Dineke Schokkin

10 Preverbal directionals as markers of associated motion in Paluai (Austronesian; Oceanic)

Abstract: This chapter discusses the directional paradigm of Paluai, an Oceanic language spoken on Baluan Island in Manus Province, Papua New Guinea. It shows that these forms are used as preverbal particles not only to indicate direction with motion verbs, but also associated motion (AM) with non-motion verbs. This paper is the first to claim that an AM system based on deictic directionals can clearly be recognized as a category in an Oceanic language, thus setting a precedent for further study of this phenomenon in this particular subgroup, and perhaps also in the Austronesian language family more generally. Secondly, a systematic comparison is made between directionals used either preceding or following the main verb, and it is argued that only the former are attested as markers of AM. It turns out that iconicity is a strong guiding principle in the usage of directionals in Paluai.

Keywords: associated motion, directionals, serial verb constructions, Oceanic languages

1 Introduction

A phenomenon commonly encountered in Oceanic languages consists of verb-like forms that indicate the direction of motion verbs, which go by different names depending on the analysis (Pawley 1973; Durie 1988), but will henceforth be referred to with the term "directional". This paper discusses the directional paradigm of Paluai (South East Admiralty subgroup), spoken on Baluan Island in Manus Province, Papua New Guinea; see Figure 1 for the location of Manus Province, and Figure 2 for the location of Baluan within the province. The analysis is based on a corpus of naturalistic speech about 69,000 words in size, which was collected on Baluan Island by the author between 2010 and 2012. The main text genres represented in the corpus are narratives, task-based elicitation (picture-matching tasks), and public speeches.

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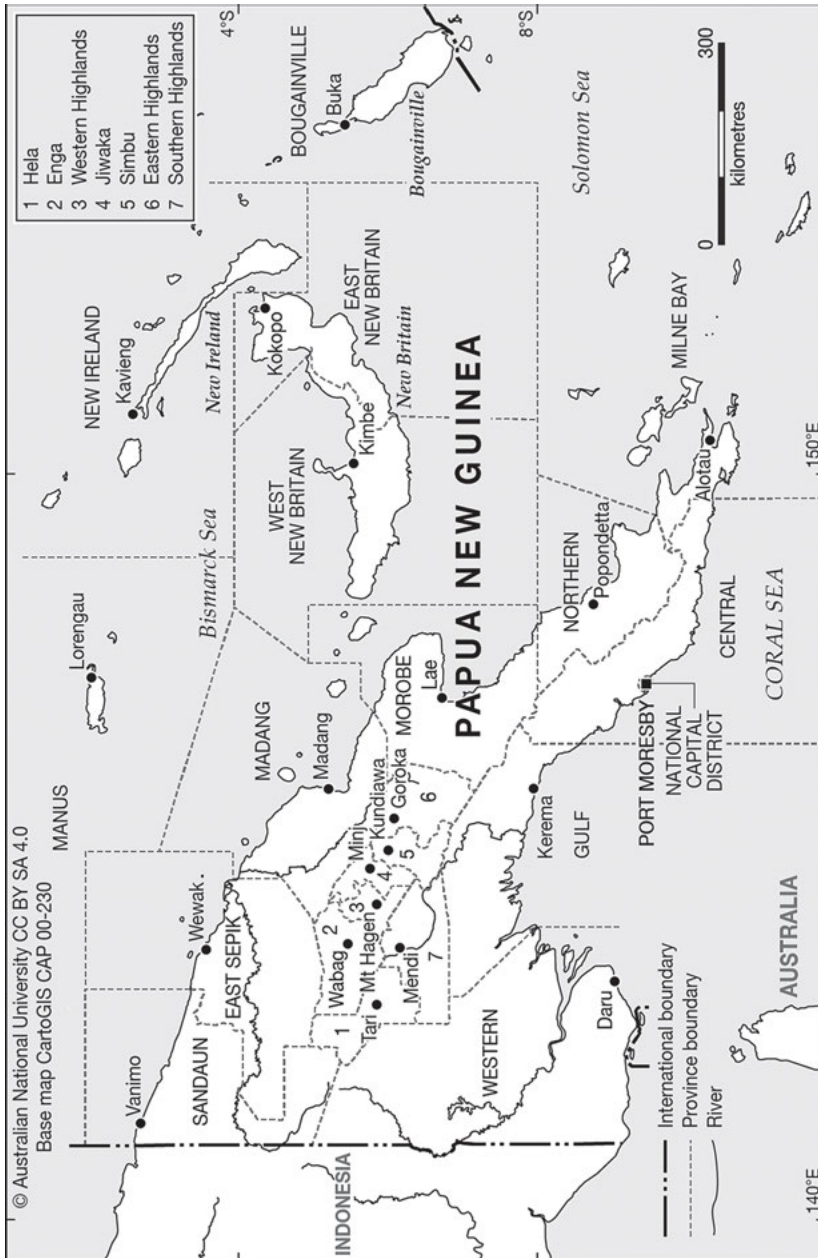dineke.schokkin@canterbury.ac.nz

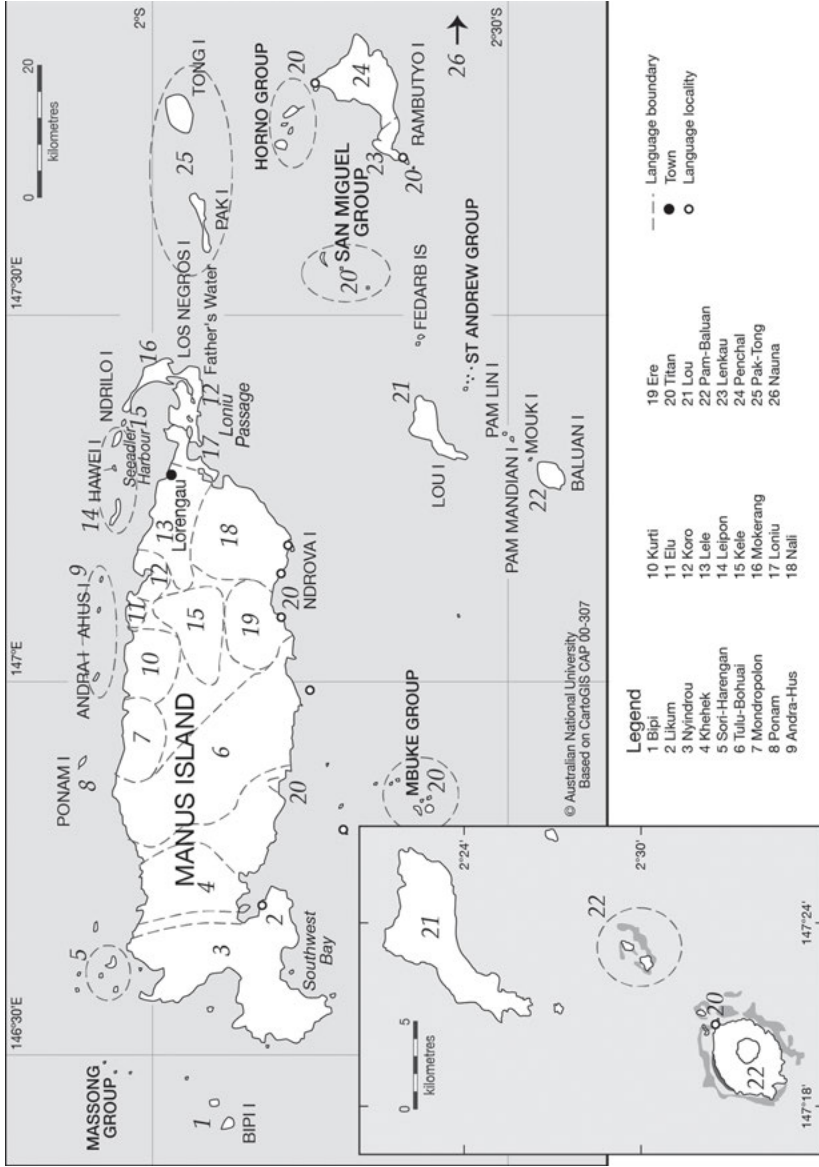**Figure 1:** Provinces of Papua New Guinea.

Figure 2: Location of Baluan Island within Manus Province**.**

The current paper will show that in Paluai, directionals are used not only to indicate direction with motion verbs, as with *me* 'come' in example (1), but also associated motion (AM) with non-motion verbs, as with the same *me* 'come' in (2). It is therefore an example of a D-AM system (Belkadi 2015). Systems of AM may be present in other Oceanic languages, but they may not always have been recognized as such and none appear to have been described in detail thus far.

(1) *epme ret liliu la Lipan*
    *ep$_S$=**me***   ***tet***   ***liliu***   *la*   *Lipan*
    1pl.EXC=**come**   **walk** **return** go.to place.name
    'We came back to Lipan village.' (KM060111_0084)

(2) *ipme lêp nganngan teyo*
    *ip=**me***   ***lêp***   *nganngan* *te-yo*
    3pl=**come** **take** food   EMP-DEM.INT
    'They came and took the food.' (KM060111_0092)

Paluai shows widespread verb serialisation, with a number of subtypes of serial verb constructions (SVCs) recognised; see Schokkin (2020) for more details. It has no tense, but aspect and modality are indicated by a number of preverbal particles that may be verbal in origin. Alignment is nominative-accusative, and constituent order is fairly rigidly SVO. It has a paradigm of ten directionals, introduced in more detail below, that are attested in three different functional slots: 1) as main verbs, heading a predicate; 2) as grammaticalised particles preverbal to main lexical verbs, both motion verbs and non-motion verbs; 3) as second verb in particular types of SVCs with motion and transfer verbs. Only the uses as particles preverbal to non-motion verbs will be considered instances of D-AM.

2 Definition of associated motion

As discussed in Guillaume and Koch (this volume), "associated motion" as a category was first recognised for indigenous languages of Australia, but is now gaining more currency among people working with a variety of other language families across the world. Belkadi (2015) proposes a distinction between I-AM and D-AM systems, the former involving inflectional elements dedicated to marking AM whereas the latter contain forms that stem from, and can be simultaneously used as, markers of deictic orientation. She also puts forward the hypothesis

that the former system can develop out of the latter. In Belkadi (2015: 53), D-AM is defined as follows:"[I]n D-AM contexts, deictic directionals presuppose a motion event which occurs *in addition to* the event encoded by the verb stem they modify." (emphasis mine).

Guillaume (2016: 13) puts forward the following definition: "An AM marker is a grammatical morpheme that is associated with the verb and that has among its possible functions the coding of translational motion." While this definition is often interpreted as referring to bound verbal morphology, it can be extended to include other grammatical elements such as particles, even if these are also attested as free forms. This is the approach taken in the current chapter. Even though all Paluai directionals currently occur as main verbs, as preverbal particles they function as grammatical elements that are closely associated with the main verb, as the analysis in the subsequent sections will show.

3 AM in Oceanic languages

Grammatical elements that indicate direction on motion verbs are a characteristic feature of Oceanic languages, and much attention has been devoted to them, over several decades (see e.g. Pawley 1973; Durie 1988; Hamel 1993; Wilkins & Hill 1995; Senft 2000; Ross 2004; Næss 2011; Schokkin 2013; Barth & Anderson 2015). They can indicate deictic direction (itive 'go' vs. ventive 'come'), direction with regard to a cardinal orientation system ('seawards', 'inland', 'parallel to the shore'), or a combination of both.

Given recurrent findings in the typological literature with respect to the link between directionals and AM in other language families, it would be expected to also find this link in Oceanic languages where directionals are frequently employed. This isn't often made explicit for Oceanic languages, however, which may just simply be due to unfamiliarity with the term "associated motion" in the Oceanic research tradition. There are a few exceptions. Cleary-Kemp (2015), in her dissertation on SVCs in Koro, an Admiralties language spoken on Manus mainland, analyses one type of SVC as denoting associated motion. This construction looks very similar to the one in Paluai that uses preverbal directionals to indicate AM. Dryer (2013) also explicitly analyses the suffix -*maan* 'come' and the preverbal particles *maa* 'come.and' and *fe* 'go.and' as AM markers in his description of the Lemakot dialect of Kara. Meier (2020) is another recent dissertation that discusses AM, for the Northwest Solomonic language Mono-Alu.

4 The Paluai directional paradigm

Each motion event includes "a Figure in Motion along a Path oriented with respect to one or more Grounds" (Wilkins & Hill 1995: 217). The source (the location where the motion starts) and the goal (where the motion terminates) are sometimes, but not always, explicitly stated. When referring to motion in Paluai, two dimensions are important: whether or not the motion is oriented or grounded with regard to a deictic centre (DC), and whether or not the motion is oriented or grounded with regard to an absolute Frame of Reference (FoR) based on fixed bearings (Levinson 2003; Levinson & Wilkins 2006).

Paluai directionals form a closed subclass of active intransitive verbs, which have become grammaticalised to function as direction markers for or related to the action expressed by a main verb. They do, however, also appear as head of a predicate. A feature that distinguishes them from regular active intransitive verbs is that they cannot be nominalised. Table 1 shows the directional paradigm. It is likely that some of the directionals were in fact morphologically complex forms, and the presumable Proto-Oceanic (POc) roots are indicated for each of them.

Table 1: Directional paradigm.

Form	Paraphrase	POc root(s)
1) [+deixis −FoR]		
me	come, motion towards DC	**mai* 'come, hither'
la, lak	go to, motion away from DC	**lako* 'go, thither'
2) [+deixis +FoR]		
si	come seawards (down), towards DC	**sipo* 'go down'
sa, sak	come inland (up), towards DC	**sake* 'go up'
wot	go parallel to the shore (horizontally), away from DC	**ua[tu]* 'go to addressee'
suwot	go seawards (down), away from DC	**sipo* + **ua[tu]*
sot	go inland (up), away from DC	**sake* + **ua[tu]*
3) [−deixis +FoR]		
wen	move parallel to the shore (horizontally)	**pano* 'go, walk (away)'
suwen	move seawards (down)	**sipo* + **pano*
sen	move inland (up)	**sake* + **pano*

Paluai has eight directionals that are specified with regard to an absolute FoR. For these, a three-way distinction is made between 1) movement seawards, 2) movement inland, and 3) movement parallel to the shore. As for other Austronesian languages, the land–sea axis is an important concept within spatial reference. Baluan is a cone-shaped volcanic island; its highest point is the crater of

the now dormant volcano located more or less in the middle. Therefore, going inland always means going up, and going towards the shore always means going down. In addition, since motion parallel to the shore (i.e. intersecting the land–sea axis) usually means moving on more or less the same level, this has obtained the secondary meaning of 'moving on a horizontal level'. At sea, the system is extrapolated: thus, for moving towards the shore the same directionals are used as for moving inland, and for moving out to sea the same directionals are used as for moving towards the shore (i.e. seawards) when on land.

Seven of the ten directionals are specified for deixis, indicating motion either towards or away from a deictic centre. Most often, the speaker of the utterance can be understood as the DC, but this can be varied for pragmatic reasons. Five of the directionals specified for deixis are additionally specified for the absolute FoR. The other three of the ten directionals are specified with regard to the absolute FoR, but are not deictically anchored. This means that, in most cases, both the source and the (intended) goal of the motion are located at points removed from the DC, and thus the motion is directed neither towards nor away from the DC. Thus, these terms are often used for motion transverse to the DC. For instance, when speaker and addressee from their DC slightly uphill are commenting on a third person walking along the shore, the form *wen* could be used. No distinction is made between motion from left to right or the reverse. Two directionals, *la* and *me*, are deictically anchored, but not specified for the absolute FoR.

This interrelation is illustrated in Table 2. The first three columns in the first and third row of the table show forms all ending in *-ot* and *-en* respectively, and it is possible that the forms in the first column start with the same formative *si- ~ su-*. Note that there are two omissions in the paradigm: first, there is no antonym of *wot*, a directional indicating motion towards the DC, parallel to the shore. This slot is filled by *me*, as discussed below. In addition, there is no term that is neither specified with regard to the absolute FoR, nor deictically anchored. This is not surprising, as such a term would not add meaningful information to a lexical motion verb.

Table 2: Organisation of the directional paradigm along two dimensions: absolute FoR and deixis.

Absolute FoR Deixis	down, seawards (on land); out to sea (on water)	up, inland (on land); towards the shore (on water)	parallel to the shore, level, horizontally	not specified
away from deictic centre	*suwot*	*sot*	*wot*	*la, lak*
towards deictic centre	*si*	*sa, sak*	–	*me*
not deictically anchored	*suwen*	*sen*	*wen*	–

The directional paradigm provides a precise reference structure with ample use in discourse. For virtually all actions that in some sense involve motion (including perception-based actions such as seeing/looking, speaking or listening), the direction of the action will be specified with a directional, something that is very common in Oceanic languages. In Paluai, this is done either by a directional as preverbal particle, or by a SVC in which the directional follows the main verb.

There are semantic differences between the directionals that are not speci-fied above. For instance, *la* is telic, with an endpoint to the motion inherent in its meaning; it is therefore systematically translated with 'go to'. *wot*, on the other hand, seems to lack an inherent endpoint. Forms indicating motion towards the DC are a bit different again: these motion events are telic in nature, since it is implied that the Figure's arrival at the DC will terminate the motion. This may be part of the reason that *me* is used as an antonym to *wot* in many instances. Firstly, the semantics of *me* do not clash with this reading, and secondly, with 'come' forms, the arrival at DC may be the meaning facet that speakers focus on most, rather than the exact direction the Figure of Motion came from.

As in other Oceanic languages, the deictic centre does not necessarily have to be the current position of the speaker, but it can be varied in order to put a certain constituent or discourse participant in focus (cf. Hamel [1993, 1994] for the related language Loniu). In addition, directionals are used to keep track of who did what to whom, because they specify the locations of speech act partici-pants relative to each other.

Below, examples are given of the directional *la(k)* in each of the functional slots: as preverbal particle in (3), as main verb in (4), and as V2 in a SVC in (5). Two directionals have two different forms attested: *la~lak* and *sa~sak*. The long form is used when the directional appears by itself (either as main verb or in a SVC) and does not introduce a constituent (a following adverb or noun phrase), as in (4a); the short form is used in all other contexts (preverbal particle, main verb or secondary verb in an SVC when introducing a constituent), as in with (4b)

(3) *wuikala au nayek ansê alilêt*
     *wui=ka-**la**   wau   nayek an-sê   alilêt*
     1du.EXC=IRR.NS-**go.to** move   about PART-DIM forest
     'We would go and walk around a bit in the bush.' (KM050995_0003)

(4) a. *ngalak*   b. *ngala um*
         *nga=**lak***   *nga=**la**   wumwa*
         1sg=**go.to**   1sg=**go.to** house
         'I went.'   'I went home.'

(5) *ino ro lêp la um*

i=no	to	lêp=Ø	***la***	*wumwa*
3sg=IPFV	CONT	take=3sg.ZERO	**go.to**	house

'He was taking [it] home.' (NP210511_1_0050)

5 Structure of the Paluai verb complex

Directionals, in particular the most common forms *la* 'go (away from DC)', 'thither', and *me* 'come (towards DC)', 'hither' are frequently found in a preverbal particle slot. The Paluai verb complex[1] exhibits three preverbal slots for particles expressing Tense-Aspect-Mood (TAM) and direction, obligatorily preceded by either a bound pronoun proclitic or irrealis prefix cross-referencing the subject argument, or both of these. In Figure 3, the preverbal part of the verb complex of a declarative clause is schematically represented. Some material can occur after the main verb, but should not concern us here; please refer to Schokkin (2020) for a fuller discussion of the verb complex and the TAM system more generally.

(ProSubj=)	IRR°	(CoreAsp)		(DIR)	(SecAsp)		VERB**
	kV-	PFV	*pe*		CONT/HAB	*to*	
		PRF	*an**		PROG	*yen*	
		MOD	*sa*		STAT CONT	*tu*	
		IPFV	*no*				

° The subject bound pronoun is obligatory for realis clauses and 2sg irrealis clauses, but not for other persons in irrealis. Irrealis is obligatory when the reference demands so, but is formally unexpressed for 2sg.
* When *an* is present, no other preverbal matter except a subject bound pronoun is allowed.
** The main verb (head of the verb complex) can consist of a SVC.

Figure 3: Schematic representation of the Paluai verb complex.

The subject argument is cross-referenced strictly only once per verb complex, on the first element, also when it contains more than one verb. The first particle slot

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1 The term "verb complex" is used following Pawley (2003) who defines it as a phonological phrase which has word-like properties (rigid order of elements, single intonation contour with no pauses and stressed only once), but is unwordlike in the sense that it can be made up of a sequence of free forms.

can be filled by forms analysed as Core Aspect particles, specifying perfective, imperfective or perfect aspect, or by a marker of modality; none of these can be clearly traced back to a full verbal source they grammaticalised from. The second particle slot is reserved for one of the ten directionals. The third slot can be occupied by forms indicating Secondary Aspect, which are formally identical to the posture/existential verbs *to(k)* 'be, stay; sit', *tu* 'stay (for a longer period)'[2] and *yen* 'lie', and thus clearly have grammaticalised from full verbs.[3] They indicate continuative/habitual, stative continuative, or progressive aspect. None of the particle slots is obligatorily filled. An example with a form occupying each slot is given in (6).

(6) *ipkape la ro wau nayek ayi pulek*
  ip$_S$=ka-pe   la   to   wau   nayek   a-i   pulek
  3pl=IRR.NS-PFV go.to CONT walk around OBL-3sg also
  'They will go and wander around there [at the hot springs] too.'
  (MS250311_0007)

Preverbal directionals appear to have a very similar status to the Secondary Aspect particles, where there are identical forms synchronically functioning both as a full lexical verb and as a grammatical element modifying other verbs. These sequences may have developed from nuclear-layer SVCs (Foley & Olson 1985; Crowley 2002) indicating associated motion/direction for directionals and associated posture (Enfield 2002; Newman 2002) for posture verbs, then further grammaticalising towards aspectual markers (for posture verbs) and indicating distance from the deictic centre (for the directional *la* 'go to').[4]

   The Secondary Aspect particles seem to have grammaticalised further than most directionals, however. Most uses of directionals (either pre- or postverbal) still denote a sense of genuine translational motion, whereas the particles stemming from posture/existential verbs are purely aspectual, and not postural, in meaning. This raises the issue of whether directionals could be considered full

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2 *tu* is a reflex of POc *tuqur* 'stand', but is not attested with this meaning in the present-day language.
3 *to~tok* is similar to *la~lak* and *sa~sak* discussed above, in that it exhibits a long form when used on its own as a main verb and not followed by a constituent.
4 The term "nuclear layer" is part of the Role and Reference Grammar framework (Foley & Van Valin 1984), in which clauses are analysed as having a layered structure. The nuclear layer consists of the inflected verb(s), while the core layer contains the inflected verbs (the nucleus) plus arguments (and a third layer, the periphery, includes non-core arguments). Paluai SVCs with a directional as V2 (discussed in Sections 7 and 8) are considered to be core-layer SVCs.

verbs instead of particles in all instances, including in their preverbal use. This would mean that instances of preverbal directionals would also count as SVCs. There are two main arguments for analysing preverbal directionals as particles, and not full verbs. The first is a phonological one: in contrast to postverbal directionals (in SVCs), preverbal directionals are never independently stressed. The second one is based on distributional criteria: directionals are found in a slot occurring between two slots that can exclusively be filled by grammatical items. Thus, while preverbal directional particles and Secondary Aspect particles may very well have developed out of full verbs in SVCs (as discussed in the previous paragraph), the sequences they occur in are not analysed as SVCs in the present-day language.

6 Preverbal directionals as markers of AM

Directional particles often occur preverbal to intransitive motion verbs, specifying direction for the translational motion indicated by the main verb. The seven deictic directionals also frequently occur preposed to non-motion verbs, and then indicate deictically anchored, i.e. itive or ventive, motion prior to the event described by the main verb ('go/come and do X').[5] In this function, directionals can be considered markers of AM (Belkadi 2015).

The following sections discuss and give examples of the occurrence of the various directionals in the preverbal slot, both as markers of direction with motion verbs, and as markers of AM with non-motion verbs. The relevant sequences of directional and lexical verb (with the lexical verb represented by a SVC in some cases) are shown in bold.

6.1 *La* 'go to'

La(k) 'go to' is the most frequently used directional, with 2,193 tokens of *la* and 220 tokens of *lak* in a corpus of about 69,000 words. This directional underwent the most semantic bleaching and grammaticalisation; still, it is very often used to refer to genuine translational motion. The sentences below demonstrate its use. Example (7) shows the long form *lak* as a main motion verb in the first clause,

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5 Due to my previous unfamiliarity with the term "associated motion", in Schokkin (2013) these constructions were called "sequential/purposive", but essentially their analysis has not changed.

followed by a coordinated clause in which the short form *la* is used as a preverbal directional to *lêp* 'take', indicating prior associated motion; this is also called "echo construction" (Guillaume & Koch this volume). It frequently occurs in Paluai, as it does in other languages with AM markers.

(7) *wuipe lak a wuipe la lêp Chi*na

wui$_S$=*pe*	**lak**	*a*	*wui*$_A$=*pe*	**la**	**lêp**	[China]$_O$
1du.EXC=PFV	**go.to**	and	1du.EXC=PFV	**go.to**	**take**	proper.name

'We went and (after going) we took China [a dog].' (MK060211_0043)

In example (8), the first clause shows the short form *la* as a main verb followed by the locative constituent *alilêt* 'bush'.[6] Subsequently, *la* is used three times as a marker of prior motion AM. The entire sentence has irrealis reference, which is not formally marked for a 2sg subject. The speaker relates how, after a ceremony was done for her, the taboos of a specific place were lifted and she was told she could move around freely and do things. Each action, except for *tapot nik* 'smoke fish' which was presumably done at or very near the deictic centre, is accompanied by *la* as a marker of a separate associated motion event.

(8) *wono la alilêt, wono la lêp yaum le wono la tun pau le wono la yim lêp mwei le wono rabot nik, le ...*

wo=*no*	**la**	*alilêt*	*wo*=*no*	**la**	**lêp**	*yaum*	*le*
2sg=IPFV	**go.to**	bush	2sg=IPFV	**go.to**	**take**	mudcrab	or

wo=*no*	**la**	**tun**	*pau*	*le*	*wo*=*no*	**la**	**yim.lêp**
2sg=IPFV	**go.to**	**boil**	coconut.oil	or	2sg=IPFV	**go.to**	**dive. take**

mwei	*le*	*wo*=*no*	*tapot*	*nik*	*le*
clam.meat	or	2sg=IPFV	smoke	fish	or

'[They told me,] "You can go to the bush, you can go catch mudcrabs, or you can go boil coconut oil, or you can go dive for clamshells, or you can smoke fish, or ..."' (LL030611_0059)

Note that in both (7) and (8), the subject of each coordinated clause is obligatorily cross-referenced by a bound pronoun. This excludes a possible analysis of the juxtaposition of *la* and another verb, e.g. *lêp*, as an instance of coordi-

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6 *alilêt* is not marked by a preposition *a-* even though it functions as an adverbial (locative goal) constituent. This is due to a well-described feature of many Oceanic languages, namely a distinction between local, common and personal nouns (Lynch, Ross, & Crowley 2002). In Paluai, this means that local nouns are not marked by a preposition, in contrast to common nouns, for which this is obligatory in locative uses. See also Schokkin (2020).

nation of two clauses without overt marking, as there is no cross-referencing of the subject on the second verb. Since a bound subject pronoun occurs only once per verb complex, we conclude that the two forms must belong to a single verb complex and thus a single clause. The fact that the semantic contribution of the directional in subsequent clauses in both (7) and (8) is superfluous (after all, this motion event was already expressed by the main verb in the first clause) is further evidence that preverbal directionals are indeed grammaticalised elements.

As mentioned, cases of preverbal *la* in combination with the Secondary Aspect particle *to* have acquired another meaning: that the action referred to by the main verb is taking place at a distance removed from the DC (usually the speaker); this corresponds to what is called "atrilocal", "exlocative" or "distal" function in §4.4 of the Introduction (Guillaume and Koch this volume).[7] Cognates of *la* with this function are found in other Oceanic languages (Lichtenberk 1991); a Paluai example is given in (9). There is no sense of motion in this statement, in contrast to AM uses of *la* such as in (8).

(9) *urêro pe yong yamat te ila ro pe kolon wat*
     wurê=pe   yong yamat te   i=la   to   pe   kolo-n
     1pc.EXC=PFV hear person REL 3sg=**go.to** **CONT** **do** mouth-3sg.POSS
     wat
     up.high
     'We heard someone shouting [lit. 'doing mouth'] up high.' (NP210511_2_0024)

6.2 Me 'come'

Example (10) below, repeated from (1), shows the use of *me* as a directional marker for the motion verb *tet* 'move, walk'.

(10) *epme ret liliu la Lipan*
      *ep$_S$=**me**   **tet**   **liliu**   *la*   *Lipan*
      1pl.EXC=**come** **walk** **return** go.to place.name
      'We came back to Lipan village.' (KM060111_0084)

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7 There are a few constructions with other directionals found in the corpus that exhibit the same semantics. Since these are so rare, it is concluded that grammaticalisation into a 'distance from DC' marker may be only incipient for these forms, whereas it is firmly established for *la*.

Example (11), from the same story, shows a use of *me* as a marker of AM, indicating prior motion towards the DC. The action represented by the main verb is giving back food. The inanimate O argument is elided, and not cross-referenced on the verb, which is a regular feature of Paluai discourse. The Goal argument bears the alimentary classifier *ka-*, which indicates both its Animate Goal status, and that the Theme transferred is a food item. Note that, while the main verb is a transfer verb, preverbal *me* is not related in any way to the motion of the O inherent in the transfer, which is expressed by *la* following the main verb. *me*, in this case, only entails the motion associated with the A argument of the main verb, prior to the action entailed in that verb.

(11) *ippe me rou liliu la kep*
    ip$_A$=pe   **me**   **tou**   **liliu**=Ø   la   ka-ep
    3pl=PFV **come** **give** **return=3sg.ZERO** go.to CLF.food-1pl.EXC.POSS
    'They came and gave (it) [=food] back to us.' (KM060111_0087)

6.3 *Wot* 'go (on the same level)'

Example (12) shows the use of *wot* in a deictic directional sense, with a motion verb.

(12) *mui reo ibe ngui rou ngoyai, onga ngoyai reo ibe wot terepelek*
    mui   *te-yo*   *i=pe*   *ngui.tou*   *ngoyai* *ong.a*   *ngoyai*
    dog   EMP-DEM.INT 3sg=PFV snarl.give cuscus and.so cuscus
    te-yo   *i=pe*   **wot**   **terepelek**
    EMP-DEM.INT 3sg=PFV **go.level** **run**
    'The dog 'snarled after' the cuscus, and so the cuscus ran away (from him).'
    (LL010711_0069)

In example (13), preverbal *wot* with a non-motion verb means 'go ahead (and)', indicating a sequence of events. When *wot* follows a non-motion main verb in a SVC, the predicate obtains a different, aspectual meaning: 'do for an extended period of time'; see example (14).

(13) *eppe wot lêpi ran mwanen Parugui*[8]

ep=pe   **wot**   **lêp**=i   ta-n   mwane-n
1pl.EXC=PFV **go.level**   **take**=3sg   CLF.AL-3SG.POSS   brother-3sg.POSS

Parugui
person.name

'We went ahead and took her of/from her brother Parugui.' (KM060111_0035)

(14) *uno rok wot*

u=no   **tok**   **wot**
3du=IPFV   **stay**   **go.level**

'They were staying/living (together) for some time.' (LL10711_0011)

6.4 *Sot* 'go up'

Example (15) shows a deictic directional use, with a motion verb.

(15) *irê not teo no sot tet panu rang*

irê   not   te-yo   no   **sot**   **tet**   panu   ta-ng
3pc   child   EMP-DEM.INT   IPFV   **go.up**   **walk**   front   CLF.AL-1sg.POSS

'[I stopped walking and] the boys were going past, in front of me.'
(NP210511_2_0040)

Sentence (16) below shows an AM use of *sot*, and could have two interpretations: either a sequence of motion and action, or an instance where there is simultaneous motion and action, i.e. 'going up' and 'hunting' happening at the same time. This is because the verb *yik* is ambiguous as to whether there is motion happening while the action is carried out, or not, and thus semantically both interpretations are allowed. It is possible that the proper reading is pragmatically determined, as is the case in various other languages discussed in this volume (e.g. Vidal & Payne this volume). Examples of temporal vagueness of this kind are rare in the Paluai corpus, however.

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8 *lêp* 'take' is one of the few trivalent verbs in Paluai, which do not need to be serialised with a directional to form a ditransitive predicate (see Section 7 below, and Schokkin (2020) for full discussion). The Source semantics of the third argument is not explicitly expressed by any grammatical element but needs to be inferred from the lexical semantics of *lêp*.

(16) *eppwa kasot yik ngoyai*

    ep=pwa   *ka-**sot***   ***yik***   *ngoyai*
    1pl.EXC=want.to   IRR.NS-**go.up** **search.for** cuscus
    'We were about to go uphill and hunt for / hunting for cuscus.'
    (NP210511_2_0011)

6.5 *Sa* 'come up'

In sentences (17) and (18), we see again a directional used first in a deictic directional sense, and as a marker of sequential AM.

(17) *kumun teo kipe sa wau la wat*

    kumun *te-yo*   *ki-pe*   ***sa***   ***wau***   *la*   *wat*
    sprout EMP-DEM.INT IRR.3sg-PFV **come.up** **move** go.to up.high
    'The sprout will come up high.' (NK290311_1_0028)

(18) *wuipe sa lêpi*

    wui=pe   ***sa***   ***lêp=i***
    1du.EXC=PFV **come.up** **take**=3sg
    'We came up and got her.' (MK060211_0044)

6.6 *Suwot* 'go down'

In (19), the directional *suwot* is used in combination with a motion verb.

(19) *irou parayon suwot net a isuwot tet la net*

    i=tou   *parayo-n*   *suwot*   *net*   *a*   *i=**suwot***   ***tet***
    3sg=put front-3sg.POSS go.down sea and 3sg=**go.down** **walk**
    la   *net*
    go.to sea
    'He turned his face toward the sea and went down into the water.'
    (WL020711_0096)

Sentence (20) illustrates a sequence of events with *suwot*.

(20)   *osuwot ilili la pulen kone areo*
       wo=**suwot**   ilili   la   pulen.kone   a-te-yo
       2sg=**go.down**   **stand.up**   go.to   beach   OBL-EMP-DEM.INT
       'You go down and stand up on the beach there.' (LL030611_0051)

6.7 *Si* 'come down'

Example (21) shows a deictic directional use of *si* 'come down', whereas (22) shows a purposive sequential AM use.

(21)   *kanun kuyen deo ino si ret si pulikalon paye*
       kanun   kuyen   te-yo   i=no   **si**   *tet*
       drops   dye   EMP-DEM.INT   3sg=IPFV   **come.down**   **spread**
       si   *puli.kalo-n*   *paye*
       come.down   elbow-3sg.POSS   down.below
       'Drops of dye are trickling down his elbow.' (Game4_280812_0067)

(22)   *kisi wut kem a ...*
       ki-**si**   **wut**   kem   ya
       IRR.3sg-**come.down**   **fetch**   salt.water   then
       'When she will come down to the shore to fetch sea water, then ...'
       (LK100411_0090)

6.8 Non-deictic directionals *wen, sen* and *suwen*

The three directionals indicating motion that is not deictically anchored (*sen* 'move upwards', *wen* 'move horizontally' and *suwen* 'move downwards') are rarely used in the corpus, and therefore very few instances were found of their use as preverbal particles (in the case of *sen* 'move upwards' none at all). They are sometimes used in combination with a motion verb, with a directional meaning, as in (23). When we find them with non-motion verbs, their interpretation can usually be metaphorical, and there are therefore no instances of these directionals where they unambiguously indicate AM.[9] It is unclear whether this is because

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9 Metaphorical usage of verbs of motion (i.e. not expressing spatial relations or translational motion in a literal sense, but for instance with reference to the passage of time) is very common

they cannot be used to express AM, or these cases are just not present in the corpus because of the relatively low frequency of the forms. In sentence (23), there is a simultaneous action of moving and getting closer together. This reading is possible because Paluai stative verbs, such as *pit*, are ambiguous between a stative and inchoative semantic reading, and *pit* can thus mean either 'be close' or 'become closer'. The second instance of *wen* in this example, as a main verb, refers to a location rather than a movement.

(23) *apkawen pir ai pulen kone re iwen telo*
    *ap=ka-**wen**   **pit**   a-i   pulen.kone te*
    2pl=IRR.NS-**move.level**   **become.closer** OBL-3sg beach   REL
    i=wen   te-lo
    3sg=move.level EMP-DEM.DIST
    'You will gather together on the sand beach that is over there.' (NP210511_2_0009)

6.9 Summary

The above sections have shown that only a prior motion sense is attested when preverbal directionals are used with non-motion verbs (with the possible exception of (16), with the verb 'hunt'). What these cases also have in common is that the motion semantics are associated with the S/A argument of the clause. These properties are in line with Guillaume's (2016) two implicational hierarchies based on cross-linguistic observations for AM as a comparative concept in South American languages (prior motion > concurrent motion > subsequent motion and motion of the subject > motion of the object). While there are many examples of preverbal directionals in the corpus that have purposive meanings (motion with the intention of doing an action: 'go/come TO do X'), in all these instances the clause is marked for irrealis, which can be assumed to contribute the purposive semantics. When preverbal directionals occur with past reference, the action following the motion is always realised, and never just purposed. See also Section 4.1 of the introduction (Guillaume & Koch this volume) for examples of motion-with-purpose constructions; note that not all authors (e.g. Lovestrand & Ross this volume) consider these instances of AM.

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cross-linguistically and is also often found for the other Paluai directionals discussed in this paper. While a very interesting topic in its own right, discussing this in detail was deemed to lie outside the scope of the current paper.

The AM sense of preverbal directionals is based on a complementary distribution: when they precede a motion verb, they indicate direction of that motion, and when they precede a non-motion verb, they indicate AM. Their AM sense is based on inference, and therefore the system can be considered an example of "inferential AM", as opposed to "dedicated AM" systems where a given morpheme always has an AM interpretation (Reed & Lindsey this volume). There appears to be some leakage in the system when a main motion verb is used in an ambulative sense, as is the case in (24) below (repeated from (3)). Because in this case, *wau* 'move, walk' is modified by *nayek* 'about, around', there are two separate motion events: first an itive motion event from the DC to the bush, specified by *la*, followed by an ambulative motion event inside the bush, indicated by *wau nayek*. Thus, *la* indicates prior AM, and not direction for the main motion verb. This example underlines the inferential nature of the system, as it is highly dependent on verb semantics and the pragmatic context.

(24)   *wuikala au nayek ansê alilêt*
       *wui=ka-**la**   wau   nayek an-sê   alilêt*
       1du.EXC=IRR.NS-**go.to** move   about PART-DIM   forest
       'We would go and walk around a bit in the bush.' (KM050995_0003)

Since there are (at least) seven different terms that can express AM in the Paluai inventory of directionals, the Paluai AM system can be considered "very complex" according to the classification put forward by Guillaume (2016: 109). Guillaume does not distinguish between systems that make distinctions based on a vertical cline (motion 'up' vs. 'down') and those that don't. However, systems that do, like Paluai, have been attested elsewhere, such as in Sino-Tibetan languages (Jacques et al. this volume).

The most frequently encountered form, *la*, appears to have grammaticalised to a larger extent than other directionals. In many of its preverbal occurrences in combination with the secondary aspect particle *to*, it can be interpreted as marking an event that takes place at a distance removed from the DC.

7 Directionals in SVCs

This section will briefly discuss what SVCs containing a directional look like, in order to set the stage for a comparison of the use of directionals either preceding or following the lexical verb, as will be done below in Section 8. For a more in-depth discussion of serialisation in Paluai, see Schokkin (2020). For the

purposes of this paper it suffices to use the narrow definition of a SVC as given by Haspelmath (2016: 296): "A serial verb construction is a monoclausal construction consisting of multiple independent verbs with no element linking them and with no predicate–argument relation between the verbs." As a reminder, directionals can occur in three different slots: preverbally, as main verb, and following the main verb in SVCs. There are many instances in which two different directionals are encountered in the same clause: one preverbally, the other following the main verb (but a directional as main verb is never combined with another directional in either slot). This is an indication that the preverbal and postverbal slots can function independently from each other.

Directionals used as V2 in SVCs, like preverbal directionals, indicate deictic (or occasionally, non-deictic) direction of a path with main verbs, most typically but not limited to verbs of motion. Almost any verb describing an action which has motion or transfer inherent in it can be (and preferably is) accompanied by a directional; this type of serialisation is very common for Oceanic languages (Durie 1988; Crowley 2002). But while it is highly preferential to indicate direction for any motion and transfer event by serialising the main verb with a directional, this doesn't seem to be obligatory. While not numerous, examples such as (25) are found in which a lexical motion verb, in this case *liliu* 'return', is not followed by a directional. These cases, showing the optionality of directional serialisation, are also evidence against a full reanalysis of postverbal directionals as argument markers and/or prepositions.

(25) *aukala liliu um tao*
      au=ka-la   *liliu*   *wumwa*   *ta-o*
      2du=IRR.NS-go.to   return   house   CLF.AL-2sg.POSS
      'You two must return to your (sg) house.' (KM060111_0027)

Directionals can be serialised with either transitive or intransitive verbs. Each will be discussed in turn; again, relevant verb forms will be shown in bold. Typically, directionals serialise with motion verbs, but they are also very frequently encountered with other intransitive verbs, e.g. referring to perception or bodily functions. When the directional does not introduce a constituent, it merely modifies the main verb for direction; the destination or goal of the movement is left unspecified, but it will be retrievable from the discourse context. A directional can also introduce an Oblique constituent of an intransitive clause, preceding a noun phrase headed either by a local or a common noun, or a spatial adverbial or demonstrative. This SVC is of the same-subject type. It does not have to be contiguous: an adverb can be inserted between the main verb and the serialised directional.

The following sentences are examples of the directional *me* modifying the main verb, in (26) without introducing a Locative constituent, and in (27) with a Locative.[10] In (26), the inherent endpoint can be understood to be the current location of the speaker (the DC).

(26) *ong kope liliu me*
     wong   ko-pe   **liliu**   **me**
     1sg.FREE   IRR.1sg-PFV   **return**   **come**
     'I will come back (here).' (KW290311_0007)

(27) *uro aluk liliu me panu*
     u$_S$=to   **aluk**   **liliu**   **me**   *panu*
     3du=CONT   **paddle**   **return**   **come**   village
     'They were paddling back to the village.' (NP210511_1_0021)

Below, two examples are given of directional serialisation with verbs of perception: (28) shows intransitive *ningning* 'look' (formed by reduplication of transitive *ning* 'see'), and (29) shows transitive *tiy* 'observe, watch'. Sometimes a locative constituent is introduced by the directional, such as in (29). In other cases, just the direction of the event of perception is indicated, as in (28). When V1 has an overt O argument, this intervenes between the two verbs, as in (29). Note that with perception verbs, there is no translational motion in a literal sense, only a metaphorical motion of e.g. a gaze.

(28) *ipwa kiningning suwot ...*
     i=pwa   ki-**ning~ning**   **suwot**
     3sg=want.to   IRR.3sg-RED~**see**   **go.down**
     'He was about to look down ...' (LL010711_0052)

(29) *iriy maloan suwor ai laliyon*
     i=**tiy**   maloa-n   **suwot**   a-i   laliyon
     3sg=**observe**   reflection-3sg.poss   **go.down**   OBL-3sg   pool
     'He looked down at his reflection in the pool.' (LL010711_0052)

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10 The exact syntactic status of NPs introduced by directionals (whether they are arguments or not) is often unclear due to several complicating factors. This argument will not be pursued further here, and the reader is referred to Schokkin (2020) for more elaborate discussion.

With transitive verbs, directionals have the function of adding a Goal argument. They thus introduce another participant to the clause, one that the main verb is not subcategorised for, in order to express a three-participant event (Margetts & Austin 2007). This SVC is of the switch-subject type, with the O of V1 functioning as the S of V2, and is always discontiguous: V2 follows the shared argument if this is overtly expressed.[11] The types of argument specified by this SVC are Locative Goal, often expressed by a local noun, and Animate Goal (which includes Recipient and Beneficiary). Paluai only has a handful of genuine three-place verbs that do not necessitate introduction of a third participant by a SVC (for an example of such a verb, see (13) above), making this a very common strategy to express three-participant events, by means of a ditransitive complex predicate consisting of one transitive and one intransitive verb.

Some examples of directionals introducing a Locative Goal argument are given in (30) and (31).

(30) *urê yokari si suk*
      wurê   **yokat**=i   **si**   *suk*
      1pc.EXC   **carry**=3sg   **come.down**   shore
      'We carried him down to the shore.' (NP210511_2_0063)

(31) *irou liliuip la panu*
      i$_A$=**tou**   **liliu**=ip   **la**   panu
      3sg=**send**   **return**=3pl   go.to   place
      'He sent them back to their village.' (LL300511_1_0022)

An Animate Goal argument is obligatorily preceded by the general alienable possessive classifier *ta-* (which takes a pronominal suffix specifying number and person of the referent), or, alternatively, by the alimentary possessive classifier *ka-* (also taking a suffix) when the Theme is a food item. This kind of argument is typically encountered with verbs of transfer that involve motion of a Theme to a human Recipient, such as *tou* 'give' (32) and *pul* 'tell' (33), but is encountered with other transitive verbs as well, as (34) shows.

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11 When the O argument is not overtly expressed, as is usually the case when it refers to an inanimate object, it is still assumed that there is a zero trace of the O argument between V1 and V2.

(32) *ikipe si rou kokon la rararê*

i=ki-pe	*si*	***tou***	*kokoni*	***la***	*ta-tarê*
3sg=IRR.3sg-PFV	come.down	**give**	money	**go.to**	CFL.AL-1pc.INC.POSS

'He should come here and give money to us.' (OBK040311_0193)

(33) *ngapwa kopul sot tao la remenin telo*

nga$_A$=pwa	*ko-**pul**=Ø*		***sot***	*ta-o*	*la*
1sg=want.to	IRR.1sg-**tell**=3SG.ZERO		**go.up**	CFL.AL-2sg.POSS	go.to
temenin	*te-lo*				
thus	EMP-DEM.DIST				

'I am going to tell you as follows ...' (PK290411_3_0076)

(34) *ipe sui yapi reo la kau rinan*

i=pe	***sui***	*yapi*	*te-yo*	***la***	*ka-u*	*tina-n*
3sg=PFV	**fry**	sago	EMP-DEM.INT	**go.to**	CLF.food-3du.POSS	mother-3sg.POSS

'She fried the sago for him and his mother (to eat).' (KW290611_0036)

The directional *la* is attested most frequently, but occasionally another directional is found expressing an Animate Goal argument; see (33). Most cases of directionals other than *la* are attested with the verb *pul* 'tell'. The speaker of sentence (33), which was uttered during a public ceremony, stands on a lower level than his addressee, and thus it is more appropriate to use the directional *sot*, specified for the absolute Frame of Reference, instead of the unspecified *la*. It appears that when the cardinal direction (i.e. landwards or seawards) of the motion indicated by the main verb is known, an appropriate directional has to be used. However, when the cardinal direction of the action relative to the deictic centre is unknown or backgrounded, *me* or *la* can be used, since these are only deictic and not specified for the absolute FoR.

8 Comparison of directionals preceding and following the main verb

To summarise: the preceding sections have shown how the same set of forms, the paradigm of ten directionals in Paluai, can be used both as preverbal particle and serialised with a main verb (and additionally, as main verbs). As preverbal particles, they are used in order to indicate direction (with motion verbs) or AM (with non-motion verbs, and perhaps excepting non-deictic forms). Serialised with a main verb, they serve to specify the direction or goal of a translational

motion event, and, in the case of three-participant events, introduce a third argument. This section will discuss the main differences between the two uses, and argue why it is that only directionals in preverbal position are attested as markers of AM.

Firstly and most notably, the two construction types including a directional (preceding a main verb on the one hand, and following a main verb on the other) consist of, or have developed from, two different types of SVC. Preverbal directional particles, as mentioned, have probably developed from nuclear-layer SVCs, which necessarily shared their arguments. Directionals following the main verb, in contrast, form core-layer SVCs, in which there can be a switch in arguments: the O argument of V1, if transitive, will be the S argument of V2. In ditransitive constructions, V2 introduces a third argument, while the main verb it is serialised with is only subcategorised for two. Thus the transitivity of the construction as a whole is determined by V1 and V2 both, whereas in nuclear-layer SVCs the valency of the main lexical verb always determines the transitivity of the construction. In addition, core-layer SVCs do not have to be contiguous, in contrast to nuclear-layer SVCs.

Secondly, a directional preceding the main verb is always related to motion by the S/A argument, whereas the same directional following the main verb is describing the completion of motion by a Figure specified by the verb semantics towards a goal. For intransitive verbs, this Figure is the S argument; for transitive verbs it is the O, as we will see below.[12] As an illustration of the former, consider the following pair, made up of the intransitive main verb *terepelek* 'run' plus the directional *wot* 'go (on the same level)':

(35) *mui reo ibe ngui rou ngoyai, onga ngoyai reo ibe wot terepelek*
     mui   *te-yo*   *i=pe*   *ngui.tou* *ngoyai* *ong.a* *ngoyai*
     dog   EMP-DEM.INT 3sg=PFV snarl.give cuscus and.so cuscus
     te-yo   *i=pe*   **wot**   **terepelek**
     EMP-DEM.INT 3sg=PFV **go.level** **run**
     'The dog "snarled after" the cuscus, and so the cuscus ran away (from him).' (LL010711_0069)

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12 Transitive verbs of perception form an exception to this, as there is no literal translational motion in these instances and thus neither the A nor the O argument could be seen as a Figure of motion. Rather, it is the act of perceiving that functions as the Figure, and the directional indicates the Path of perception.

(36) *som iterepelek wot a ipung nupun som*

som	*i_S=**terepelek***	***wot***	*a*	*i=pung*	*nupu-n*
one.ANIM	3sg=**run**	**go.level**	and	3sg=smell	bottom-3sg.POSS

som
one.ANIM
'One (dog) ran over (to the other dogs) and sniffed the bottom of another.' (LL300511_1_0075)

In (35), *wot* occurs preverbally, and its function is to indicate that the cuscus started running away from a certain location, the DC, and away from the dog. In contrast, in (36) *wot* follows the main verb *terepelek*. This highlights the motion by the S argument away from a DC, arriving at a goal location where the main action of the coordinated clause, 'sniffing', takes place.

A further set of sentences, only a few utterances apart in a narrative, shows that this "minimal pair" of DIR-V and V-DIR is not coincidental. Compare (37) and (38):

(37) *Sakumai ipe moto a urêpe me terepelek la Baon*

Sakumai	*i=pe*	*moto*	*a*	*wurê=pe*	***me***	***terepelek***
person.name	3sg=do	engine	and	3p=PFV	**come**	**run**

la *Baon*
go.to place.name
'Sakumai operated the engine and we sped off towards Baon.'
(NP210511_2_0066)

(38) *ip not pari Lou, ipterepelek me a ippwa "tenepa?"*

ip	*not*	*pari*	*Lou*	*ip=**terepelek***	***me***	*a*
3pl	child	belonging.to	place.name	3pl=**run**	**come**	and

ip=pwa *tenepa*
3pl=say how
'The children from Lou Island, they came running over [to us] and asked, "What's the matter?" (NP210511_2_0069)

Example (37) describes how a dinghy is departing; interestingly, ventive preverbal *me* is used. By contrast, (38) describes how, after the dinghy arrived at Baon, children came running towards it and its passengers and started asking questions. Here the emphasis is on the completion and goal location of the 'running' event (by the children, not the dinghy) and the event that followed after, and thus postverbal *me* is used.

We can summarise the differences in semantics and pragmatics of the two constructions as in Table 3:

Table 3: Comparison of two constructions involving directional + main verb.

1. DIR – Main V	2. Main V – DIR
1. When expressing **direction**: specifies direction of motion by Figure S entailed in the semantics of V 2. When expressing **AM**: specifies motion by S/A **prior** to action entailed in the semantics of V	Specifies direction of motion by Figure entailed in the semantics of V (S of intransitive V, O of transitive V)
Highlights source location	Highlights goal location / participant
Emphasizes inception of the event	Emphasizes completion of the event

Evidence that the two grammatical slots are functioning independently of each other comes from the fact that there are many instances in the corpus where the same or a different directional is chosen to occupy either. There were already several examples of this throughout the paper (see e.g. (19), (21), (32) and (37)); one of them is repeated below (from (11)).

(39) *ippe me rou liliu la kep*
      ip_A=pe ***me*** *tou* *liliu*=Ø ***la*** *ka-ep*
      3pl=PFV **come** give return=3sg.ZERO **go.to** CLF.FOOD-1PL.EXC.POSS
      'They came and gave (it) [=food] back to us.' (KM060111_0087)

This sentence describes how a party involved in a bride price ceremony came to the speaker's house and gave the family an amount of food. The preverbal directional *me* reflects this: the A argument *ip* moved to the current location of the speaker, the DC. However, *me* 'come' does not encompass the direction of the transfer that the food subsequently makes when it is given, but instead *la* 'go to' is serialised with the main verb to indicate this motion to the Goal argument. This example shows that both directional positions operate independently of each other, referring to distinct (associated) motion and transfer sub-events. The most frequent directional *la* is often used also when strictly speaking a more specific directional would be more appropriate. *La* thus seems to be highly grammaticalized, and functions here primarily as an argument marker. It is very much bleached of its original 'motion from DC' semantics. After all, since the transfer of the food would also have been towards the speaker (and thus the DC), one would expect the use of ventive *me* to mark the Goal argument.

It appears that the usage of ventive directionals to mark motion to a Goal that is the current DC only happens when a speaker adds particular (e.g. contrastive)

focus to the fact that motion is directed towards him or her, and not somewhere else; this is shown below in (40). The example is from the beginning of a recording of the *Man and Tree* game (Levinson et al. 1992). The two players are discussing how the game should be played. In this utterance, the speaker wants to confirm whether he should pass the photo to his interlocutor (using *wot*) or whether the interlocutor should pass it to him (using *me*). It appears that only in this kind of contrastive situation, use of *me* for a ventive 'towards me' meaning is required.

(40) *korou wot le worou me?*

*ko-**tou**=Ø*	***wot***	*le*	*wo$_A$=**tou**=Ø*	***me***
IRR.1sg-**give**=3sg.ZERO	**go.level**	or	2sg=**give**=3sg.ZERO	**come**

'Should I give (it) to you or should you give (it) to me?'
(Game1_021012_0020)

Example (41) shows 'round-trip motion' (i.e. 'go and come back', cf. Belkadi 2015: 59) semantics, which involve prior motion, an action and subsequent motion back to the same location. We see that the prior motion, going away from the deictic centre by the A argument, is expressed by preverbal *la*. The subsequent motion, bringing the coconut (back) to the DC and arriving there, is expressed by a directional *me* which follows the main verb plus the very long constituent that makes up the O argument.[13] Alternatively, it is possible that *lêp* 'take' has additional motion semantics, in which case there would be no subsequent AM meaning, but *me* would merely specify the 'hither' direction of the motion, as in other cases of directional serialisation.

While, of course, in this case the A argument moves back to the DC as well, it is the motion/direction of the O argument back to the DC that this construction specifies. In order to specifically express motion back to the DC of the A argument, a SVC expressing round-trip motion would be infelicitous. Instead, a biclausal construction is used, as shown in (42) and (43), in which the S/A argument is cross-referenced again on the first verb or particle in the coordinated clause. Note that nevertheless, a preverbal particle is expressing the prior AM in the first clause, while in the second clause, a directional serialised with the main motion verb is used to express the direction for the subsequent motion of the S argument back to the original location.

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13 One reviewer enquired whether this type of subsequent motion AM only occurs with the 'take' verb, as this is a cross-linguistically fairly common pattern. This appears to be the case, but due to the paucity of constructions with clear round-trip semantics in the corpus it is hard to say with certainty.

(41) *ola lêp kong payanpôl sip te ila ro arelo me*

wo=la	*lêp*	*ka-ng*		*payan.pôl*	*sip*	*te*
2sg=**go.to**	**take**	CLF.food-1sg.POSS		dry.coconut	one.INANIM	REL

i=la	*to*	*a-te-lo*	*me*
3sg=go.to	be	OBL-EMP-DEM.DIST	**come**

'You go and get my coconut (to eat) that is over there, (and bring it) here (to me).' (LK100411_0063)

(42) *kola ning Maluan a koliliu me*

ko-la	*ning*	*Maluan*	*a*	*ko-liliu*	*me*
IRR.1sg-**go.to**	**see**	person.name	and	IRR.1sg-**return**	**come**

'I will go and see Maluan and come back (here).' (KM050995_0006)

(43) *kala yik yapi a kape liliu sa Paluai pwo*

ka-la	*yik*	*yapi*	*a*	*ka-pe*	*liliu*	*sa*
IRR.NSG-**go.to**	**find**	sago	and	IRR.NS-PFV	**return**	**come.up**

Paluai	*pwo*
place.name	DEM.PROX

'We would go find sago and come back to Paluai.' (OL201210_0053)

This is more evidence that postverbal, serialised directionals are associated with completion of the event. In the case of transfer verbs, where the Figure in Motion is the item transferred, this entails specifying the location where the Figure ends up. Consequently, in a three-participant transfer situation, this type of directional SVC came to be used to introduce (animate) Goal arguments. It also explains why postverbal uses of directionals are excluded from being considered AM markers. The only non-motion verbs they occur with are transfer verbs, which by definition are not analysed as verbs triggering AM contexts since they already have translational motion inherent in their semantics. If subsequent motion of the S/A argument is expressed, a biclausal construction with a main motion verb serialised with a directional, or with a directional as main verb, has to be used. Thus, in Paluai we do not find postverbal directionals to indicate subsequent AM of S/A arguments.

It appears that motion serialisation in Paluai, including AM meanings, works under strong iconic principles. This is shown by the fact that preverbal directionals, coming before the main verb and when expressing AM, can only express prior motion, and, being closer to the bound subject pronoun, are most strongly associated with motion of the S/A argument. Contrastively, postverbal directionals, when used with non-motion verbs, can only express direction for subsequent motion of the O arguments of transfer verbs. One question that remains for preverbal

directionals is whether their AM meaning grammaticalised from an earlier directional use with motion verbs, or whether the directional sense developed out of an earlier prior motion SVC with an AM sense. The latter is the more likely explanation for two reasons.[14] Firstly, across languages a prior motion sense is commonly expressed by a motion verb preceding another verb, while directional meaning expressed by a verb in this position appears to be quite rare; see Lovestrand and Ross (this volume) for a cross-linguistic overview. Directional verbs tend to follow the main verb, as they do in the other Paluai construction, analysed as a SVC. It seems therefore reasonable to conclude that Paluai preverbal directionals primarily had prior motion meaning, and acquired an additional directional meaning at a later stage. A second fact suggesting that prior motion is the primary function of the preverbal directionals is the restriction on only expressing motion of the S/A argument. Again, this is a cross-linguistically common feature of prior motion SVCs. Thus, in addition to AM meanings being a possible grammaticalisation path for deictic directionals as suggested by Belkadi (2015), it appears that the opposite route is also a possibility, with a more general directional sense developing out of an associated motion sense. Further evidence for this possibility is provided by Voisin (this volume), who proposes the term "AM-D" for systems that have AM as their primary meanings and developed an additional directional sense.

9 Conclusions

The aim of this chapter has been twofold. Firstly, it has claimed that D-AM can clearly be recognized as a category in an Oceanic language, thus setting a precedent for further study of this phenomenon in this particular subgroup, and perhaps also in the Austronesian language family more generally. Secondly, a systematic comparison has been made between directionals used either preceding or following the main verb, and it has been argued that only the former can be analysed as markers of AM. It turned out that iconicity is a strong guiding principle in the usage of directionals in Paluai. Moreover, the chapter has shown that deictic directionality and associated motion meanings are closely intertwined, as put forward elsewhere (Dryer this volume [ch. 4]; Belkadi this volume). Either one of them appears to be able to develop out of the other (Voisin this volume) and it is even possible that they may develop in parallel (Creissels & Bassène this volume). These outcomes show that the development of directionals and AM markers may

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14 I thank Joey Lovestrand for first suggesting this as a possible analysis.

be another instance of *polygrammaticalisation* (Craig 1991), a process whereby one specific element can evolve into multiple different grammatical markers.

Abbreviations

AL	alienable	HAB	habitual	pl	plural
ANIM	animate	INANIM	inanimate	POSS	possessive
CLF	classifier	INC	inclusive	PRF	perfect
CONT	continuative	INT	intermediate	PROG	progressive
DEM	demonstrative	IPFV	imperfective	PROX	proximate
DIM	diminutive	IRR	irrealis	RED	reduplicant
DIR	directional	MOD	modal	REL	relative clause
DIST	distal	NS	non-singular		marker
du	dual	OBL	oblique	sg	singular
EMP	emphatic	PART	partitive	STAT	stative
EXC	exclusive	pc	paucal		
FREE	free pronoun	PFV	perfective		

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