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Directionals in Paluai: Semantics, Use, and Grammaticalization Paths

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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. This article discusses the directional paradigm of Paluai (Eastern Admiralties), spoken on Baluan Island (Manus Province, Papua New Guinea). This language has an exceptionally large paradigm of ten directionals, which are obligatorily used in serial verb constructions (SVCs) to express the direction of the action represented by the main verb. The Paluai paradigm is interesting because it utilizes an absolute frame of reference in which many of the terms are additionally specified for deixis. Which directional is used in what context depends on two variables: first, where the motion is directed with regard to a land–sea axis (absolute or cardinal direction); and second, whether the motion is directed away from or toward a deictic center, or in neither direction. Although the directionals are used predominantly in SVCs, they are all attested as main verbs, heading a predicate. They have, however, undergone some degree of grammaticalization; this appears to be especially the case with *la* ‘motion away from the deictic center’.

1. INTRODUCTION.¹ Much attention has been paid to the interrelationship between language and cognition with regard to the representation of space in grammar (Levinson 2003; Levinson and Wilkins 2006). Within this area of research, there has been quite a strong focus on the representation of space in the Austronesian and Oceanic language families (Senft 1997; Bennardo 2002; Ross, Pawley, and Osmond 2003). A phenomenon commonly encountered in these languages consists of verb-like forms that serve to indicate the direction of motion verbs. These go by different names depending on the analysis. Many modern Oceanic languages demonstrate reflexes of Proto-Oceanic (POC) verbal roots **lako* ‘to go, thither’ and **mai* ‘to come, hither’ (Lynch, Ross, and Crowley 2002:85), and most, like Paluai, have additional terms specifying direction of

1. I thank Juliane Boettger, Bob Dixon, Ton Otto, and Sasha Aikhenvald for useful comments on an earlier version of this article, which was presented at ICAL, July 2012, in Denpasar. I am indebted to Malcolm Ross, Frank Lichtenberk, and other participants at the conference for insightful questions and useful remarks, and thanks are also due to two anonymous reviewers for suggestions for improvement. In particular, I wish to acknowledge my debt to the speakers of Paluai, on Baluan Island, for their friendship, support, and hospitality during my field stays over the past few years. Any remaining flaws are, of course, my sole responsibility.

motion based on a cardinal reference frame: a land–sea axis, orientation based on river valleys or mountains, or direction of monsoon or trade winds.

This article discusses the directional paradigm of Paluai, an Oceanic language belonging to the Eastern Admiralties subgroup (Lynch, Ross, and Crowley 2002). Paluai is spoken on Baluan Island in the Manus Province of Papua New Guinea. Even by Austronesian standards, it has an exceptionally large paradigm of ten directionals, which are obligatorily used in serial verb constructions (SVC) to express the direction of the action represented by the main verb.

Following the terminological framework developed by the Max Planck Institute for Psycholinguistics (Levinson 2003; Levinson and Wilkins 2006), the Paluai paradigm is interesting because it utilizes an absolute Frame of Reference based on fixed bearings, combined with deictic specifications. Which directional is used in what context depends on two variables: first, where the motion is directed with regard to a land–sea axis (absolute or cardinal direction); and second, whether the motion is directed away from or toward a deictic center (DC), or in neither of these directions. The land–sea axis is an important component of spatial reference in many Austronesian languages (Senft 1997, 2004; Ross, Pawley, and Osmond 2003). Although the directionals are used predominantly in SVCs, they are all attested as main verbs, heading a predicate. For this reason, they are considered full verbs in the present analysis. All of them, however, have undergone some degree of grammaticalization; this appears to have progressed farthest in the most widely used directional *la* ‘motion away from DC’. There is evidence that a similar grammaticalization process is ongoing for a related language spoken in the Manus Province, Loniū (Hamel 1993).

First, after a short note on the term “directional,” the semantics of the directional paradigm in Paluai will be discussed in detail, considering geographical factors that could explain its emergence. There are a number of other Oceanic languages that seem to share the feature of a large directional paradigm with Paluai. Next, the ways in which directionals are used and have grammaticalized, or are grammaticalizing, will be discussed, followed by a discussion of extensions of their use into nonspatial domains.

2. SEMANTICS AND ORIGIN OF THE PALUAI DIRECTIONAL PARADIGM

2.1 THE PARADIGM. Most Oceanic languages contain elements that serve to indicate direction of a motion verb and that seem notoriously difficult to classify. The term “verbal preposition” was first used by Pawley (1973), and since then they have also been named “directional verb,” “directional particle,” “directional adverb,” and “prepositional verb” (cf. Durie 1988). In some languages, a directional is attested as an affix next to a full verb that has a fuller form. In Paluai, directionals are always free-standing morphemes and are not attested as affixes. They do form a closed subclass of intransitive verbs, because they constitute a paradigm, and are the only forms that appear as the second verb (V2) in certain types of asymmetrical SVCs (cf. Aikhenvald 2006). Throughout this article, I will refer to the forms as “directionals,” since I deem this the most straightforward and transparent denominator. An overview of the forms in the paradigm is given in table 1.

TABLE 1. PALUAI DIRECTIONAL VERB PARADIGM

FORM	POC ROOT	PARAPHRASE
la, lak	*lako 'go, thither'	to go to, motion away from DC, thither; not specified for absolute FoR
suwot		to go seaward (down), away from DC
sot		to go inland (up), away from DC
wot	*ua[tu] 'go to addressee'	to go parallel to the shore (horizontally), away from DC
me	*mai 'come, hither'	to come, motion toward DC; not specified for absolute FoR
si	*sipo 'go down'	to come seaward (down), toward DC
sa, sak	*sake 'go up'	to come inland (up), toward DC
suwen		to move seaward (down), not deictically anchored
sen		to move inland (up), not deictically anchored
wen		to move parallel to the shore (horizontally), not deictically anchored

2.2 MOTION AND DEIXIS. Each motion event includes “a Figure in Motion along a Path oriented with respect to one or more Grounds” (Wilkins and 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 center, and whether or not the motion is oriented or grounded with regard to an absolute FoR based on fixed bearings (Levinson 2003; Levinson and Wilkins 2006). Levinson regards deixis as falling outside of his frame of reference/coordinate system. He defines it as a system “where F [figure] is located relative to a (usually egocentric) G [ground] in terms of radial categories (‘here’ vs. ‘there’)” (Levinson 2003:65). Thus, although deixis has to do with the location of two objects relative to each other, “deictic specifications of location merely use the deictic center as a special kind of ground, and they do not themselves contribute to angular specifications of the kind that constitute coordinate systems” (Levinson 2003:71).

There are eight directionals in Paluai that are specified with regard to an absolute Frame of Reference (FoR). For these, a three-way distinction is made between (i) movement seaward, (ii) movement inland, and (iii) movement parallel to the shore. As for other Oceanic and 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 toward the shore always means going down. This has come to be reflected in the directional verb paradigm, and it sanctioned the fact that the directionals came to be used in a more general sense of moving in upward or downward directions along a vertical cline, as we will see below. In addition, since motion parallel to the shore (that is, 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 toward 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 toward the shore when on land.

Seven of the ten directionals are specified for deixis: they indicate motion either toward or away from the deictic center. Most often, the speaker of the utterance can be

understood as the DC, but this can be varied for pragmatic reasons, as we will see below. 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 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 toward 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. Although Paluai has terms for left and right, these are not generally used for motion reference, but rather for sides of the body or descriptions of the location of objects relative to each other. Two directionals are deictically anchored, but not specified for the absolute FoR.

This interrelation is illustrated in table 2. The first and third row of table 2 show forms all ending in *-ot* and *-en*, respectively, and it is possible that the forms in the first column start with the same formant *si-* ~ *su-*. It is likely that some of the directionals were in fact morphologically complex forms, but thus far it has not been possible to analyze them synchronically. For two directionals, there are two different forms attested: *la/lak* and *sa/sak*. The long form is used when the directional is used by itself (either as main verb or in a SVC), whereas the short form is used when the directional introduces a constituent (see below) and thus is followed by an adverbial or NP. It is unclear why this distinction is made only for these two directionals and not for the remainder of the paradigm. Note that there are two gaps in the paradigm: first, there is no antonym of *wot*, a directional indicating motion toward the DC, parallel to the shore. This slot is filled by *me*, which is discussed below. In addition, there is no term that is neither specified with regard to the absolute FoR, nor deictically anchored. This is no surprise, as such a term would not add any additional information to a lexical motion verb.

The directional paradigm provides a very 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 has to be specified with a directional, something that is very common in Oceanic languages. In Paluai, this is done by a SVC, in which a directional either precedes or follows the main verb. Even when there is only a slight difference in level—for instance, when going to another house slightly uphill—still the appropriate directional will be used.

There are semantic differences between the directionals that are not specified above. For instance, *la* is telic, with an endpoint to the motion inherent in its meaning; it is therefore also systematically translated with ‘go to’. *Wot*, on the other hand, seems to lack this

TABLE 2. ORGANIZATION OF THE DIRECTIONAL PARADIGM ALONG TWO DIMENSIONS: ABSOLUTE FoR AND DEIXIS

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

inherent endpoint. This difference between *la* and *wot* is also reflected in the different grammaticalization paths they follow, as we will see below. With forms indicating motion toward the DC, the situation is a little different again: these motion events are telic in nature, since it is implied that the object's arrival at the DC will terminate the motion.² This may be part of the reason that *me* is used as an antonym to *wot* in many instances: first, the semantics of *me* do not clash with this reading, and second, with 'come' forms the arrival at DC may be the meaning facet that speakers focus on, rather than the exact direction that the object came from.

As in other Oceanic languages, the deictic center 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 1994 for Loniū). In addition, directionals are used to keep track of who did what to whom, because they specify the locations of speech act participants relative to each other. Oceanic languages generally do not have gender or case marking on pronouns, and, therefore, directionals play an important role in disambiguating reference to speech act participants (cf. Ozanne-Rivierre 1997 for an example from the New Caledonian language Nemi).

2.3 POC ROOTS AND RELATED FORMS IN MODERN OCEANIC LANGUAGES. As is evident from Ross, Pawley, and Osmond (2003) and Ross (2004), roots of some of the forms encountered in the Paluai directional paradigm are reflexes of forms that have been reconstructed for Proto-Oceanic. The POC roots **lako* 'to go, thither' and **mai* 'to come, hither' have already been mentioned. In addition, Ross (2004:259) mentions the antonyms **sipo* 'go downward' and **sake* 'go upward'. These forms probably either indicated motion away from the speaker, or were not specified with regard to the deictic dimension. *Wot* is most likely a reflex of POC **ua[tu]*, but it did not inherit the 'go toward addressee' meaning potential of its POC root, indicating only movement away from the speaker.³

A major difference between the forms reconstructed for POC and the systems encountered in modern Oceanic languages on the one hand, and Paluai on the other, seems to be that few other languages have combined an absolute FoR with a deictic framework. Forms for 'going up/inland' and 'going down/seaward' are mentioned frequently, but it is hardly ever specified whether the motion is also deictically anchored. An exception is North-East Ambae (Hyslop 2002). This language shows a paradigm of nine forms that can be grouped according to both an absolute FoR and also a deictic dimension. There are two differences compared with the Paluai paradigm: first, North-East Ambae shows an opposition between movement toward and away from the addressee; and second, the North-East Ambae forms are more transparently morphologically complex. The forms for 'motion toward deictic center' have been suffixed with *-mai*, and the forms for 'motion toward addressee' are suffixed with the directional marker *-atu* (Hyslop 2002:52). The latter most likely is a reflex of POC **ua[tu]*.

2. This is the case at least in the language under discussion, but it is not a cross-linguistic given that all 'come' verbs imply arrival at the DC (cf. Wilkins and Hill 1995 and Senft 2000).

3. The three-way distinction between 'toward speaker', 'toward addressee', and 'toward neither' found in some modern Oceanic languages was not fully realized in Proto-Oceanic, but only potentially there. Thanks are due to an anonymous reviewer for pointing this out.

In Paluai, *ua[tu] is also retained, but its reflex never inherited a ‘toward addressee’ distinction, as mentioned above. In addition, the reflexes of *sipo and *sake have gained a ‘toward deictic center’ distinction. Thus, although many POC forms are retained, the paradigm also shows some innovation. All terms in the paradigm have equal status: all are used in the same way to indicate direction in SVCs with both intransitive and transitive verbs. In addition, they are mutually exclusive: no combinations of two or more directionals in the same functional slot have been encountered. This demonstrates that they are indeed in a paradigmatic relationship with each other. The forms do differ, however, in the grammaticalization paths they follow. I will first discuss their most ‘basic’ use specifying motion used by themselves or as V2 in SVCs (which will be explained below), followed by their use as grammatical elements to mark Oblique arguments. Next, other grammatical functions and metaphorical extensions will be discussed.

3. DIRECTIONALS AS MAIN VERB. Below, a canonical example of the use of each directional as head of a predicate is given.⁴ Most examples are from narratives recorded during a seven-month fieldtrip to Baluan Island in 2011. The remainder come from recordings made by Ton Otto during several field trips.

- (1) Ila panu.⁵
 yi=la [panu]_{LOC}
 3SG-go.to place
 ‘He went home.’(ANK020995_0014)
- (2) Irê me ai marayon sip.⁶
 irê me a-yi [mata-n yon sip]_{LOC}
 3PC come.to at-3SG eye-PERT water one.INANIM
 ‘They came upon a well (lit., ‘eye of water’).’(MS250311_0052)
- (3) Iwot ai pwot teo.
 yi=wot a-yi [pwot teyo]_{LOC}
 3SG=go.level at-3SG bamboo DEM.INT
 ‘He went over to the bamboo.’(NS220511_1_0011)
- (4) Wui sot Manai.
 wui sot [Manai]_{LOC}
 1DU.EXCL go.up M.
 ‘We went uphill to Manai.’(KM050995_0011)

4. All directionals indicating motion away from DC are glossed and translated with ‘go’, those indicating motion toward DC with ‘come’. This by no means implies that the lexical semantics of the Paluai terms exactly coincides with those of their English counterparts. Up- and downward direction are glossed, but only used in the free translation where appropriate in English. Movement neither to nor from the deictic center is usually translated with ‘move’.

5. Examples are glossed according to the Leipzig glossing rules. Nonstandard abbreviations: AG, animate goal; HAB, habitual; INANIM, inanimate; INT, intermediate; INTF, intensifier; LG, locative goal; MAL, malefactive; O, transitive object; PC, paucal; PERT, pertensive; SUB, subordinator.

6. Due to phonological alternations, /t/ is realized as [r] in intervocalic position, as [d] following a nasal and (with only a subset of morphemes) as [l] following a liquid. Within a phonological word (such as a compound), /n/ is deleted when it precedes a sonorant or semivowel. /p/ is realized as [b] in intervocalic position and following a nasal.

- (5) Ngabe sak tebo-om.
 nga=pe sak tepwo-om
 1SG=PFV come.up right.now
 ‘I’ve come (here) now.’ (LK100411_0058)
- (6) Naman sin in sen nganoyuêp tebo-om.
 naman sin yi=an sen nganoyuêp tepwo-om
 perhaps sun 3SG=PRF move.up eight.INANIM right.now
 ‘Perhaps it is eight o’clock now.’ (lit., ‘the time has moved up to eight’)
 (OL01210_0008)
- (7) Wui suwot Marako.
 wui suwot [Marako]_{LOC}
 1DU.EXCL go.down M.
 ‘We went downhill to Marako.’ (KM050995_0032)
- (8) Monokin ep kasi panu.
 monokin ep ka-si [panu]_{LOC}
 afterward 1PL.EXCL IRR.NSG-come.down place
 ‘Afterward, we will come back home.’ (MK220995_0006)
- (9) Urê suwen suk.
 wurê suwen [suk]_{LOC}
 1PC.EXCL move.down shore
 ‘We moved down to the shore.’ (MK060211_0006)
- (10) ... pulen kone re iwen delo.
 pulen.kone te yi=wen telo
 beach REL 3SG=move.level DEM.DIST
 ‘...the sand beach that stretches out over there, along the shore.’
 (NP210511_2_0009)

These examples show that a directional used by itself is mostly followed by a local noun, as in (1), (4), (7), (8), and (9), or a preposition *a-* plus a common noun, as in (2) and (3).⁷ The two spatial adverbs, *paye* ‘down below’ and *wat* ‘up high’, are also commonly encountered. Thus, directionals usually specify motion toward a particular location: when the location is not explicitly stated, it can be retrieved from the discourse context. An exception is (6), where *sen* is used metaphorically to refer to the passing of time and is followed by a numeral. It has to be noted that the directionals that are not deictically grounded (*sen*, *suwen*, and *wen*) are attested in the data much less frequently than the others, and often in idiosyncratic ways. Another indication of this is (10), where a specific beach is referred to and there is no actual movement involved.

The DC is usually the location of the speaker when s/he utters the sentence, except for (2), where *marayon* ‘well’ can be understood to function as the deictic center. Thus, the motion described is deictically anchored to the current location of the speaker, which will mostly be a speaker’s home close to the shore, in the case of narratives. In (7), the movement is toward the shore, but away from the current location of the speaker, whereas in

7. The distinction between personal, local, and common nouns is widespread in Oceanic languages. Local nouns refer to “familiar” places that need no further specification. In Paluai, they can be distinguished from common nouns because they do not need to be modified by a locative preposition *a-* (which is prefixed to a 3SG pronoun *yi*).

(8), the movement is both toward the shore and toward the deictic center (the village or home of the speaker, where she is recounting the narrative). This opposition requires the use of different directionals, *suwot* and *si*, respectively. Sentence (1) is a direct quotation from a conversation that took place on Manus mainland, and refers to a third person who went to Baluan Island. Pragmatically, the fact that the third person already went home is important, and not so much which direction he went in. This is foregrounded by using *la*, which is only deictic and not specified for the absolute FoR. In (5), *sak* is used for probably yet a different reason: coming to a house involves upward movement, via a ladder to a veranda (which is always located at the front of the house, facing the shore). Thus, coming to a house is typically referred to with *sak*, which is also evidenced by the imperative *Wa sak!*, telling a (single) person standing on the ground below to come up to the veranda.

4. DIRECTIONALS AS V2 IN SERIAL VERB CONSTRUCTIONS

4.1 TO INDICATE DIRECTION OF MOTION OF V1. Directionals are used in SVCs to indicate the direction of intransitive verbs, most typically (but not limited to) verbs of motion. SVCs are distinguished from other sequences of verbs by the following criteria, which are well established: they form a single predicate; there is no overt marker of subordination, coordination, or other syntactic dependency; they conceptualize a single event and have one tense, aspect, and polarity value. SVCs often, but not always, share core arguments (see Aikhenvald 2006 and references there, and Durie 1988). SVCs are in bold in the examples given below.

Any verb describing an action in which motion is inherent can be (and preferably is) followed by a directional; this type of serialization is very common in Oceanic languages (Crowley 2002). When the directional introduces an Oblique adjunct to an intransitive clause, it governs a local or common noun in a construction similar to a prepositional phrase, thereby indicating the Locative of an intransitive predicate (see below). Otherwise, it is often followed by a spatial adverbial or demonstrative. When the directional is serialized as V2 with the main verb and is not introducing a constituent, it 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.⁸ These SVCs can be categorized as same-subject asymmetrical SVCs, which as a whole are intransitive. Asymmetrical SVCs “include a verb from a grammatically and semantically restricted class,” such as a directional, combined with a verb from an unrestricted class (Aikhenvald 2006: 3). V1 and V2 share the same subject. Table 3 shows a number of verbs that are frequently followed by a directional in a SVC.

The following sentences are examples of directionals modifying the main verb without introducing a Locative constituent; the destination of the motion can usually be inferred from the discourse context. In (11), the inherent endpoint can be understood to be the current location of the speaker (the deictic center). Sentence (13) contains a transitive verb (*lēp* ‘take’), serialized with a directional *si*, but this directional is not introducing an overt Locative Goal constituent. This is quite rare for directionals serialized with transitive

8. If emphasis is purely on the direction of the motion and not on its destination, the directional tends to precede the main verb: see section 5.

verbs. The reason, in this case, may be that the Goal is understood from the context: the speaker takes the plants from the bush and brings them down, seaward, which is understood to mean she brings them home. Note that *lêp* is not inherently deictic, but rather means ‘take/bring along’.

- (11) Ong kobe liliu me.
 wong ko-pe liliu me
 1SG.FREE IRR.1SG-FUT return come.to
 ‘I will come back (here).’ (KW290311_0007)
- (12) Uno ro wau sot.
 u=no to wau sot
 3DU=IPFV PROG move go.up
 ‘They (two) went uphill / inland.’ (LK100411_0059)
- (13) Kola lêp nam a kolêp si.
 ko-la lêp nam a ko-lêp si
 IRR.1SG-go.to take plant.species and IRR.1SG-take come.down
 ‘I will go and get *nam* (plant used for basket weaving) and bring it home.’ (AK160411_1_0005)

The following sentences exemplify directionals introducing a Locative constituent of an intransitive predicate, expressed by a local noun.

- (14) Uro aluk liliu me panu.
 u=to aluk liliu me [panu]_{LOC}
 3DU=PROG paddle return come.to place
 ‘They were paddling back home.’ (NP210511_1_0021)
- (15) Imumut sot net a pian.
 yi=mumut sot [net]_{LOC} a pian
 3SG=vomit go.up sea and good
 ‘He vomited into the sea and (it was) fine.’ (MK060211_0016)

Sentence (15) seems, at first sight, to be paradoxical. What *sot* here means, however, is not that the vomiting was done upward, but that the vomiting was done at the side of the canoe that faced toward the shore (the incident happened at sea). The speaker and thus the deictic center were located inside the canoe, and the vomiting was done in a

TABLE 3. A SELECTION OF MOTION VERBS FREQUENTLY FOLLOWED BY DIRECTIONALS IN SVCS

tet	to move along a path, a relatively short distance; to grow, to spread—not used for movement on water
wau	to move along a path, a relatively long distance (longer than what is indicated by <i>tet</i>); used for movement on both land and water
liliu	to return
terepelek	to run
pul*	to speak (to s.o.), to tell (s.t. to s.o.)
tarak	to climb upward, to ascend (on hill, ladder, tree, etc.)
worup	to climb downward, to descend (on hill, ladder, tree, etc.)

* Verbs of speaking are not usually regarded as motion verbs. However, the act of speaking to someone, of course, has direction inherent in it. Since *pul* is obligatorily accompanied by a directional, it is included in this table.

direction away from the speaker, toward the shore, and, therefore, in an inland direction. Hence the use of *sot* is appropriate.

In sentences (16)–(18), a directional, serialized with an intransitive verb, introduces a spatial adverb. Again, which directional is used depends on the position of the speaker and, thus, the deictic center. In (16), the meat of the yam is supposed to grow downward into the ground, away from the speaker. In (17), the action referred to is falling out of a tree, and, thus, toward the position of the speaker. Sentence (18) seems a little confusing, since it contains both *sa* (preverbally; see below) and *la*. It describes the growth of the sprout of a yam plant, upward from the ground toward the speaker, and then up into the air, away from the speaker. It is possible that the instance of *la* here is bleached of all motion meaning, as is the case with a number of other grammaticalizations of *la* (see below), and the entire phrase [la wat] merely functions as an adverbial adjunct.

- (16) Kanen kibe ret suwot paye.

kane-n ki-pe **tet suwot** [paye]_{LOC}
 meat-PERT IRR.3SG-FUT **grow go.down** down.below

‘Its meat (i.e., of the yam) will grow in a downward direction.’

(NK290311_1_0022)

- (17) Ube lot si paye.

u=pe **lot si** [paye]_{LOC}
 3DU=PFV **fall come.down** down.below

‘They fell down (to the ground).’

(KW290611_0053)

- (18) Kumun de kibe sa wau la wat.

kumun teyo ki-pe sa **wau la** [wat]_{LOC}
 sprout DEM.INT IRR.3SG-FUT come.up **move go.to** up.high

‘The sprout will come up high.’

(NK290311_1_0028)

Occasionally, a spatial adverbial demonstrative follows a directional. In the sentence below, it seems a bit redundant, because *me* already implies movement to the current deictic center. The demonstrative, however, specifies the current location as ‘this place’ in addition to ‘where I am’ specified by the deictic directional.

- (19) Ngawau me arebo.

nga=wau me [arepwo]_{LOC}
 1SG=move **come.to** here

‘I came here (to this place).’

(OL201210_0009)

4.2 AS V2 IN A SVC TO SPECIFY OBLIQUE ARGUMENT. As mentioned before, directionals are also used to introduce an Oblique argument of a ditransitive clause. This function is typically the domain of prepositions, but in Paluai it is done by serialization. The directional is serialized with a transitive verb, yielding a ditransitive construction. In this case, the SVC is of the switch-subject type, with the O of V1 functioning as the S of V2 (Aikhenvald 2006; Crowley 2002). The types of oblique argument specified by SVCs are Animate Goal (which includes Recipient and Beneficiary) and Locative Goal.

4.2.1 Animate Goal (AG). An oblique argument that indicates AG, Recipient, or Beneficiary (traditionally often called “indirect object”) is obligatorily preceded by the

possessive/locative particle *ta* (which takes a pronominal suffix specifying number and person of the NP it modifies), or, alternatively, by the possessive classifier *ka* (also taking a suffix) when the O argument is intended to be eaten by the receiver. Usually, a Goal or Recipient argument represents an animate individual. When it refers to an inanimate object, it will receive the same marking as a Locative Goal (see below) and not be marked by *ta*. This kind of Oblique argument is typically encountered with transitive verbs, for instance ‘give’, specifying the goal or recipient of the Theme argument. In some cases, a beneficial or maleficial overtone is clearly indicated (‘do X for the benefit/to the detriment of Y’), but this can be regarded as a subtype of Recipient.

Thus, the Animate Goal argument receives two types of marking: a directional verb indicating the ‘path’ of movement, and either the particle *ta* or the classifier *ka* to indicate its AG status. As we will see below, other types of Oblique arguments are not marked by *ta* (or *ka*). The following sentences give a number of examples of this kind of Oblique.

- (20) Ibe sui yabi re la kau rinan.
 yi=pe **sui** [yapi teyo]_O **la** [ka-u tina-n]_{AG/BEN}
 3SG=PFV fry sago DEM.INT go.to CLF.food-3DU mother-PERT
 ‘She fried the sago for him and his mother (to eat).’ (KW290611_0036)

- (21) Ibe la buk mabian la ran asoan.
 yi=pe **la** **puk** [mapia-n]_O **la** [ta-n asoa-n]_{AG/BEN}
 3SG=PFV go.to open knowledge-PERT go.to of-PERT husband-PERT
 ‘She went to inform her husband.’ (lit. ‘open the knowledge of it to her husband’) (LK100411_0098)

- (22) Ikibe si rou kokon la rararê.
 yi=ki-pe **si** **tou** [kokoni]_O **la** [ta-tarê]_{AG/BEN}
 3SG=IRR.3SG-FUT come.down give money go.to of-1PC.INCL
 ‘He should come here (and) give money to us.’ (OBK040311_0193)

The directional *la* is attested most frequently, but occasionally another directional is found expressing an AG argument:

- (23) Ngaba kobul sot to la remenin delo.
 nga=pwa **ko-pul** **sot** [ta-o]_{AG} **la** temenin telo
 1SG=want IRR.1SG-speak go.up of-2SG go.to like DEM.DIST
 ‘I am going to speak to you as follows.’ (PK290411_3_0076)

- (24) Ngasong um me raip Mabut.
 nga=song wumwa **me** [ta-ip Maput]_{AG}
 1SG=run.away house come.to of-3PL M.
 ‘I married into the Titan people.’ (lit. ‘I married came to the Titan people’)⁹
 (LL030611_0007)

- (25) Ip to akip payambôl leo suwot tang.
 ip to **apek**=ip [payan.pôl teyo]_O **suwot** [ta-ng]_{AG/MAL}
 3PL PROG hit=3PL dry.coconut DEM.INT go.down of-1SG
 ‘They were hitting me with the dry coconuts.’ (lit. ‘they were hitting the dry coconuts downward at me’) (LL030611_0055)

9. *Song um* ‘to marry’ literally means ‘run away house’ (*um* is the short form of *wumwa*). The reason for this expression, as people told me, is that the woman leaves her own house and moves in with her husband’s family (patrilocal system), and, thus, literally ‘runs away from’ her house.

usually *si* is used for movement toward the shore, as in (30) below, and *sot* for motion away from it, since most recordings were made at people's houses near the shore, and, thus, the deictic center was located there. The sentences above are from the same recording about the procedure of frying sago. Example (26) indicates a movement toward the speaker; she puts the sago into another bowl that is closer to her than the one it comes from. Sentence (27) entails an upward movement (and, thus, triggers the use of *sot*), because the sago is put into a frying dish that is located above the fire. In (28), once again the fact that there is motion, and its goal, are probably considered more important than the exact direction, so here once again *la* is used based on pragmatic grounds. Some more examples of directionals introducing a LG are given below.

- (29) Ilêp payambôl le onga isoyek sen parung.
 yi=lêp [payan.pôl]_o teyo onga **yi=soyek sen** [patu-ng]_{LG}
 3SG=take dry.coconut DEM.INT and.so 3SG=move move.up head-1SG
 'He took the dry coconuts and hung (them) around my neck.'
 (LL030611_0048)
- (30) Urê yokari si suk.
 wurê **yokat**=_[i]_o **si** [suk]_{LG}
 1PC.EXCL carry=3SG come.down shore
 'We carried him down to the shore.'
 (NP210511_2_0063)
- (31) Ibe roui sa patan pris.
 yi=pe **tou**=_[i]_o **sa** pata-n [pris]_{LG}
 3SG=PFV put=3SG come.up on.top-PERT jetty
 'She put him on top of the jetty.'
 (MK060211_0047)
- (32) Iriy malolan suworai laliyon.
yi=tiy [maloa-n]_o **suwot** a-yi [laliyon]_{LOC}
 3SG=observe reflection-PERT go.down at-3SG pool
 'He saw his reflection in the pool.'
 (LL010711_0052)

Sentence (32) does not actually contain a Locative Goal argument, because there is no movement involved of a Theme to the location indicated by this argument. Its form, however, is similar to that of the other sentences, and *suwot* modifies the main verb *tiy*, indicating that the direction of the 'observe' action was downward, away from the deictic center.

Sentence (33) below, which comes from the same story as (31), shows that a directional is not always obligatory in a Locative Goal construction, at least not with all verbs (the Tok Pisin loan *pris* 'jetty' is regarded as a local noun by the speaker, and, thus, is not marked with the preposition *a-*). The semantics of many verbs—as shown by the various examples above, such as *tou* 'give, put' and *yokat* 'carry'—encompass motion on a horizontal plane, and, thus, they have to be accompanied by a directional. The semantics of *top* 'drop', on the other hand, seem not to cover this, and so the verb can do without. Thus, whether or not a directional is used depends on the semantics of the main verb as well.

- (33) Tarê kala robirê pris.
 tarê ka-la¹⁰ top=_[irê]_o [pris]_{LG}
 1PC.INCL IRR.NSG-go.to drop=3PC jetty
 'We will go drop them off at the jetty.'
 (MK060211_0045)

10. Preverbal *la* has a status different from postverbal *la* (see section 5).

4.3 SERIALIZATION OF DIRECTIONALS: CONCLUSIONS. From the examples, it is clear that, with regard to the marking of Oblique constituents, Paluai directionals are used in much the same way as adpositions are used in many other languages. The question is whether the directionals are on a grammaticalization cline toward full-fledged prepositions. There are a number of facts in opposition to this, however, such as the fact that they can still be used as main verbs. Durie (1988:5) mentions that if a verb is used independently, this “inhibits semantic bleaching and subsequent reanalysis.”

When a directional is serialized with an intransitive verb without governing a constituent, it merely modifies the verb as an adverbial would (but with the destination of the motion understood), and when it is serialized with a transitive verb, there is a switch-subject SVC, with the object of V1 functioning as the subject of V2. Moreover, it seems that the directionals are still predominantly used as V2 in serializations when a genuine sense of motion on a horizontal plane is present; this is not the case for some other grammaticalizations of directionals, as will become clear below. A case in point is the contrast between (32) and (33), for example, where the semantics of the main verb *tou* ‘put’ entail motion on a horizontal plane, but the semantics of the main verb *top* ‘drop’ may not.

An argument in favor of grammaticalization would be that directionals are currently used not only for large-scale motion events that are clearly either directed toward, parallel to, or away from the shore and can thus be related to the cardinal directions quite easily, but also for small-scale motion events, where the “level” component of their meaning mainly refers to movement up or down a vertical cline, as is the case in sentences (31) and (32), for example. It could be argued that this is an example of semantic bleaching and extension/context generalization, two principal mechanisms involved in grammaticalization (Heine and Kuteva 2002:2). It is possible that each directional has two variants: one as full verb, with the full lexical semantics of ‘to move uphill away from deictic center’, and so on, and one as grammaticalized directional particle, with a more generalized meaning, like ‘upward away from deictic center’. This is very common cross-linguistically. There is, however, no formal difference apparent between the two varieties of the same directional, except for the pairs *la/lak* and *sa/sak* mentioned previously. In addition, sentences like (15), where *sot* ‘go up’ is used to indicate landward direction for the downward motion of vomiting, indicate that the absolute dimension can still be relevant even for small-scale movements.

Another argument that may support the claim that directionals are grammaticalizing toward prepositions is the fact that they are not obligatorily cross-referenced by subject-bound pronouns, and, thus, generally carry no verbal morphology. This would be in line with a third principle of grammaticalization: decategorialization. However, in Paluai, the subject is usually expressed only once per VP, and does not have to be cross-referenced on each verb by person/number prefixes, as in many other Oceanic languages. Thus, as mentioned above, it is not possible to formally distinguish between a SVC and a main verb followed by a particle. The following two sections will discuss some cases where directionals have more clearly grammaticalized.

5. PREVERBAL USE OF DIRECTIONALS. Directionals are also found in a preverbal slot, that is, preceding the main verb. They always follow aspectual particles

(perfective or imperfective), if these are present. Directionals generally indicate deictically anchored motion prior to the event described by the main verb ('go/come and do X'), but they seem to have grammaticalized and acquired a "purposive" overtone (sometimes "unintentional result"), in particular the most frequently used directional *la*.

In other cases, the movement indicated by the directional and the action of the main verb seem to be occurring simultaneously. The directional then indicates the direction of the action referred to by the main verb, and has roughly the same function as when it follows an intransitive verb (as discussed in 3.2 above), but probably with less emphasis on the destination of the motion. It turns out that this is the way to specify direction for a transitive motion event, when the movement represented does not entail a Locative Goal. In other words, this movement in a particular direction occurs *while* the action described by the main verb is carried out, and is not the movement the *object* makes while undergoing the action described by the main verb. This will be exemplified below.

Preverbal instances of directionals are currently not analyzed as SVCs, because it is not certain that they form a single predicate consisting of two verbs. Clauses in which a directional occurs preverbally and where there is a sequential/purposive meaning could also be analyzed as two juxtaposed predicates without an intervening connective. The cases in which the movement occurs simultaneously are a bit more problematic. These can be analyzed as SVCs, as compound verbs, or the directionals could be grammaticalized preverbal particles, on a par with, for example, *to* 'to be' for habitual/progressive aspect, or *pe* (which may originate from a verb 'to go') as a future marker. Some examples found with various directional verbs are given below..

5.1 *La* 'GO TO'. Sentence (34) indicates a sequence of events: a movement away from the deictic center and an action. In addition, it has "purposive" overtones: the speaker is moving away from her current location with the purpose of seeing someone. Cases of preverbal *la* where there is simultaneity with the main verb have acquired another meaning: that the action is taking place at a distance from the DC. These are discussed below.

- (34) Ngaba kola ning Ponaun.
 nga=pwa ko-**la** **ning** Ponaun
 1SG=want.to IRR.1SG-go.to see P.
 'I want to go (in order to) see Ponaun.' (ANK020995_0008)

5.2 *Me* 'COME TO'. Example (35) shows a purposive use of *me*, which involves a movement toward the deictic center. Used like this, *la* and *me* form a pair of antonyms.

- (35) Ip kame ning Maiau.
 ip ka-**me** **ning** Maiau
 3PL IRR.NSG-come.to see M.
 'They will come (in order to) see Maiau.' (KM060111_0046)

5.3 *Wot* 'GO HORIZONTALLY, AWAY FROM DC'. Preverbal *wot* means 'go ahead (and)', again indicating a sequence of events. When *wot* follows the main verb, the predicate obtains a different aspectual meaning: 'do for an extended period of time'.

- (36) Ep pe wot lêbi ran mwanen Parugui.

ep pe **wot** **lêp=i** ta-n mwane-n Parugui
 1PL.EXCL PFV **go.level** **take=3SG** of-PERT brother-PERT P.

‘We went ahead (and) took her of/from her brother Parugui.’

(KM060111_0035)

5.4 *Sot* ‘GO UPWARD’. Sentence (37) shows again a sequential and possibly purposive use of a directional verb.

- (37) Ep pa kasot yik ngoyai.

ep pwa **ka-sot** **yik** ngoyai
 1PL.EXCL want.to IRR.NSG-**go.up** **search** possum

‘We were about to go uphill (in order to) search for possums.’

(NP210511_2_0011)

Sentence (38) is interesting, because here the actions described by *sot* and *pe* (the main verb) happen simultaneously. The speaker talks about weaving a particular kind of basket with which one starts with the bottom and then works upward, weaving the opening (called the ‘mouth’) last. Example (38) describes this process.

- (38) Kosot pe kolon.

ko-sot **pe** kolo-n
 IRR.1SG-**go.up** **make** mouth-PERT

‘I will make the mouth of the basket.’ (lit., ‘I will go up make its mouth.’)

(MK050311_0021)

5.5 *Sa* ‘COME UPWARD’. In sentence (39), we see again a directional verb used in a purposive sequence.

- (39) Wui be sa lêbi.

wui pe **sa** **lêp=i**
 1DU.EXCL PFV **come.up** **take=3SG**

‘We came up (in order to) get her.’

(MK060211_0044)

5.6 *Suwot* ‘GO DOWNWARD’. Sentence (40) describes the making of another kind of basket. With this kind, one starts with the rim and works downward toward the bottom. As a result, (40) is the exact opposite of sentence (38) above.

- (40) Kosuwot tik nubun.

ko-suwot **tik** nupu-n
 IRR.1SG-**go.down** **weave** bottom-PERT

‘I will weave its bottom.’ (lit., ‘I will go down weave its bottom.’)

(AK160411_2_0023)

- (41) Osuwot ilili la pulen kone areo.

wo=**suwot** **ilili** la pulen.kone areo
 2SG=**go.down** **stand.up** go.to beach there

‘You go down (in order to) stand up on the beach there.’ (LL030611_0051)

5.7 *Si* ‘COME DOWNWARD’. Sentence (42) shows a purposive sequence again. Sentence (43), on the other hand, indicates simultaneous actions of walking, coming down (toward the shore), and taking the bed.

- (42) 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 (in order to) fetch sea water, then...’
 (LK100411_0090)
- (43) Ip silal leo ip no si wau lêp pat teo.
 ip silal teyo ip no si [wau lêp] pat teyo
 3PL spirit DEM.INT 3PL IPFV come.down move take bed DEM.INT
 ‘The spirits, they were walking down to the shore carrying the bed.’
 (LM190611_0026)

5.8 *Wen* ‘MOVE HORIZONTALLY’. The three directionals indicating motion that is not deictically anchored (*sen*, *wen*, and *suwen*) are relatively rare, and, therefore, few representative instances of their preverbal use were found in the data (in the case of *sen* ‘move upward’, none at all). *Wen* indicates motion along the shore that is not deictically anchored. In (44), there is a simultaneous action of moving and getting closer together, which is hard to express in English. The second instance of *wen*, in addition, refers to a location rather than to a movement.

- (44) Ap kawen pirai pulen kone re iwen delo.
 ap ka-wen pit a-yi pulen.kone te
 2PL IRR.NSG-move.level be.close at-3SG beach REL
 yi=wen telo
 3SG=move.level.angle DEM.DIST
 ‘You will gather together on the sand beach that is over there.’
 (NP210511_2_0009)

5.9 *Suwen* ‘MOVE DOWNWARD’. In (45), *suwen* is used in an imperative construction (in a direct quotation from a narrative). It is interesting that the nondeictic directional is used in this case. When someone is told to go away, this usually implies motion away from the DC, the speaker who utters the imperative. It is possible that because the imperative already implies this motion from DC, it is not necessary to use a deictic directional.

- (45) Iba “suwen det la paye!”
 yi=pwa suwen tet la paye
 3SG=say move.down walk go.to down.below
 ‘She said, “Go down!”’ (i.e., get out of the house) (WL020711_0062)

5.10 DIRECTIONALS USED PREVERBALLY: CONCLUSIONS. What can be concluded from this section? First, the preverbal use of a directional in order to indicate a sequential/purposive sense ‘go/come and V; go/come in order to V’ seems relatively well established. Which directional is chosen depends on the location of the action described by V: if it is at the deictic center, a COME form will be used, and if it is away from it a GO form is used. In addition, the motion will often, but not always, be specified with regard to the absolute FoR.

Most likely, the sequential use appeared earlier, and has been further extended to include purposive: after all, motion to a certain place with the intention of doing some-

thing there has inherent in it a sense of purpose. This is quite a common grammaticalization path cross-linguistically; cf. also Lichtenberk's (1991) overview of the grammaticalization of GO, COME, and RETURN forms in Oceanic.

Second, in some cases a specific directional is used in a preverbal slot, rather than serialized and occurring as V2 following the main verb, as discussed in section 4. In these cases, the movement and the action of the main verb occur simultaneously, as in examples (38), (40), (43), and (44). The reason that the directional precedes the verb rather than following it is probably the following. All these cases have in common that they show a transitive main verb that is directly followed by its object, and there is no LG constituent. Inserting the directional between the main verb and its object would alter the meaning of the utterance, because the O argument would have to be reinterpreted as a LG (Oblique) argument. For instance, swapping the directional from preverbal to postverbal position in example (43) would yield the following:

- (46) ip silal teyo ip no [wau lèp] si [pat]_{LG} teyo
 3PL spirit DEM.INT 3PL IPFV move take come.down bed DEM.INT
 ? 'The spirits, they carried (it) down to the bed.'

Because *pat* is now following the directional in a SVC, it has to be interpreted as the LG of a clause with an ellipped direct object.¹¹ Thus, the meaning of the clause has changed. Apparently, in cases like (43) there is a preference to put the directional in preverbal position, rather than let it follow the O argument. In other cases, as, for example, in (13) above, the directional does follow the O. Probably the directional cannot follow the direct object in cases such as (43) because there is no LG specified, or specifying a LG would be nonsensical, as in example (40). In these cases, the directional will be used preverbally, to distinguish it from its use as a marker of Oblique argument (such as LG) when used postverbally as V2 in a SVC. It reflects the direction of the motion of the A argument while VERBING: it makes sense, therefore, that it appears closer to A than to O. Also for intransitive predicates, there may be a difference in emphasis between the use of a preverbal and a postverbal directional.

6. OTHER GRAMMATICALIZATION PATHS CONCERNING DIRECTIONALS. There are a number of paths along which directionals have grammaticalized. A selection of these will be discussed in the following sections.

6.1 *La*. *La* is the most frequent directional, and it has grammaticalized in a number of different ways (cf. Craig 1991 on the polygrammaticalization of 'go' in Rama). It often refers to situations in which no motion is involved, indicating that it has been quite heavily semantically bleached.

6.1.1 *La* as marker of 'turn into, become'. *La* is used on its own or following a main verb and then followed by an adjective, noun, or stative verb, in the sense of '(turn) into, become'. Often, the main verb is *pei*, which means 'appear, come up, happen', but other verbs are also attested. When *la* follows a transitive verb, as, for example, in (47),

11. These clauses are common in Paluai. Only animate direct objects are obligatorily cross-referenced on the verb complex with a bound pronoun. Inanimate direct objects are usually ellipped when retrievable from the discourse context.

the construction can be analyzed as a switch-subject SVC, on a par with the LG/AG examples above.

- (47) Samin deo, koribel la kalomwen.
 samin teyo ko-tibel [la kalomwen]
 end.of.rope DEM.INT IRR.1SG-braid go.to handle
 ‘The ends of the twines I will braid into the handles (of the basket).’
 (AK160411_2_0024)
- (48) Wong kola paiwon.
 wong ko-[la paiwon]
 1SG.FREE IRR.1SG-go.to strong
 ‘I will become strong.’
 (SY100411_0013)
- (49) Obe ning de kibe la mwat.
 wo=pe ning te ki-pe [la mwat]
 2SG=FUT see COMP IRR.3SG-FUT go.to be.cooked
 ‘You will see that it will become cooked.’
 (CA120211_1_0027)
- (50) Muyan kibe bei la bian.
 muya-n ki-pe pei [la pian]
 skin-PERT IRR.3SG-FUT become go.to good
 ‘His skin will become nice.’
 (NP260511_0023)

6.1.2 *La* as marker of adverbial phrase. The above use of *la* may have led to its development into an adverbial phrase marker. Often, adverbial phrases are constructed by an adjective preceded by *la*. This [*la* A] phrase follows the main verb.

- (51) Taman do aluk la paiwon dea.
 tama-n to aluk [la paiwon] teya
 father-PERT PROG paddle go.to strong then
 ‘Then his father was paddling strongly.’
 (NP210511_1_0033)
- (52) Ngaro yêk la palak.
 nga=to yêk [la palak]
 1SG=PROG feel go.to bad
 ‘I am feeling bad.’
 (SY100411_0049)
- (53) Uro rok la bian palsi.
 u=to tok [la pian] palosi
 3DU=HAB stay go.to good past
 ‘They used to live (together) well in the past.’
 (LL010711_0092)

These uses of *la* have a static meaning; that is, there is no motion involved, nor a metaphorical “movement” of a change of state, as in the previous examples (47)–(50). Sometimes, the same adjective is encountered preceded by *la*, where in different contexts it either has an adverbial or a ‘become/turn into’ meaning: compare examples (50) and (53). In general, the context and the semantics of the main verb are sufficient to disambiguate.

6.1.3 *La* meaning ‘according to’. With some abstract nouns, *la* acquires the meaning of ‘according to’. This is attested for three different (obligatorily possessed) nouns: *arona*- ‘way, procedure’ (see [54]), *ayo*- ‘way’, and *kina*- ‘mark’).

- (54) Minak tebo ip maro ret tou pun la aronan pwên.
 minak tepwo ip ma=to tet tou pun [la arona-n] pwên
 present DEM.PROX 3PL NEG₁=HAB move give INTF go.to way-PERT NEG₂
 ‘Nowadays, they do not run (ceremonies) properly according to procedure.’
 (SP90311_0057)

6.1.4 *La* indicating remoteness from deictic center. According to Lichtenberk (1991), GO forms can develop into markers that indicate relative remoteness or distance, either in space or in time. This may lead to further development into past or future markers. The latter does not seem to be the case (yet) for Paluai, but many instances of *la* refer to a state, or to an action not involving motion, taking place at a distance from the deictic center. When *la* is combined with the verbs *tok* ‘to sit, to remain in a place’ and *to* ‘to be, to exist’, there is no sense of motion at all, but the use of *la* may rather point to the fact that the reference is to situations that occur at a distance from the deictic center. Occasionally, another directional is used to express the same kind of meaning, as in (56).

- (55) Ip monmon pari net te ila rok pulek.
 ip monmon pari net teyo yi=la tok pulek
 3PL bird belonging.to sea DEM.INT 3SG=go.to sit too
 ‘Sea birds (lit. birds belonging to the sea), they’re there, too.’ (location is a small island at some distance from Baluan) (LL030611_0015)
- (56) Ip mwanêng sot to ai.
 ip mwane-ng sot to a-yi
 3PL brother-1SG go.up be at-3SG
 ‘My brothers live there. (location at distance upward from deictic center)’
 (OL201210_0116)

To has grammaticalized into a marker of progressive and habitual aspect. Thus, a clause containing *la to* can also refer to an action that takes place for a prolonged time at a location away from the deictic center.

- (57) Ila ro nu.
 yi=la to nu
 3SG=go.to PROG bathe
 ‘He is bathing. (at a place removed from the deictic center)’ (052b_0211)
- (58) Urê ro be yong yamat te ila ro be kolon wat.
 wurê to pe yong yamat te yi=la to pe
 IPC.EXCL PROG PFV hear person REL 3SG=go.to PROG make
 kolo-n wat
 voice-PERT up.high
 ‘We were hearing a person who was shouting (lit. ‘making voice’) up high.’
 (NP210511_2_0024)

Alternatively, these examples could be interpreted as having a sequential or purposive meaning, but that does not seem to make much sense in these cases.

6.2 *Wot* AS DURATIVE ASPECT. *Wot* is frequently used in postverbal position to indicate that an activity is continuing for a stretch of time. It is comparable to (and may be a calque of) Tok Pisin constructions such as *Em i wokabaut i go i go i go* (i go) ‘He’s walk-

ing and walking (and walking)’. *Wot* has grammaticalized to such an extent that it can also be used with activities that do not involve motion. A few examples are given below.

- (59)

Kino yen pe wot a poyen deo kibe som.
ki-no yen pe wot a poye-n teyo ki-pe som
IRR.3SG-IPFV CONT do go.level and residue-PERT DEM.INT IRR.3SG-FUT form
‘It will keep on doing (that) for a while and its residue will form.’
(CA120211_2_0029)
- (60)

Uno rok wot.
u=no tok wot
3DU=IPFV sit go.level
‘They lived (together) for an extended time.’
(LL10711_0011)
- (61)

Uno ro be mangat wot wot wot.
u=no to pe mangat wot wot wot
3DU=IPFV PROG do work go.level go.level go.level
‘They were working for a long time.’
(LM190611_0005)

It is likely that *wot* rather than *la* has been grammaticalized in this way because *wot* is atelic, whereas *la* is telic and necessitates an endpoint of the action. The semantics of the verb *wot* were more in accordance with the durative meaning to begin with and, thus, it was this verb that grammaticalized in this direction.

6.3 GRAMMATICALIZATIONS OF DIRECTIONALS: CONCLUSIONS.

As has become clear in the previous sections, Paluai directionals have a multitude of functions. They can be used as full verbs, heading a predicate and indicating motion toward a specific location, either overtly specified or retrievable from the context. If the destination of the motion is backgrounded, a directional tends to precede a lexical motion verb. Preverbal use of a directional can also have a sequential or purposive meaning; these constructions are analyzed as biclausal.

When a directional is used postverbally, it forms a SVC with the lexical main verb, and introduces a Locative constituent with intransitive verbs, and a Locative or Animate Goal argument in case of transitive verbs. This use is obligatory for those verbs whose semantics encompass a sense of motion on a horizontal plane. A Locative or Locative Goal constituent has to be marked by the preposition *a-* in case it is expressed by a common noun. An Animate Goal argument has to be marked with *ka* in case the O argument is something intended to be eaten by the receiver, and with *ta* otherwise.

We can schematize the various possible combinations as shown in table 4: when a constituent is placed between square brackets it means that it can be either overtly expressed or ellipted.

TABLE 4. OVERVIEW OF POSSIBLE VERB-DIRECTIONAL COMBINATIONS IN PALUAI

CLAUSE STRUCTURE					DISCUSSED IN
S	V _{INTR}	DIR	[LOC]		Section 4.1: e.g., examples (12) and (14)
A	V _{TR}	[O]	DIR	LG / AG	Section 4.3: e.g., examples (22) and (26)
S	DIR	V _{INTR}			Section 5: e.g., example (41)
A	DIR	V _{TR}	O		Section 5: e.g., example (38)

Additionally, directionals have grammaticalized along various paths to encompass events in which there is no motion evident. In particular, *la* has shown multiple directions of grammaticalization (cf. Craig 1991): as a marker of ‘change of state’, an adverbial phrase marker, or to indicate remoteness from the DC, among others. One conclusion is that the different semantics of *la* and *wot* have led to different grammaticalization paths: *la* developed into a marker of inchoative aspect and of adverbial phrases, which can all be regarded as “accomplished” situations. In contrast, *wot* has grammaticalized as a marker of durative or progressive aspect for situations that have not reached accomplishment.

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