ej**-a-qz̄əg-n-ən see REM-VEN-RT.EXT-bite3-DUR-3SGA oh child-3.poss 3sg.nom 'Oh, his boy was watching him come up.' (D. Sobam 2018a: 15)
- (32) To indrang de ngäna ikop d**i**ge. to indraŋ=de ŋəna ikop d-**i**-ge light bright=ACC 1SG.NOM see REM-VEN.3SGP-AUX 'I saw the bright light coming towards me.' (Sowati Kurupel 2017: 30)
- (33) Daolle dallän abo tatraem de daore da-r-ən abo tatrajm=de towards.there REM-go-3sGS then noise=ACC d**ey**andärän. yaya iaia d-**ei**-a-ndər-ən father REM-VEN-RT.EXT-hear-3sgA 'He walked until his father heard him coming.' (W. Kurupel 2017b: 37)

³ The collocation of the uninflecting verb 'see' and the inflecting verb 'bite' is an idiomatic expression in Ende, which translates as 'to watch'.

(34) Lla da deyamballigallo ngänaeka alle d-**ej**-a-mbar1g-aro ra=da nənajka=are person=nom rem-ven-rt.ext-welcome-hab.plA tears=ins tärämpmenvang de. tərəmpmen=an=de funeral.act=AGT=ACC

'The people will welcome with tears the returning person who slept with the deceased's bag.' (B. Zakae 2016b: 29)

Again, the host verbs in examples (31–34) have no motion semantics.⁴ Instead. the directional morpheme expresses both the motion and path of the moving entity, which in these examples is the object argument. This associated motion of the object may be typologically unusual, given Ross's (this volume) finding that "non-subject" associated motion is rare. Belkadi (this volume), surveying D-AM systems in several African languages, notes that motion of the object is "quite rare", and where it occurs, is associated with verbs of perception, utterance, or "goal-oriented verbal emission", such as cursing or welcoming. Belkadi's analysis of the semantics of verbs that can drive an object-only motion reading, therefore, accords with this phenomenon in Ende (31–34).

A core component of associated motion is that the secondary motion event is ordered temporally in relation to the main verb. In dedicated associated motion systems such as Adnyamathanha (Pama-Nyungan, Australia), prior (35), concurrent (36) and subsequent (37) temporal orderings are possible:

- (35) *Mai* ngarlku-mana-angg-athu. food eat-come.and-PERF-1SG.ERG 'I came and ate the food.' (Adnyamathanha; Tunbridge 1988: 270)
- (36) Awi yarra-**nali**-ku. rain-NOM fall-CONT.coming-NARR 'It's raining, and it's heading this way (from a long way off).' (Adnyamathanha; Tunbridge 1988: 272)

⁴ Antoine Guillaume makes a good observation here that "in some languages, such verbs behave like motion verbs, and the authors talk about 'fictive' motion. But in these languages, the directional specifies the direction of this fictive motion (of the 'gaze', for instance, with verbs like 'look at'), and not about the motion of the O, which [exists] in Ende" (p.c. 28 April 2020).

(37) Artu-nga veldha marli-wandha-anggu. woman-ERG clothes wash-and.leave-PERF 'The woman washed the clothes and cleared off.' (Adnyamathanha; Tunbridge 1988: 273)

Despite the fact that Ende has a single associated motion morpheme, the Ende ventive prefix can still give rise to a prior (27), concurrent (26, 31–34), or subsequent (5, 28-30) sense of motion. In dedicated associated motion systems such as Adnyamathanha (35–37), there are dedicated affixes for each temporal ordering. This is not the case in Ende, where context and pragmatics determine which temporal reading is generated. Ende speaker Warama Kurupel Suwede reported in elicitation that the events in (38) can be interpreted with either a subsequent or a concurrent motion reading.

(38) *Ngäna* nge ine de inewan. nəna ine=de i-ne-wan ne 1sg.nom coconut water=acc rec.ven.3sgP-drink-3sgA 'I drank coconut water and came.' 'I drank coconut water while I was coming.' (W. Kurupel p.c. 2017)

When we consider our naturalistic corpus, some generalisations emerge in terms of which inferred reading is more likely. Using the ventive with an intransitive verb seems to yields prior associated motion (27), while the motion of the transitive object only seems to yield concurrent associated motion (31–34).⁵ However, the motion of transitive subject and transitive object together can generate a concurrent (26) or subsequent associated motion reading (28–30).

This variability in possible temporal interpretations is in contrast with the inferential associated motion system in five languages of the Koman family (Ethiopia/South Sudan), which can only express subsequent motion (Otero, this volume). Temporal ordering in Ende appears freer than that in Paluai (Oceanic, Papua New Guinea), where preverbal and postverbal directionals give, respectively, strict prior and subsequent associated motion readings (Schokkin, this volume). In Ende, the prevalence of concurrent and subsequent motion and the relative scarcity of prior motion goes against crosslinguistic proposals and findings from Levinson and Wilkins (2006: 534), Guillaume (2016: 120, 127), and Ross (this volume).

⁵ We thank an anonymous reviewer for this insight.

5 Other functions of the directional morpheme

There are several examples in Ende where the ventive may denote the assumption or intention of motion, rather than necessarily actualised motion. The following is an excerpt of a conversation:

```
(39) Ao, nga bevantämonaemeva
               b-ej-a-ntəmon-ajm-eja
     ao
         ηa
     ves now fut-ven-rt.ext-wait-nsg>pl-1nsgA
     'Yes, now we will wait for them to come.' (P. Madura 2016: 21)
```

Here, motion is associated with the host verb 'wait'. The figure of the secondary motion event is the object, namely, the girls who are washing. However, the motion has not yet occurred, and indeed, may not; for example, the girls may not come back to the waiting speaker. Similarly, in the following example, the subject calls towards the object to come (i.e., move), but there is no entailment that the object will necessarily carry out the motion coded by the directional. That is, the children will not necessarily come following their being called.

```
(40) Llig
            kläkle
                      olle ignigan.
            kləkle
                      ore i-g-nig-an
     rıg
     child small.pl call rec.ven.3plP-aux-sg>pl-1sgA
     'I called the children over.' (K. Baewa 2018: 331)
```

There is a parallel here with the "anticipated ventive" marker in Nivacle (Mataguayan, Paraguay), exemplified in (41):

```
(41) j-ovalh-c'oya
     1(>3)-watch-AM.ANT.VEN
     'I watched, waiting for him/her/them to come.' (Nivacle; Fabre 2013: 11,
     cited in Guillaume 2016: 144)
```

The "anticipated ventive" marker in Nivacle marks motion that is "temporarily postponed or expected ... towards the [subject/actor]" and where the "associated actor [is] invisible at the time of the event" (Fabre 2013: 11, cited in Guillaume 2016: 144). This accords with (39) and (40) in Ende; however, in Ende, there is no entailment that the associated actor is nonvisible.

It is an open question whether examples such as (39) and (40) should be considered associated motion or not, given that it is not certain whether the motion will take place or not.⁶ Antoine Guillaume (p.c., 28 April 2020) highlights a more interesting pattern in this data, in that it may reflect the "mirror image" of what is commonly referred to as "motion with purpose". As Guillaume points out, motion with purpose is overwhelmingly discussed in the context of prior motion in the literature (see, for example, Lovestrand & Ross, this volume). However, Ende appears to permit the expression of *subsequent* motion with purpose, which may be cross-linguistically quite unusual.

By way of further example, other uses of the Ende ventive are better translated as 'so as to come ...' rather than encoding an actual secondary motion event. This could be seen as a sort of path-oriented intentionality. In (42), Donae Kurupel describes the aftermath of capturing a crocodile in her net while fishing in the swamp. Having placed the crocodile in the canoe, she arrives back at the mooring place, throws the crocodile on the ground, kills it with the help of her sister, and then they carry it back to the village.

- (42) a. Gall e Za de tap dägag. ngäna d-ə-gag gar=e tap za=de ŋəna canoe=ALL dock REM-3SGP-AUX thing=ACC 1SG.NOM dägaz. d-ə-gaz REM-3PLP-take.out.PLP 'The canoe docked. I took out our things.'
 - b. Käza de däbe bogo gall kəza=de dəbe bogo gar crocodile=ACC that 3sg.nom canoe ik mi ada any gogän. ik=mi ada go-g-ən an inside=Loc like.this something REM-AUX-3SGS 'That crocodile was inside the canoe and was going like this.'
 - c. Ngäna däbe käza de eraeva ŋəna dəbe kəza=de era=jja 1SG.NOM that.ACC crocodile=ACC where=COP.PST.SGS net alle daeva anv dägag. net=are da=jja d-ə-gag an net=inst int.dem=cop.pst.sgS thing rem-3sgP-aux 'I got the crocodile with the net, and went like this.'

⁶ We thank Antoine Guillaume for this point, and for drawing our attention to the Nivacle data.

- d. *Gänveri* tutu wi d**ey**aspun. gəneri tutu=wi d-**ei**-a-spun here.all land=all Rem-ven-rt.ext-throw 'I threw [the crocodile] onto the shore [so as to return home].' 'I threw [the crocodile] onto the shore [towards home].' #'I threw [the crocodile] onto the shore [and brought it home].'
- e. Gall ik att de dägazen ume ttäp a aar *ik=ats=de* d-ə-qazen ume tsəp=a canoe inside=ABL=ACC REM-3sGP-take.out mouth=NOM ttatt a gottalamän. eraeya era=jja tsats=a go-ţsalam-ən where=cop.pst.sgS jaw=nom rem-break-3sgS 'When I took it out from the canoe, the jaw cracked open.'
- f. Ngäna däbe giri tupi da ngämi dəbe nəna qiri tupi=da nəmi 1sg.nom that.acc knife long=nom 1npl.excl.nom ada eraeya ume ttäp e dätrəkne. ume tsəp=e d-ə-trək-ne era=iia ada where=cop.pst.sgS like.this mouth=all rem-3sgP-push-dur 'I took my big knife and started pushing it into the crocodile's mouth.' (D. Kurupel 2017:51–56)

Example (42d) could be translated as 'I threw it on the shore and carried it home', just as in (28–30), where the translation indexes two events. However, the next part of the story recounts how the protagonist struggles with and kills the crocodile on the shore. It is only after that that she and her sister shoulder the crocodile and carry it back to the village. Hence, (42d) translates best as 'I threw it on the ground (so as to return home)', or 'I threw it on the ground (towards home)'. It is not well-translatable as 'I threw it on the ground and brought it home' as there are multiple events following this sequence where the crocodile is killed before it is then carried home. This interpretation is in contrast to uses of the directional in examples (28–30), which involve two distinct events per clause.

Coding for directionality or associated motion is optional in Ende. Example (42) is revelatory in that although the ventive could appear in (42a), (42c) and (42e), it does not. The switch back and forth from ventively marked to neutral verbal forms appears more stylistic than strictly grammatical. Indeed, the directional morpheme is often co-combined with a directional adverb or deictic postposition, as with (43) and (44) in the following examples:

(43) *Gänye* gänyerimae d**ey**angkämänggeya d-ej-a-ŋkəmə-ŋg-eja gəne aənerimai

this.way.closer REM-VEN-RT.EXT-take-APPL-1NSGA here

ako-o aumawang e ae. ako=o $au=ma=wa\eta=e=aj$

then=voc grave=place=ATT=ALL=voc

'Then we took a shortcut this way towards the graves.' (J. Karea 2016:11)

(44) Minong gänyaollemae minon gənaoremaj

Minong towards.here.closer

d**i**täräpmällnän ngämo pate. d-i-tərəp-mər-n-ən ŋəmo=pate

REM-VEN.3SGP-cut.across-dur-dur-3SGA 1SG.POSS=ALL.ANIM

'Minong cut across towards me.' (J. Karea 2016:43)

Remarking on the use of the ventive in its directional sense, speaker Warama Kurupel Suwede called it "a shortcut". His comment hints at speakers' intuition of the use of the ventive as an efficient way to package a lot of information in a single clause. This shortcut is optional in Ende, but it is nevertheless used quite often.

6 Discussion

In Taqbaylit Berber, Belkadi (2015: 59) finds that when a directional is used with a verb which does not encode an event expressing motion, an associated motion reading arises. The exclusion of inferential associated motion with verbs with motion semantics in Taqbaylit Berber "suggests that the phenomenon is primarily derived pragmatically, as a kind of 'last-resort' interpretation" (Belkadi 2015: 60; also see Belkadi, this volume). Faced with a deictically orientated non-motion verb (such as 'sleep', 'eat' or 'work'), speakers "seek among the implicatures" of the directional and construct the most pragmatically likely meaning (Hooper 2002: 297). Motion coded by directionals appears a matter of "inferential ingenuity", not syntax (Haviland 1993: 43).

Ende's associated motion system is similar to those in geographically widely-dispersed languages, such as those discussed in this volume by Dryer (this volume, ch. 4) and Belkadi (this volume). Prior to Belkadi's (2015, 2016: 49) proposal of the term "deictic associated motion" or "D-AM", this function of directionals was variously termed "displaced directionality" (Lichtenberk 2003: 160–166), "time referentials" (Payne 1982), or given no specific term at all (Haviland 1993: 43). The lack of convergence on a standard term meant that studies were scattered orphan-like throughout the literature. The term "deictic associated motion" has created an explicit link to the existing associated motion literature, and indeed has been taken up by several scholars in this volume.

However, as outlined in section 1, we have concerns that the term "deictic associated motion" is somewhat imprecise and potentially confusing, as prototypical associated motion markers very often also have a deictic orientation. As such, we restate our new terminological proposals here, which we argue are both clearer and capture a greater range of form possibilities. For "I-AM" systems such as in Adnyamathanha, Cavineña, and Kaytetye, we propose the term dedicated associated motion. For "D-AM" systems such as in Ende, we propose the term inferential associated motion. The expression of associated motion is common to both types of systems, but what differs is whether the sense of the marker is dedicated and hence unambiguous, or whether it rests on inference. By focusing on this dimension of dedication vs inference, we avoid questions of form; that is, we allow for the possibility that either type of associated motion may be expressed by any morphological form, be it verbal inflections, derivations, particles, or some other construction.

To see the power of this terminological distinction in action, we consider Kayardild (Tangkic, Australia). Here, when a verb is followed directly by a motion verb, this gives rise to a concurrent or subsequent motion reading (Evans 1995: 308). For instance, when the verb warra-ja is used as a main verb, it translates as 'go (to)' or 'come (to)'. However, when it appears in a "motion complex", that is, directly following a "main verb", it gives rise to a concurrent motion reading, as in (45).

(45) *Jiki-ja* warra-ja karn-ki. light.fire-ACT go-ACT grass-MLOC '(They) went along setting fire to the grass.' (Evans 1995: 309)

Evans (1995: 309–310) notes that this concurrent motion reading is "usually" generated from this serial verb construction; less frequently, a motion with purpose reading is generated. Depending on how predictable and "usual" the concurrent motion reading indeed is, we would have grounds to classify these Kayardild serial verb constructions as either dedicated associated motion (if they are heavily predictable) or inferential associated motion (if not).⁷

⁷ See also Lovestrand & Ross (this volume) for a treatment of Kayardild and associated motion serial verb constructions more generally.

7 Conclusion

Ende has one directional morpheme, which codes motion towards the deictic centre. When the directional morpheme is inserted into a verb of motion or transfer, it codes path only. When it is inserted into a verb that is not of motion or transfer, it associates a secondary motion event with the host verb. This motion event can be prior to, concurrent with, or subsequent to the main verb. The directional can also code the assumption or intention of motion. Despite a lean directional system with only one morpheme, Ende speakers use context and pragmatics to give rise to a feast of possible meanings.

We agree with Belkadi (2015, this volume) that this phenomenon warrants analysis as a special type of associated motion. However, we identify some issues with Belkadi's (2015, 2016) terms "I-AM", "D-AM", and "deictic associated motion". We instead propose that associated motion systems with dedicated markers or structures, such as those in Kaytetye and Cavineña, be termed dedicated associated motion. Meanwhile, systems such as those in Ende, which rely on other markers such as directionals to express associated motion, should be termed inferential associated motion. Importantly, by following Belkadi's lead and arguing for a link between these Ende phenomena and associated motion, we contribute to "turning the story around" for this function of directionals, which has hitherto been only peripherally acknowledged.

Abbreviations

Glossing abbreviations follow Leipzig's Glossing Rules (Comrie, Haspelmath, & Bickel 2008). Less-standard abbreviations are as follows:

	or	HAB	habitual	RT.EXT	root extension
>	acting on	MLOC	modal locative	SIM	similative
ACT	actual	NSG	nonsingular	TEMP	temporarily
AM	associated motion	PERF	perfective	VEN	ventive
ANIM	animate	REC	recent past		
ANT	anticipated	REM	remote past		

Acknowledgements: We wish to thank and acknowledge the Ende tribe, in particular Warama Kurupel Suwede, Wagiba Geser, Wendy Bewag, Takeya (Mecklyn) Dieb, and Wareya (Wesley) Giniya for their assistance in data collection and analysis and for sharing their lives and language with us. We also gratefully acknowledge funding from the Firebird Foundation for Anthropological Research to conduct this research and for equipment loans from the Centre of Excellence for the Dynamics of Language. For comments and feedback on this paper, thanks go to Antoine Guillaume, Harold Koch, Nicholas Evans, Jean-Christophe Verstraete, an anonymous reviewer, and the attendees of the workshop "Directionality or associated motion? Evidence from diverse languages" held at the Australian National University on 22 June 2018.

References

- Baewa, Kols. 2018. Sociolinguistic Questionnaire Kols Baewa. LSNG08.8 http://www.paradisec.org.au/collections/LSNG08/items/SE_PI113.
- Barth, Danielle, & Gregory D. S. Anderson. 2015. Directional constructions in Matukar Panau. Oceanic Linguistics 54(1). 206-239.
- Belkadi, Aicha. 2015. Associated motion with deictic directionals. SOAS Working Papers in Linguistics 17. 44-71.
- Belkadi, Aicha. 2016. Associated motion constructions in African languages. Africana Linguistica 16. 44-70.
- Belkadi, Aïcha. This volume, chapter 5. Deictic directionality as associated motion: Motion, complex events and event integration in African languages.
- Bewag, Maki (Lynette). 2018. Sociolinguistic Questionnaire Maki (Lynette) Bewag. LSNG08. http://www.paradisec.org.au/collections/LSNG08/items/SE_PI095.
- Bewag, Wendy. 2017. Wendy's Fishing Story. LSNG08. http://www.paradisec.org.au/ collections/LSNG08/items/SE_SN039.
- Bourdin, Philippe. 2006. The marking of directional deixis in Somali. In F. K. Erhard Voeltz (ed.), Studies in African linquistic typology, 13-41. Amsterdam & Philadelphia: John Benjamins.
- Comrie, Bernard, Martin Haspelmath, and Balthasar Bickel. 2008. The Leipzig Glossing Rules: Conventions for interlinear morpheme-by-morpheme glosses (modified 05/31/2015). Department of Linquistics of the Max Planck Institute for Evolutionary Anthropology & the Departement of Linguistics of the University of Leipzig. https://www.eva.mpg.de/lingua/ resources/glossing-rules.php.
- Danielsen, Swintha. 2007. Baure: An Arawak language of Bolivia. Leiden: Research School of Asian, African, and Amerindian Studies (CNWS), Universiteit Leiden.
- Dareda, Jerry. 2016. Watermelon Story (retelling). LSNG08. http://www.paradisec.org.au/ collections/LSNG08/items/SE_PN010.
- Dareda, Jerry. 2017. Sisor otät ttängäm ngasnges ttoen (Yam Gardens: Planting and Harvest). LSNG08. http://www.paradisec.org.au/collections/LSNG08/items/SE SN045.
- Dobola, Kaoga. 2018. Sociolinguistic Questionnaire Kaoga Dobola. LSNG08. http://www.paradisec.org.au/collections/LSNG08/items/SE_PI110.

⁸ References to collection LSNG08 refer to the PARADISEC archival collection by Lindsey (2015). Years refer to the date of recording.

- Dryer, Matthew S. This volume, chapter 4. Associated motion and directionals: where they overlap.
- Dryer, Matthew S. This volume, chapter 13. Associated motion in North America (including Mexico and Central America).
- Evans, Nicholas. 1995. A grammar of Kayardild: With historical-comparative notes on Tangkic. Berlin & New York: Mouton de Gruvter.
- Evans, Nicholas. 2012. Even more diverse than we had thought: The multiplicity of Trans-Fly languages. In Nicholas Evans & Marian Klamer (eds.), Melanesian Languages on the Edge of Asia: Challenges for the 21st Century. Language Documentation & Conservation. Special publication (5). 109-49.
- Evans, Nicholas, & Marian Klamer. 2012. Introduction: Linguistic challenges of the Papuan region. In Nicholas Evans & Marian Klamer (eds.), Melanesian Languages on the Edge of Asia: Challenges for the 21st Century. Language Documentation & Conservation. Special publication (5). 1-12.
- Fabre, Alain. 2013. Applicatives and associated motion suffixes in the expression of spatial relations: A view from Nivacle (Mataguayo family, Paraguayan Chaco). Unpublished manuscript. https://www.academia.edu/12443688/ (accessed 17 May 2020).
- Fortis, Jean-Michel & Benjamin Fagard. 2010. Space and language, Part V Deixis. Leipzig summer school in typology. https://www.eva.mpg.de/lingua/conference/2010_ summerschool/pdf/course_materials/Fortis_5.DEIXIS.pdf (accessed 7 March 2018).
- Frank, Wendy. 2018. Sociolinguistic Questionnaire Wendy Frank. LSNG08. http://www. paradisec.org.au/collections/LSNG08/items/SE_PI058.
- Frawley, William. 1992. Linquistic semantics. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Gast, Volker. 2017. Directional inflection in Sidibiri Idi (Southern PNG). Paper presented to Workshop on the Languages of Papua 4, Manokwari, Indonesia. 23 January. https://www.researchgate.net/publication/313242611_Directional_inflection_in_Sibidiri_ Idi_Southern_PNG (accessed 6 March 2018).
- Geser, Wagiba. 2017. Llimollang aba giddoll ttoen. LSNG08. http://www.paradisec.org.au/ collections/LSNG08/items/SE_SN066.
- Guillaume, Antoine. 2008. A grammar of Cavineña. Berlin: De Gruyter Mouton.
- Guillaume, Antoine. 2016. Associated motion in South America: Typological and areal perspectives. Linguistic Typology 20(2). 81-177.
- Guillaume, Antoine & Koch, Harold. This volume, chapter 1. Introduction: Associated motion as a grammatical category in linguistic typology.
- Haviland, John B. 1993. The syntax of Tzotzil auxiliaries and directionals: The grammaticalization of "motion". In Proceedings of the Nineteenth Annual Meeting of the Berkeley Linquistics Society: Special Session on Syntactic Issues in Native American Languages. 35-49. https://www.researchgate.net/publication/268384840_The_Syntax_ of_Tzotzil_Auxiliaries_and_Directionals_The_Grammaticalization_of_Motion_Authors (accessed 16 October, 2018).
- Hooper, Robin. 2002. Deixis and aspect: The Tokelauan directional particles mai and atu. Studies in Language 26(2). 283–313.
- Jackendoff, Ray. 1983. Semantics and cognition. Boston: MIT Press.
- Jerry, Samuel. 2016. Ause Ur (Children's song). LSNGO8. http://www.paradisec.org.au/ collections/LSNG08/items/SE_SS024.
- Karea, Jugu (Mado). 2016. Mado's Pig Story. LSNG08. http://www.paradisec.org.au/ collections/LSNG08/items/SE_SN030.

- Koch, Harold. 1984. The category of "associated motion" in Kaytej. Language in Central Australia 1, 23-34,
- Koch, Harold. This volume, chapter 7. Associated motion in the Pama-Nyungan languages of
- Kurupel, Donae, author. 2016. Kurupel bo pepeb (reading). LSNGO8. http://www.paradisec.org. au/collections/LSNG08/items/RE EN015.
- Kurupel, Donae. 2017. Donae's Crocodile Story. LSNG08. http://www.paradisec.org.au/ collections/LSNG08/items/SE_SN033.
- Kurupel, Donae, 2018. Sociolinguistic Questionnaire Donae Kurupel, LSNG08. http://www.paradisec.org.au/collections/LSNG08/items/SE_PI051.
- Kurupel, Rex. 2017. Story of the Limol/Malam coconut tree. LSNG08. http://www.paradisec.org. au/collections/LSNG08/items/SE_SN049.
- Kurupel, Sarbi. 2018. Sociolinguistic Questionnaire Sarbi Kurupel. LSNG08. http://www.paradisec.org.au/collections/LSNG08/items/SE_PI114
- Kurupel, Sowati. 2017. Iddob Käbama Ibiatt. LSNG08. http://www.paradisec.org.au/ collections/LSNG08/items/SE PN024.
- Kurupel (Suwede), Warama. 2017a. Sali's Pig Story. LSNG08. http://www.paradisec.org.au/ collections/LSNG08/SE_SN041.
- Kurupel (Suwede), Warama. 2017b. Auma we ibiatt ttoen (retelling)." LSNG08. http://www.paradisec.org.au/collections/LSNG08/items/SE_PN026.
- Levinson, Stephen C. 2006. The language of space in Yélî Dnye. In Stephen C. Levinson & David P. Wilkins (eds.), Grammars of space: Explorations in cognitive diversity (Language Culture & Cognition), 157–205. Cambridge: Cambridge University Press.
- Levinson, Stephen C. & Wilkins, David P. 2006. Patterns in the data: Towards a semantic typology of spatial description. In Stephen C. Levinson & David P. Wilkins (eds.), Grammars of space: Explorations in cognitive diversity (Language Culture & Cognition), 512-552. Cambridge: Cambridge University Press.
- Lichtenberk, Frantisek. 2003. Directionality and displaced directionality in Toqabaqita. In Erin Shay & Uwe Seibert (eds.), Motion, direction and location in languages: In honour of Zygmunt Frajzyngier. 151-75. Amsterdam & Philadephia: John Benjamins.
- Lindsey, Kate L. 2015. Language corpus of Ende and other Pahoturi River languages (LSNG08). Digital collection managed by PARADISEC. [Open Access]. DOI: 10.26278/5c1a5cfcaacde. http://catalog.paradisec.org.au/collections/LSNG08.
- Lindsey, Kate L. 2019. Ghost elements in Ende phonology. Stanford, CA: Stanford University doctoral dissertation. https://purl.stanford.edu/ys194fp6634.
- Lovestrand, Joseph & Ross, Daniel. This volume, chapter 3. Serial verb constructions and motion semantics.
- Madura, Pitepo. 2016. Conversation. LSNG08. http://www.paradisec.org.au/collections/ LSNG08/items/SE_SI001.
- Osgarby, David. This volume, chapter 8. Mudburra associated motion in an areal perspective.
- Otero, Manuel. This volume, chapter 20. At the intersection of associated motion, direction and exchoative aspect in the Koman languages.
- Payne, Judith. 1982. Directionals as time referentials in Ashéninca. Anthropological Linguistics 24(3). 325-337.
- Rose, Françoise. 2015. Associated motion in Mojeño Trinitario: Some typological considerations. Folia Linguistica 49(1). 117-158.

- Ross, Daniel. This volume, chapter 2. A cross-linguistic survey of associated motion and directionals.
- Sali, Erabal. 2018. Sociolinguistic Questionnaire Erabal Sali. LSNG08. http://www.paradisec. org.au/collections/LSNG08/items/SE PI064.
- San Roque, Lila, Lauren Gawne, Darja Hoenigman, Julia C. Miller, Alan Rumsey, Stef Spronck, Alice Carroll & Nicholas Evans. 2012. Getting the story straight: Language fieldwork using a narrative problem-solving task. Language Documentation and Conservation 6. 135-174.
- Schokkin, Dineke. This volume, chapter 10. Preverbal directionals as markers of associated motion in Paluai (Austronesian; Oceanic).
- Sobam, Duiya. 2018a. Family Problems Picture Task 4.4. LSNG08. http://www.paradisec.org. au/collections/LSNG08/items/SE PI041.
- Sobam, Duiya. 2018b. Sociolinguistic Questionnaire Duiya Sobam. LSNG08. http://www.paradisec.org.au/collections/LSNG08/items/SE_PI072.
- Soma, Christina. 2018. Sociolinguistic Questionnaire Christina Soma. LSNG08. http://www.paradisec.org.au/collections/LSNG08/items/SE_PI046.
- Sowati, Jubli (Joe), author. 2016. Ause da llig kälsre peyang (The old woman and the small boy). LSNG08. http://www.paradisec.org.au/collections/LSNG08/items/RE_EN003.
- Sowati (Kurupel), Maryanne. 2016. Emi bo mänddmänddatt eka (Emi's drowning story). LSNG08. http://www.paradisec.org.au/collections/LSNG08/items/SE_PN004.
- Sowati, Yuga. 2018. Family Problems Picture Task 2.4. LSNG08. http://www.paradisec.org.au/ collections/LSNG08/items/SE_PN036.
- Talmy, Leonard. 1975. Semantics and syntax of motion. In John P. Kimball (ed.), Syntax and semantics, vol 3, 181-238. New York: Academic Press.
- Tunbridge, Dorothy. 1988. Affixes of motion and direction in Adnyamathanha. In Peter Austin (ed.), Complex sentence constructions in Australian languages, 267-283. Amsterdam & Philadephia: John Benjamins.
- Vidal, Alejandra & Payne, Doris L. This volume, chapter 12. Pilagá directionals and the typology of associated motion.
- Warama, Tonny (Tonzah). 2016. Ause da llig kälsre peyang (The old woman and the small boy). LSNG08. http://www.paradisec.org.au/collections/LSNG08/items/SE_PN003.
- Warama, Tonny (Tonzah). 2018. Kate's Notebook 2018b. LSNG08. http://www.paradisec.org.au/ collections/LSNG08/OE_SI005.
- Warama, Winson. 2016. How we went to dive. LSNG08. http://www.paradisec.org.au/ collections/LSNG08/items/SE_PN021.
- Wäziag, Pingam. 2016. Tatuma ibiatt pepeb. LSNG08. http://www.paradisec.org.au/ collections/LSNG08/items/WE_PN009.
- Wäziag, Pingam. 2018. Sociolinguistic Questionnaire Pingam Wäziag. LSNG08. http://www.paradisec.org.au/collections/LSNG08/items/SE_PI062.
- Wilkins, David P. 1989. Mparntwe Arrernte (Aranda): Studies in the structure and semantics of grammar. Canberra, Australia: Australian National University PhD thesis.
- Wilkins, David P. 1991. The semantics, pragmatics and diachronic development of "associated motion" in Mparntwe Arrernte. Buffalo Papers in Linguistics 1. 205–257.
- Zakae, Bibiae. 2016a. Funeral traditions. LSNGO8. http://www.paradisec.org.au/collections/ LSNG08/items/SE_SN013.
- Zakae, Bibiae, author. 2016b. Funeral traditions (reading). LSNGO8. http://www.paradisec.org. au/collections/LSNG08/items/RE_EN022.