Linguistic expressions of Goal, Source and Place in Polynesian languages

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UMR 7107 Lacito-CNRS

claire.moyse@cnrs.fr

Abstract

In Polynesian languages, as in many other Oceanic languages, the linguistic expression of Source and Goal is mainly express by (i) demonstratives and directional modifiers, which combine deictic and spatial information (toward speaker, addressee or third person, upwards, downwards, transverse axe), (ii) locative static and dynamic prepositions (which may combine with body-part terms to introduce local and landmark nouns, or place names, and (iii) posture and motion verbs. We examine the occurrences of the Source and Goal prepositions on the one hand, and the directional modifiers on the other, taking into account their compatibities, the spatial coding they convey, the position of the participants, and the verb meaning. In Polynesian languages, Goal and Source are of similar complexity, though in different ways, and a variety of resources can express fine-grained distinctions for Source vs. Goal depending on the position of the figure.

Keywords: Polynesian languages, East Uvean, East Futunan, demonstratives, directional adverbs, locative prepositions, position and motion verbs

Introduction

This article is concerned with the linguistic expression of Source and Goal in some Polynesian languages, mainly East Uvean/Faka'uvea (c. 20 000 speakers in Wallis and New Caledonia) and East Futunan/Fakafutuna (c. 10 000 speakers in Futuna and New Caledonia), both belonging to the Nuclear Polynesian subgroup of the Polynesian family. My data comes from traditional oral texts and conversations, and from descriptions elicited with the *Trajectoire stimuli* (Ishibashi et al, 2006)[1]. Data from other Polynesian languages comes from descriptive grammars. In these Polynesian languages, as in many other Oceanic languages, spatial reference is mainly expressed by (i) demonstratives/deictics and presentatives, (ii) directional adverbs which combine deictic and spatial information (toward speaker, addressee or third person, upwards, downwards, transverse axis), (iii) locative prepositions (static/essive, ablative/ventive/dynamic centripetal and allative/dynamic centrifugal) which combine with object-part terms or with verbs to introduce local and landmark nouns, place names, etc., (iv) position and motion verbs. I will first present the inventory of source, place and goal linguistic expressions, mainly conveyed by locative prepositions and directional adverbs, in combination with position, gesture and motion verbs (sections 1 & 2). I will then examine the interactions between the two types of expressions – prepositions and directionals – and try to determine their respective functions in the encoding of Source and Goal (section 3). Each section will end with considerations concerning the possible existence of asymmetry between the expressions of Source and Goal. Since in some cases the essive preposition can express the Source, I will also take into consideration the expression of Place.

Contrasting with the situation in several other Austronesian languages, I found no cases of zero-marking of spatial relations, as defined in Stolz et al. (2014). There are,

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however, marginal instances of spatial relations expressed through noun incorporation or adverbial strategies, which will be presented in section 4, since they also present some cases of asymmetry.

The conclusion will summarise how Source, Place and Goal are expressed in these Polynesian languages, whether their encodings differ in complexity or not, and whether the asymmetry between Goal and Source reflects what is found cross-linguistically.

1. Locative prepositions

Creissels (2006:19) identifies five logical different patterns for encoding the distinction between Place, Source and Goal of motion:

- Pattern 1 associates without any ambiguity each of the three meanings with a specific marker (an adposition or an affix).

- Pattern 2 comprises three different cases of conflation between the three meanings: (a) ablative vs. essive-allative, (b) allative vs. essive-ablative and (c) essive vs. allative-ablative.

- Pattern 3 makes no grammatical distinction in the marking of the three meanings.

Pattern 1 and Pattern 2(a) are common in European languages, Pattern 2(b), though rare, is attested in languages spoken in North East Africa (Creissels 2006:22), and in Samoan (see below). Pattern 2(c) has not been identified so far. A case of Pattern 3 has been thoroughly described in Wan, a South Eastern Mande language (Nikitina 2009).

At least two Polynesian languages, East Futunan and Tuvaluan, mix two patterns: Pattern 2(b) allative vs. essive-ablative, along with Pattern 1 in which each of the three meanings - essive, ablative and allative - is primarily associated with one preposition. Indeed, in most Polynesian languages, three locative prepositions are attested, all of them being reflexes of Proto Polynesian (PPn) etyma (cf. Pollex Online, Greenhill S.J. & Clark R. 2011):

i.   PPn *i < Proto Oceanic (POc) *qi 'a preposed locational particle, at or from a

position'. In the languages listed in Pollex, reflexes of *i are described as spatio-

temporal prepositions; 'at, in, on'.

ii.   PPn *ki 'preposition indicating motion towards, to; direction towards a goal including

physical movement but extending to the arguments of perception, communication and

cognition'.

iii.   PPn *mai 'from, since'[2]. The only logical source for PPn *mai 'from' is the POc verb

*mai 'come' and the POc adverbial directional *mai 'towards speaker'. As some

Polynesian languages have *mai* as the reflex, that form must be attributed to PPn (A.

Pawley, pers. com.).

According to Mosel and Hovdhaugen (1992), one variety of Samoan has only two

prepositions, and thus constitutes a case of conflation:

i.   the dynamic centrifugal preposition PPn *ki is reflected as *'i*, which tends to lose its

initial glottal stop, and so is now phonologically identical to the static one, *i,* from

PPn *i. The conflation occurs in casual speech in Samoan. In careful speech glottal

stop is retained in *'i*.

ii.   PPn *mai is reflected either as *mei* or *mai* (cf. note 2).

Samoan corresponds to Creissels' (2006) Pattern 2(a), with only two prepositions left:

ablative *mei*/*mai* vs. essive-allative *i*. As we will see later, the two Samoan allomorphs for the

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[2] This reconstruction is problematic: the ablative/ventive preposition is reflected as *mei* in several Polynesian
languages belonging to two different subgroups: East Futunan, Marquesan, Mangarevan, etc. belonging to the
Nuclear Polynesian subgroup, and Tongan belonging to the Tongic subgroup. *Mei*, however, is not attributable to
the ancestor of either of these two subgroups; only *mai is reconstructable, that is, the form also reconstructed
for the centripetal directional. One of the explanations for the shift *mai > *mei* in some Polynesian languages is a
phonological one: *mei* in Tongan, East Futunan, Marquesan, etc. can be explained as arising by an assimilation
that happened independently several times; the change a > e before /i/ is a common sporadic change, e.g. in
Tongan PPn *qariki 'chief' > *'eiki*, PPn *fafine 'woman' > *fefine*, etc. albeit this change has not happened in
other words than *mei* in East Futunan, Niuafo'ou or Marquesan. Moreover, this change only happened in its
prepositional use since the directional adverb remains *mai* in all these languages. According to A. Pawley
(pers.com.), the difference which now exists between the two morphemes could be due to the stress, the phrase
final adverb *mai* taking primary stress, while the preposition *mei* is unstressed.

ablative meaning is a significant fact, since in some Polynesian languages the locative centripetal preposition is formally identical to the adverbial centripetal directional *mai* while in other languages, they diverge phonologically.

Let us first examine the functions of the locative prepositions with examples mostly from East Futunan, a language which keeps distinct the locative centripetal preposition (*mei*) from the adverbial centripetal directional (*mai*).

Depending on the category of the noun phrase they introduce, the three locative prepositions, which are built with suffixes in the following cases: *-a* (+ proper names and dual/plural independent pronouns), *-ate* (+ singular independent pronouns) if the noun phrase refers to a human entity considered as an individual, and *–ō* if the human entity is considered as a location, similar to the French preposition *chez* 'at someone's place'. Hence, in East Futunan, the locative prepositions have the following forms: *i/ia/iate/iō*, *ki/kia/kiate kiō*, *mei/meia/meiate/meiō*.

It is the bare forms *i/ki/mei* that introduce toponyms and place nouns, whereas proper nouns and personal pronouns are introduced by suffixed forms. This word-class distinction has some implications for the expression of benefactive and Goal on the one hand, of dissociative and Source on the other hand. Cross linguistically, benefactive and Goal expressions are most often identically marked, and so are dissociative and Source expressions. Polynesian languages, by contrast, show morphological differences, even if the prepositions involved are basically identical.

In many languages, 'locative' prepositions often have several other functions, which, as we will see, have significant relations with the spatial relations. For example, the stative preposition is also used to express causal complements (cf. § 1.2.4), indicating the starting point of the cause, and the allative preposition is also used to introduce beneficiaries (cf. §1.3.2). In Polynesian languages there is, however, an asymmetry between the multifunctional

Goal and Place prepositions and the quasi uni-functional Source preposition. This difference in uses has a direct consequence in discourse: the Source preposition occurs less often than the Goal and Place prepositions in both traditional stories and conversations.

1.1. The source/ablative preposition

In East Futunan, the preposition *mei* 'from, since, starting from' serves to introduce a centripetal dynamic Source which can never refer to the place where the figure is located. The Source may be either spatial, temporal, perceptive or even abstract.

1.1.1. Source located in space

The preposition *mei* introduces spatial complements after verbs of motion, such as *'au* 'come' in the following examples, in which the figure (an object or a person moving in space) has left its point of origin, or is not yet in the point of origin mentioned in the discourse.

EAST FUTUNAN

(1)　　*E　　'au　　lātou　**mei**　　Ono.*
　　　　NPST　come　3PL　　SOURCE　Ono
　　　　'They are coming from Ono.' (They are no longer in Ono.)[3]

(2)　　*E　　kau　'au　**mei**　　Palesi　i　　le　　aso　　tolu.*
　　　　NPST　1SG　come　SOURCE　Paris　STAT　SPC　day　　three
　　　　'I will come from Paris on the third [of the month].' (The speaker is not yet in Paris.)

(3)　　*E　　'au　a　　ia　**mei**　　gāne'a　kesekese　o　　le　　Eulopa.*
　　　　NPST　come　ABS　3SG　SOURCE　place　　different　POSS　SPC　Europe
　　　　'He comes from different places in Europe.' (He is no longer in Europe.)

　　　In all the examples above, the verb associated with the ablative preposition is *'au* 'to come'[4]. Other verbs of motion may also co-occur with the preposition *mei*, such as *makape* 'run' in (4) and *ulu* 'pass through, go in, go out, cross' in (5) as well as verbs of direct physical manipulation such as *samuti* 'prick out' in (6) or *to'o* 'take' in (7). In (5), it is *mei* that allows the hearer to understand that Soane is going out of his house, whereas in English,

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[3] Unless otherwise indicated, all the examples are taken from my personal unpublished fieldnotes.
[4] The verb *'au* < PPn *aqu 'come, reach, arrive' (Greenhill S.J. & Clark R. 2011) often has the more general meaning of 'move from one place to another', and this explains its compatibility with the different prepositions.

this role is played by the combination of a directional satellite and a preposition, 'out of', and

in French by the verb *sortir* 'go out' followed by the preposition *de* 'from':

(4)   *E   makape   le   ta'ine* **mei**   *le   la'akau.*
         NPST   run   SPC   girl   SOURCE   SPC   tree
         'A girl is running from a tree.' (The girl already left the tree.) (traj033_FUD)

(5)   *E   ulu   a   Soane*   **mei**   *lona   fale.*
         NPST   cross   ABS   Soane   SOURCE   his   house
         'Soane is just going out of his house.' (Soane is no longer in his house.).

(6)   *Na   samuti laku gā   ika*   **mei**   *laku pā   e   Petelo.*
         PST   prick   my   CLS   fish   SOURCE   my   dish   ERG   Petelo
         'Petelo pricked a bit of my fish out of my dish.' (Moyse-Faurie 1997:85)

(7)   *Na   kau   to'o   mai   le   kulo*   **meiate**   *koe.*
         PST   1SG   take   CPTE   SPC   pot   SOURCE   2SG
         'I took away the cooking pot from your place.' (I am no longer in your place.)

1.1.2. Fictive Source without actual motion

With verbs expressing a static position such as *nofo* 'sit, live somewhere' in (8), *taulaki*

'moor' in (9) or *eke* 'sit' in (10), or with verbs of communication or perception as in (11-13),

the dynamicity is fictive, that is, the use of *mei* only expresses motion in the auditory or visual

perception of the speaker:

(8)   *E   nofo   le   fenua fuli*   **mei**   *le   Kolofau.*
         NPST   stay   SPC   people all   SOURCE   SPC   Kolofau
         'Everyone lives at the mount Kolofau.' (The speaker is located elsewhere.) (Moyse-Faurie 1997:55)

(9)   *E   taulaki   a   vaka*   **mei**   *tai.*
         NPST   moor   ABS   boat   SOURCE   sea
         'Boats are moored in the open sea.' (The speaker sees them.) (id.:206)

(10)   *Ko   lona   ta'ine   la   fa'i   leia   e   eke*   **mei**   *le   fatu la.*
         PRED   her   daughter EMPH   RESTR   DEIC   NPST   sit   SOURCE   SPC   stone EMPH
         '[The boat is arriving in Alofitai], it is her daughter who is sitting on the stone.' (The mother is still on the boat.)

(11)   *E   sola fa'i   a   Veka aia   ki   'uta,   o   tagi*   **mei**   *le   'one.*
         NPST   flee   RESTR   ABS   Veka   DEIC   GOAL   inland COMP   cry   SOURCE   SPC   sand
         'Veka (*Rallus* sp.) flees towards the land, and cries from the beach. ' (towards someone still on the sea who can hear it).

(12)   *O   'oki   ti   kalaga   a   ia*   **mei**   *ai.*
         and   finish   then   call   ABS   3SG   SOURCE   ANAPH
         'And then he shouts from there.' (The hearer is at the opposite extremity.)

(13) *Ko   le   gako   ku   kalalā   **mei**   le   kulo.*
      PRED SPC grease PFV crackle SOURCE SPC cooking.pot
      'The grease crackles in the cooking pot.' (Moyse-Faurie 1997:85)

1.1.3. Temporal Source

Typically, *mei* introduces a noun phrase referring to a place which specifies the origin of an object or a person. However, *mei* can also introduce a temporal location, after verbs which do not necessary refer to motion. Hence, in example (14) below the fact of motion is conveyed by the nominalised phrase *lau 'au* 'your coming', which is introduced by *mei*:

(14) *Na   lekiaise   kau   kai   **mei**   lau   'au.*
      PST   NEG   1SG   eat   SOURCE your come
      'I had not eaten yet when you arrived.' (Moyse-Faurie 1997:101)

1.1.4. Abstract or metaphoric Source

The preposition *mei* may also introduce a noun phrase referring to former events or a metaphoric Source. It then means 'related to', 'concerning' rather than 'from':

(15) *E   kau   mafa'a   **meia**   Petelō.*
      NPST 1SG descend.from SOURCE Petelo
      'I am the descendant of Petelo.'

(16) *Ku   kau   sao   **mei**   le   tu'utāmaki.*
      PFV 1SG   safe SOURCE SPC accident
      'I am safe concerning the accident.' (Lit. I am safe from the accident) (Moyse-Faurie 1997:85)

The semantics and functions of the dynamic centripetal preposition are similar in the languages where it occurs as *mai,* that is, formally identical to the directional adverb 'toward the deictic centre' (cf. §2.1.1). We will see that this formal identity, due to the same origin (cf. note 2), does not extend to their functional and semantic specificities. Examples from East Uvean below show the use of *mai* as the Source preposition introducing place names (17), temporal notions (18), objects (19) or abstract notions (20-21):

EAST UVEAN

(17) *Ko   te   'ū   moa   **mai**   Halalo.*
      PRED SPC CLS chicken SOURCE Halalo
      'They are chicken from Halalo.'

(18)   *'E   fono   telituale **mai**   te   'aho nei   ki   apogipogi.*
           NPST assembly territory SOURCE SPC day   DEIC GOAL tomorrow
           'The territorial assembly will meet from today until tomorrow.'

(19)   *'E   'alu mo koe **mai**   te   magisi ki   te   manu.*
           NPST go   with 2SG SOURCE SPC tubers GOAL SPC animal
           'You are going to take with you [everything starting] from the tubers up to the animals.'

(20)   *'E   iai   te   fafine   ne'e hao   **mai**   te   tau.*
           NPST exist SPC woman   PST   survive SOURCE SPC war
           'There is a woman who survived from the war.'

(21)   *Ko Vaka'ana ko   he   tagata ia   **mai**   te   Ha'avakatolō.*
           PRED Vaka'ana PRED NSPC man EMPH SOURCE SPC Ha'avakatolo
           'Vaka'ana, he is one of the man of the Ha'avakatolo clan.' (Moyse-Faurie 2016:78)

To summarise, the ablative/dynamic centripetal preposition conveys one main piece of information: the point of reference must be different from the deictic centre/the figure, and the motion (real or fictive) is calculated from the point of reference toward the deictic centre. Its meaning is always related to the Source of motion or physical manipulation, and it has no other function.

1.2. The static/essive preposition

1.2.1. Spatial localisation

As a locative preposition, *i* expresses a static spatial localisation: 'at, in, on, between'. Recall that locative prepositions have different suffixes when introducing noun phrases referring to space: *i* + place names (22), *ia* + proper nouns and dual/plural pronouns (23), *iate* + singular pronouns and *iō* + someone's place (24).

EAST FUTUNAN

(22)   *E   nofo a   ia **i**   Ono.*
           NPST stay ABS 3SG STAT Ono
           'He lives in Ono.'

(23)   *E   tauloto   le   sau **ia**   Manafa mo Sa'atula.*
           NPST sit with s.o. SPC king STAT Manafa and Sa'atula
           'The king is sitting between Manafa and Sa'atula.' (Moyse-Faurie 1997:76)

The example (24) expresses a motion event, and the role of the static preposition *iō* is to specify the place where the speaker is living:

(24) *E   sili   le   motokā   a   Palatina **iō**   'oku.*
      NPST go.by SPC car   POSS Palatina STAT 1SG.INDEP
      'Palatina's car is passing by my place.' (id.:86)

1.2.2. Temporal localisation

The static preposition has no allomorphic suffixes when it introduces a temporal localisation, which may refer to a present, past or future event, as in (25) and (26).

(25) *E   kau   tau   mai   ki   leinei **i**   le   asotapu.*
      NPST 1SG   dock CPTE GOAL here   STAT SPC Sunday
      'I will arrive here on Sunday.'

(26) *Ano   o   tio ki   leia tonu le   gāne'a na   nofo ai   a   Petelo*
      go   COMP see GOAL DEIC true SPC place   PST stay ANAPH ABS Petelo
      ***i**   nānafi.*
      STAT   yesterday
      'Go and have a look at the exact place where Petelo stayed yesterday.' (Moyse-Faurie 1997:23)

1.2.3. Expression of the Source

As seen earlier, East Futunan has three different locative prepositions, primarily dedicated to three main functions, namely essive, ablative or allative. What is of interest, however, is the possible use of the same preposition *i* (glossed STAT) in some non-ambiguous situations, for both the static localisation (essive meaning) and the Source (ablative meaning), different from the Goal (allative meaning), which can only be marked with the preposition *ki* as we will see in §1.3. As stated by Bourdin (1997:189) after a similar Palauan example, we can say that "specification of the Source may be said to be less straightforward here than specification of Goal".

As shown in (27) and (28), the essive preposition can indeed express the Source, as long as the figure has not yet left the point of origin.

(27) *E   ulu   atu   le   ta'ine **i**   loto   o   le   ana.*
     NPST cross CFG   SPC   girl   STAT inside POSS SPC   cave
     'A girl is getting out of the cave (going away from the speaker who is staying in the cave).' (traj025_FUD)

(28) *E   kau   'au   **i**   Palesi i   le   aso   tolu.*
     NPST 1SG   come   STAT   Paris   STAT SPC   day   three
     'I will come from Paris on the third.' (The speaker is in Paris.)

In this context, a Goal may be expressed in addition:

(29) *E   kau   'au   **i**   Niumea ki   'Uvea.*
     NPST 1SG   come   STAT   Noumea GOAL Wallis
     'I will come from Noumea to Wallis.' (The speaker is still in Noumea and intends to go to Wallis.) (Atonio Takasi, pers. com.)

Note that if the ablative preposition *mei* is used instead of the essive *i* to introduce

Niumea in the example (30), the meaning is similar, but the speaker cannot be located in

Noumea.

(30) *E   kau   'au   **mei** Niumea ki   'Uvea.*
     NPST 1SG   come   STAT   Noumea GOAL Wallis
     'I will come from Noumea to Wallis.' (The speaker is not in Noumea, but intends to go to Wallis from Noumea.) (Atonio. Takasi, pers. com.)

The possibility of expressing the Source in both ways – that is, using the static

preposition or the Source preposition – also exists in Tuvaluan, but according to Besnier

(2000:342), the restrictions for each use are not as strict as they are in East Futunan: "The

choice between *i* and *mai* (or the combination *mai i*) as a marker of source is not structurally

determined, since either preposition can be used in most cases without affecting

grammaticality. Rather, *mai* is used to mark the most immediate origin, whereas *i* does not

carry such a connotation":

TUVALUAN[5]

(31) *Kō   vau   **mai/i**   Fīti.*
     INC   come   SOURCE/STAT Fiji
     '[He]'s come from Fiji [and Fiji was his last port of call] / [and Fiji was his point of departure].' (Besnier 2000:342)

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[5] To conform to other transcriptions, I have adapted the glosses in the Tuvaluan sentences.

East Futunan and Tuvaluan also differ when the Goal is expressed together with the Source. In East Futunan, the preposition *i* can still express the Source when the Goal is overtly expressed: the initial point of departure is introduced by *i*, and the final Goal by *ki* as in (30), or in the following example.

EAST FUTUNAN

(32)   *E   sopo   ake   le   toe   i   aluga   o   le   pā'ā fatu*
       NPST   jump   TRANSV SPC child STAT above   POSS SPC   wall stone

       tau'aluga ki   loto   o   le   tai.
       high up   GOAL inside POSS SPC   sea
       'The child jumps from the cliff into the sea.' (traj064_FUD)

However, this is not possible in Tuvaluan where only *mai* can express the Source in such a context: "When both source and destination are specified, *mai* must be used, and *i* cannot appear" (Besnier 2000:342):

TUVALUAN

(33)   *Mātou   ne   fōllau **mai**   Nanumea **ki**   Nanumaga i   te   pō sefulu.*
       1PL.EXCL PST sail   SOURCE Nanumea GOAL   Nanumaga STAT SPC   day ten
       'We sailed from Nanumea to Nanumaga on the tenth.' (Besnier 2000:342)

There is indeed a conflation in the meaning of the two prepositions. That is, the essive preposition *i* and the ablative preposition *mei/mai* are both able to express the Source; but there are restrictions, since, at least in East Futunan, the preposition *i* can only express the Source if and only if the figure has not left the initial point, and the verb must be a motion verb. The conflation of essive and ablative meanings is hence only partial.

Nikitina (2009:1114-1116) discusses the semantic relationship between the three major locative roles, also defining different patterns of encoding and cases of conflation. She concludes that in any case, a similar ordering of the three locative roles is expressed, represented on the semantic map (1) (id. 1116), in which "the greater distance between Place and Source compared to the distance between Place and Goal reflects the fact that identical

encoding of goals and static locations is typologically more common than identical encoding of static locations and sources" (id. 1117):

1. Goal---Place-------------Source

East Futunan and Tuvaluan data fits with the ordering of the semantic map (1) above. Yet, the greater distance is not between the Source on the one hand and the Goal and Place on the other hand, but rather, as shown on the map (2) below, between Goal on the one hand and the Place and Source on the other hand:

2. Goal-------------Place---Source

1.2.4. Other functions of the static/essive preposition

An explanation of the use of the static/essive preposition *i* in the expression of the Source of the motion could lie in the fact that this preposition is also used to express causal complements (34 and 35) and comparison (36).

(34) *Kua konā oku mata **i** le afi.*
      PFV prick my eye   STAT SPC fire
      'My eyes are stinging because of the fire.' (Moyse-Faurie 1997:81)

(35) *Kua mavete le laugutu o le li'ua **i** puaka.*
      PFV break.down SPC bank POSS SPC river STAT pig
      'The river bank broke down because of the pigs.' (id.)

(36) *E kese lou gā kie **i** lo'oku.*
      NPST different your CLS loincloth STAT mine
      'Your loincloth is different from mine.' (Moyse-Faurie 2010:309)

Note that in Tuvaluan (Besnier 2000:325), it is the ablative preposition *mai* which can optionally express the cause instead of *i*, as in (37).

TUVALUAN

(37) *Toku masaki ne māfua i/mai te kai valea i te fāipoipoga.*
      my sickness PST originate STAT/SOURCE SPC eat stupid STAT SPC wedding
      'My being sick stems from eating thoughtlessly at the wedding.' (Besnier 2000:325)

The relation between the expression of the cause and the expression of the Source is indeed quite obvious, and in comparative situations, the element which serves as the point of

comparison is also considered as the Source, as the English translation of the example (36) shows. As a Source marker, the meaning of the preposition *i* could be described as an initial point, a 'starting from', in a static point of view, before any motion occurs.

Besides, it is the overlap in the semantics of the two essive and ablative prepositions which can explain their possible combination (*mai + i* in Tuvaluan and possibly in Samoan, see §1.4). Still, in most of the Polynesian languages, three different prepositions do exist separately, each having a main meaning: essive vs ablative vs allative. As we will see in the next section, the allative preposition is the only one of the three that can express the Goal, but neither the Source nor the localisation.

1.3. The goal/allative preposition

1.3.1. Allative meaning

As a locative preposition *ki* has a dynamic, centrifugal meaning: 'towards, at, on, in'. It can introduce toponyms (38), locative nouns (39), personal names (40), common or abstract nouns (41). The Goal can be specific, or it can just consist of a direction, either away from the deictic centre (as in most examples) or towards the deictic centre.

EAST FUTUNAN

(38) *E   motou   ano **ki** Ālofi i   kalasini   i   apogipogi.*
NPST 1PL.EXCL go   GOAL Alofi STAT motor.boat STAT   tomorrow
'We will go to Alofi on a motor boat tomorrow.'

(39) *Na   ulu   a   ia   **ki** fale   o   ina to'o le   sele.*
PST   cross ABS 3SG GOAL house COMP 3SG take SPC   knife
'He entered the house to take a knife.'

(40) *E   likalika fa'i   a   le   toe   la   kae   'au   **kia**   Paulo.*
NPST dread   RESTR ABS SPC child EMPH but   come GOAL Paulo
'The child is a bit afraid but he still goes towards Paulo.'

The Goal preposition *ki* is also used in specific temporal situations, as in (41), to introduce an approaching time:

(41) *Ko   le   toe   kuata **ki**   le   ola tasi.*
      PRED SPC remaining quarter GOAL SPC hour one
      'It is a quarter to one.' (Lit. it is the remaining quarter towards hour one)

There are no restrictions on the compatibility of *ki* with different verbs, as is shown in the following examples with the verb *'au* 'come', which we have previously seen occurring with the ablative and essive prepositions. (See also 40)

(42) *Ko   le   āu   e   'au   **ki**   kunei.*
      PRED SPC smoke NPST come GOAL here
      'The smoke is coming towards here.'

(43) *E   taputu le   'au   a   Lita **kiō**   Soana.*
      NPST frequent SPC come POSS Lita GOAL Soana
      'The visits of Lita to Soana's place are frequent.' (Lit. is frequent the coming of Lita to Soana's place)

1.3.2. Other functions

Just as the static locative preposition (cf. section 1.2), *ki* has several other uses: it introduces objects of middle verbs[6] (44), beneficiaries (45), and instrumental complements (46).

EAST FUTUNAN

(44) *E   loto le   ta'ine **ki**   se   fakatagi*
      NPST want SPC young.girl OBL NSPC   radio
      'The young girl would like a radio.' (Moyse-Faurie 1997:31)

(45) *E   kau tufa   a   lole **ki**   toe*
      NPST 1SG distribute ABS candy BEN children
      'I am distributing candies to the children.' '(id.:85)

(46) *E   fuefue   a   le   finematu'a **ki**   lona faioa.*
      NPST use.a.fan ABS SPC old.woman INSTR her   fan
      'The old woman is fanning herself with her fan.' (id:83)

1.4. Combination of two prepositions

In East Uvean, as in East Futunan, no combination of two of the three locative prepositions – *i* (essive), *ki* (allative) and *mei/mai* (ablative) – is allowed in the same phrase. The only languages in which such a combination is said to be possible are Samoan and Tuvaluan,

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[6] In the Polynesian linguistic tradition, middle verbs are verbs of emotion, sensation, perception and communication which enter specific constructions, with an argument - the experiencer - in the absolutive case and an argument - the patient or stimulus - in the oblique case.

where the ablative preposition *mai* can be followed by the essive *i*. In Tuvaluan, according to

Besnier (2000:342), there is no difference in meaning in the use of simple vs complex

preposition. He notes that the preposition "*mai* combines optionally with *i* to form the

compound *mai i*, which has exactly the same meaning as *mai*, although it is slightly more

formal and deliberate".

For Samoan, Hovdhaugen and Mosel (1992:147) note that "*Mai* [the source

preposition] is frequently used in combination with the locative-directional preposition *i* 'in,

from'…". The examples given, however, are all from Biblical Samoan: *mai ia te*, *mai iā*,

which might be better analyzed as allomorphs of a unique preposition *mai*, which has *maiate*

(+ singular pronouns) and *maiā* (+ plural pronouns and proper names) as allomorphs, as it is

the case in other Polynesian languages.

In Marquesan (Central Eastern Polynesian), the Source preposition can combine with

two other prepositions, the locative preposition '*io* 'at or towards place of X' as in (47), or the

preposition *ma* "which expresses the passage through a location or place" (Cablitz 2006: 450)

as in (48):

MARQUESAN

(47) *Ua he'e Teiki* **mei** '*io he ko'oka mai tihe 'io te ha'e pure.*
     PFV go   Teiki SOURCE AT NSPC trough CPTE arrive AT SPC house prayer
     'Teiki has left from the trough arriving at the church.' (Cablitz 2006:450)

(48) **Mei ma** *tai mai nei au.*
     SOURCE PREP sea CPTE/come? DEIC 1SG
     'I am just coming (somewhere) from the seaward place.' (id.:451)

To conclude on the three locative adpositions, one can observe that the Source/ablative

and the static/essive prepositions can combine in a few languages such as in Tuvaluan,

Samoan and Marquesan, or can partly have the same meaning and function as is the case in

East Futunan as far as the expression of the Source is concerned, even if there are important

restrictions concerning the position of the figure. By contrast, the Goal/allative preposition

cannot combine with any of the two other locative prepositions, and this asymmetry is noteworthy.

1.5. Complex prepositions

There are two kinds of complex prepositions: the first type consists of a preposition plus a nominal lexeme, while the second one consists of the preposition plus a verbal lexeme.

1.5.1. Complex 'nominal' prepositions

These are complex prepositions derived from local nouns referring to internal parts of objects, such as 'inside', 'top', 'bottom'. They include one of the three locative prepositions, followed by a possessive noun phrase introduced by the possessive inalienable preposition *o*. With local nouns, as with toponyms, the prepositions are in their bare forms. Below are examples showing the use of the Source and the Goal prepositions:

EAST FUTUNAN

(49) *Ti ano loa a ia o fa'ī anā gā manu la **ki loto***
   then go SUCC ABS 3sg COMP capture DEIC CLS animal EMPH GOAL inside

   o le fāgogo.
   POSS SPC half.coconut
   'She (the young girl) then captures these little animals (to put them) in a coconut shell.'

(50) *O logo a Sigave kua fai kava a Alo **mei aluga o** le ma'uga.*
   and hear ABS Sigave PFV make kava ABS Alo SOURCE top POSS SPC mountain
   'People from Sigave then heard that people from Alo were preparing kava from the top of the mountain.'

As far as complex nominal prepositions are concerned, the same symmetry between Goal, Source and Place is mentioned by Bourdin (1997:199) for Rapanui, another Polynesian language described by Du Feu (1996): the different complex nominal prepositions are all compatible with the three basic locative (essive, allative and ablative) prepositions.

1.5.2. Complex 'verbal' prepositions

Complex verbal prepositions combine a conjunction (complementizer *o* or *ke* 'that, in order to'), a verb of motion or a verb of position and the Goal/allative preposition *ki*. In East Futunan and East Uvean, several verbs may be part of such complex prepositions: *kaku* 'reach, arrive at', *talu* 'originate', *tu'u* 'stand up', *'au* 'come', *tuku* 'leave', *tau* 'reach'. All combinations imply that the destination has been reached, with differences in the geographical situation of the figure involved in the destination: *o kaku ki* 'up to on a horizontal axis' as in (51), *o tu'u ki* 'up to a standing position' in (52), *o tau ki* 'up to the landing destination' in (53).

EAST FUTUNAN

(51) *Natu   fa'i   a   ia   **o kaku ki**   le   kāiga   o   le   tama.*
      arrive RESTR   ABS 3SG   UP.TO   SPC   domain   POSS SPC   boy
      'He arrives at the boy's place.'

(52) *E   ifo   lenā   le   fā   moamoa   la   **o tu'u ki**   le   'one.*
      NPST go.down   DEIC   SPC CLS   inflorescence EMPH   UP.TO   SPC   sand
      'The inflorescence of the banana tree goes down to the sand.' (Moyse-Faurie 1997:90)

(53) *Ti   'aga a   ia   o   fakato'o   ki   le   fafine   la*
      then face ABS 3SG   COMP   hand.over   BEN   SPC   woman   EMPH

      *ke   ano   **o tau ki**   se   'uluvao.*
      CONJ go   UP.TO   NSPC   bush
      'Then she hands [it] over to the woman so that she goes [with it] up to the bush.'

Following Bourdin (1997:194), we can say that the complex verbal locative prepositions specifically encode Goal-Extent, that is, all the way between the starting point up to the Goal is taken into account. By contrast, in combination with the Source/ablative preposition – *mai* in East Uvean and *mei* in East Futunan –, only the verb *talu* 'originate' is attested, deriving the complex temporal preposition *talu mai/mei* 'since', optionally introduced by the conjunction *o*.

EAST UVEAN

(54) *Kua i   Futuna **talu mai** anaāfi.*
       PFV STAT Futuna SINCE   yesterday
       'He is in Futuna since yesterday.'

<small>EAST FUTUNAN</small>

(55) *Lekiaise tō se   afā   **(o) talu mei** fẽtu'u e   ono.*
       NEG   fall NSPC cyclone SINCE   year   NPST six
       'No cyclone has yet occurred since six years.' (Moyse-Faurie 1997:89)

With respect to the combination of locative prepositions with verbs in order to form complex adpositions, the expression of the Goal is much richer than the expression of the Source, since the latter is limited to the temporal domain and can combine with only one verb, *talu* 'originate'. I have found no complex verbal locative prepositions including the stative/essive preposition.

1.6. Conclusion on the prepositions occurring in spatial relations

The three prepositions investigated in the first section share some properties but differ in others. All of them are compatible with motion, posture or physical manipulation verbs, such as *'au* 'come', *ano* 'go', *nofo* 'stay' or *to'o* 'take'; they show no restrictions as far as the word class (independent pronouns, toponyms, local nouns, proper nouns or common nouns) is concerned and show the same morphological flexions. Of the three prepositions, the Source/ablative preposition is the least diverse in its semantics and functions, and it has the heaviest phonological weight, with two syllables instead of one for the other prepositions. The essive and the allative prepositions have multiple uses, introducing diverse adjuncts as well as oblique arguments. Yet, only the essive preposition is used in comparative constructions or to introduce causal complements, and only the allative preposition marks instrumental.

As already mentioned, in Samoan, two of these prepositions tend to fuse due to a phonological reduction (k > ʔ > ∅, hence the goal/allative *ki* > *ʔi* > *i*, becoming formally similar to the static/essive preposition *i*). To conclude this first section, we can note that there are more complex prepositions to express Goal than to express Source.

2. Directionals

The core function of directionals is "to signal the direction of translational motion of a physical entity in the action encoded by the verb that heads the verb complex" (Lichtenberk, 2003:153), whether or not the head verb encodes the event of motion. Each directional may refer either to the physical path followed by a moving figure, or to the mental path followed by the speaker or the observer, either in space or in time; in narratives, they may also position a participant with respect to another. They are very frequent in imperative clauses, and are not restricted to a specific verb category, being compatible with verbs of emotion or perception, for example. Among their non-spatial uses, they occur in comparative or superlative constructions, and may also express reflexivity and reciprocity, or replace arguments. Personal/deictic markers, local markers and geocentric markers are the three different types of directionals found in Oceanic languages. Not all languages have these three types, but all have at least two or three personal/deictic directionals, which are our main concern in this paper.

According to Pawley (1973; 2003) and Ross (2004:194), most directionals are said to be derived from verbs occurring in serial verb constructions. This explains why directionals are always postposed to the verb, either as part of the predicate phrase, or in a nominalised construction. The grammaticalization from verbs of motion into directionals was already achieved in Proto Oceanic for POc *mai 'come' > 'towards speaker', *[w]atu 'go away' > 'towards addressee', *sake 'go upward' and *sipo 'go downward'; both functions, verbal and adverbial, were maintained in some Polynesian languages, at least for *mai, *sake and *sipo. In some cases, directionals have undergone phonetic reduction as is the case in East Uvean, where the verb *hifo* 'go downward', borrowed from Tongan, has grammaticalized into the directional *ifo* 'downward' (cf. examples (65) and (66)).

2.1. Personal/deictic directionals

Personal directionals vectorise an event toward a specific participant. In some Polynesian languages, three personal directionals form a paradigm, in a same person oriented deictic system as the demonstratives. In East Uvean for example: *mai* 'towards the speaker; towards the point of reference of the discourse, hither', glossed as CPTE for centripetal (56), *atu* 'towards the addressee, away from the point of reference of the discourse, thither' glossed as CFG for centrifugal (57), and *age* 'away from the speaker or the addressee' glossed as TRANSV for transverse (58):

EAST UVEAN

(56) *Ne'e   ina   toho   **mai**   tona   kupegá.*
      PST   3SG   pull   CPTE   his   fishnet
      'He brought back his net towards him.' (Moyse-Faurie 2016:156)

(57) *'E   au   fia   'alu **atu**, kae   au   mataku.*
      NPST   1SG   feel like go   CFG   but   1SG   fear
      'I feel like going towards you but I am afraid.'

(58) *Ko   ai   te   matu'a   'aē   'e   'alu **agé** ?*
      PRED   who   SPC   old man DEIC   NPST   go   TRANSV
      'Who is that old man passing by?' (Moyse-Faurie 2016:158)

　　　Let us look more precisely at the meanings and uses of the personal/deictic directionals before examining their compatibilities with the different locative prepositions.

2.1.1. The centripetal directional 'hither'

The centripetal directional *mai* is used for situations in which the participant belongs to the sphere of the speaker or the sphere of the deictic centre, as in (59) and (60).

EAST UVEAN

(59) *Ko   taku   māu   ki   te   tupu'aga   **mai**   o   te   fu'u   niu…*
      PRED   my   knowledge   GOAL   SPC   origin   CPTE   POSS SPC   CLS   coconut
      'According to what I know of the origin of the coconut tree…' (Moyse-Faurie 2016:251)

EAST FUTUNAN

(60) *E ulu **mai** le ta'ine ki loto o le ana.*
NPST cross CPTE SPC girl GOAL inside POSS SPC cave
'A girl is entering the cave (towards the deictic centre who is staying in the cave).'
(traj22_FUD)

2.1.2. The centrifugal directional 'thither'

The centrifugal directional *atu* is used for situations regarding the sphere of the addressee,

whether the latter is still present (61) or whether he has already left the deictic centre (62).

EAST UVEAN

(61) *To'o **atu** te heka'aga 'aenī.*
take CFG SPC chair DEIC
'Take the chair (which is) near me.' (Moyse-Faurie 2016:87)

EAST FUTUNAN

(62) *Kua kaku **atu** le folau.*
PFV arrive CFG SPC travel
'The travellers arrived at your place [but you were not there].' (Moyse-Faurie
2016:112)

The directional *atu* can also occur in order to indicate that the motion is undertaken by

the figure, who has moved away from the speaker and his circle:

(63) *Nao mavae **atu** nei fua a Petelo mo tātou.*
IMM.PST separate CFG now just ABS Petelo with 1PL.INCL
'Petelo just left us.' (Moyse-Faurie 1997:95)

2.1.3. The transverse directional 'away'

In East Uvean, the directional *age* is used for situations belonging neither to the sphere of the

speaker nor to the sphere of the addressee. It may also refer to a direction along the coast,

neither towards inland nor towards the sea.

EAST UVEAN

(64) *Ne'e lolotoga huo nāua kae tolotolo **age** te temonio kiā Sinilau*
PST PROG hoe 3DU but creep TRANSV SPC devil GOAL Sinilau

ke ina kai.
that 3SG eat
'While they were hoeing, the devil crept away towards Sinilau in order to eat.'
(Moyse-Faurie 2016:145)

2.2. Local directionals

Local directionals are defined in reference to a physical feature of the local situation: up/down, in/out. In Polynesian languages, only the up/down axis is grammaticalised by using directionals, whereas in Melanesian languages such as Mwotlap spoken in North Vanuatu (François 2003) or Xârâcùù spoken in New Caledonia (Moyse-Faurie 1995) for example, the in/out axis also relies on directionals.

EAST UVEAN

(65) *Pea sio **ake** te fafine pea ina ui ke hifo **ifo**.*
      and see UP SPC woman and 3SG say that go.down DOWN
      'And a woman saw him up there and asked him to come down.' (Moyse-Faurie 2016:158)

(66) *Ne'e 'alu **ifo** ia Tagaloa mai lagi o 'a'au tona kupegá.*
      PST go DOWN ABS Tagaloa SOURCE sky COMP throw his net
      'Tagaloa went down from the sky and threw his fishing net'. (id.:190)

In some Oceanic languages, geocentric directionals are defined in reference to absolute (geographic) coordinates: seaward, landward (Ozanne-Rivierre 1998; François 2003). They are not attested in Polynesian languages. Corresponding expressions are PPn *tahi 'sea', and *quta 'ashore, inland', but like other locatives (including toponyms), they must be preceded by a preposition. In Polynesian languages, directionals refer to an axis (PPn *hake 'upwards, towards the land', PPn *hifo 'downwards, towards the sea'), and must be distinguished from locatives, which refer to a place and do not behave as directionals. In East Uvean for example locative nouns can be preceded by any of the three locative prepositions to form locative complements such as *mai tai* 'coming from the sea'; *ki 'uta* 'towards inland'; *i 'uta* 'inland' as in (67).

EAST UVEAN

(67) *Ne'e mā i **'uta**.*
      PST 1DU.EXCL STAT inland
      'Both of us were inland.'

2.3. Main uses of directionals

The three (centripetal, centrifugal and transverse) personal directionals are often call *deictic*

directionals, because they entail reference to the deictic centre. As shown by Hooper (2004)

for Tokelauan, the deictic centre needs not to be the subject; rather, it indicates the point of

view of the main protagonists of the discourse, as in the Tokelauan example (68), in which the

experiencer is not overtly mentioned, but is known by the context to be the narrator and his

companions:

TOKELAUAN

(68) *Ko   te   taimi kua oho **mai** te   lā,   e   kitea **mai***
      PRED SPC time   PFV rise CPTE SPC   sun   NPST see   CPTE

      te   oneone o   te   matāfaga.
      SPC   sand   POSS SPC   beach
      'At the time that the sun rose, the sand of the beach was visible to us.' (Hooper
      2004:1755-1756)

      The core function of these directionals is to express physical motion through space.

They are also very often used to express directionality of events that do not involve

translational motion of physical objects, such as perception and speaking; hence in East

Uvean, *age* often occurs after verbs of speech such as 'say', 'tell', 'agree', etc.:

EAST UVEAN

(69) *Pea 'ui **age** leva e   te   tagata 'aē ne'e ha'u…*
      and say TRANSV EMPH ERG SPC   man   DEIC PST   come
      'The man who was arriving told him…' (Moyse-Faurie 2016:138)

      Let us also mention one of the local directionals, which has a specific form in East

Uvean: *ake* 'upwards', 'towards land when at sea', as shown in (70).

(70) *Pea heheka nāua ki   te   vaká o   foe   **ake** ki   Vailala.*
      and sit(PL) 3DU   GOAL SPC   boat COMP paddle UP   GOAL Vailala
      'And both of them climbed in the boat and paddled towards Vailala.' (Mayer
      1976:106)

      Just as the 'personal' directionals do, the local directionals may express directionality

without physical motion (Talmy 2017's *fictive motion*), as is the case after verbs of speech or

perception, as shown in the following example East Uvean with the local directional *ifo* 'downwards':

(71)   *Pea   logo   **ifo**   ia   Puakavahe   kua   lavea   ia   Mūtao.*
     and   listen   DOWN   ABS   Puakavahe   PFV   hurt   ABS   Mutao
     'Then Puakavahe heard from downwards that Mutao was hurt.' (Henquel 1910:57)

Most of the other Polynesian languages only have four directionals, because of the merging of PPn *aŋe 'away from both the speaker and the addressee' (deictic meaning); 'along, obliquely' ('transverse' geocentric meaning) and PPn *hake 'upwards'. This is the case in Tuvaluan, Māori, or Marquesan. Note that *aŋe doesn't seem to have a verbal origin, in contrast to *ake* < *hake 'go up'.

In East Futunan, only three directionals are attested: *mai* 'hither', 'towards the deictic centre', 'towards the speaker' or, in narratives, 'towards the place or the figure the speaker is talking about'; *atu* 'thither'; and *ake* which conflates the upwards local meaning and the deictic transverse meaning. Hence, in East Futunan, there are no local directionals strictly speaking, since *ake* is mostly used as a deictic directional (examples (72) and (73)), even if it is formally equivalent to the East Uvean 'upwards' directional and may have a local upward meaning in some contexts.

EAST FUTUNAN

(72)   *Kua   kaku   **ake**   le   folau.*
     PFV   arrive   TRANSV   SPC   travel
     'The travellers arrived at other people's place/over there.' (Moyse-Faurie 1997:113)

(73)   *Seu   **ake**   sana   ne'akai!*
     serve   TRANSV   his   food
     'Serve him his food!' (id.)

For Māori, Bauer (1997:350) lists *mai* 'hither, towards speaker', *atu* 'away from speaker', *ake* 'upwards *from* speaker' and *iho* 'downwards *towards* speaker', which makes two centripetal and two centrifugal directionals. The first pair concerns the horizontal level, while the second concerns the vertical level.

MĀORI

(74) *E   kō,   hoki **mai**, hoki   **mai**…*
      VOC girl   return CPTE   return   CPTE
      'Daughter, come back, come back…' (Bauer 1997: 351)

(75) *He kura   pae   āku, nō   reira kāre e   whakahoki-a   **atu**.*
      CLS feather come.ashore my   belong there NEG IPFV CAUS.return-PASS CFG
      'Feathers washed ashore are mine, and so I'm not going to return them.' (id.)

(76) *Ka hoki **ake** anō   te   kōtiro rā   ki   te   pā…*
      TAM return UP   again SPC   girl   DEIC GOAL SPC   elder
      'The girl returned up to the elder again…' (Bauer 1997: 352)

(77) *Peke   **iho**   ki   runga i   te   moenga!*
      jump   DOWN   GOAL top   AT   SPC   mattress
      'Jump down unto the mattress.' (id.)

According to Cablitz (2006), Marquesan also has four directionals: *mai* 'towards speaker', *atu* 'towards addressee (or a 3rd person)', *a'e/ake* 'upwards' and *iho* 'downwards', but these two local directionals are not speaker oriented, in contrast to Māori.

The examples below show the wide range of combinatorial possibilities between deictic directionals and motion verbs non-spatially oriented. Verbs such as *sa'ele* 'walk' and *kaku* 'arrive' are compatible with the three centripetal, centrifugal and transverse directionals:

EAST FUTUNAN

(78) *Sa'ele   **mai**!*
      walk   CPTE
      'Come here!' (Moyse-Faurie 1997:178)

(79) *Sa'ele   **atu**!*
      walk   CFG
      'Go away!' (id.)

(80) *Sa'ele   **ake**!*
      walk   TRANSV
      'Walk!' (to someone who is not near the speaker) (id.)

(81) *Kua kaku   **mai**   le   folau.*
      PFV arrive CPTE   SPC   travellers
      'The travellers arrived (here).' (Moyse-Faurie 1997:111)

(82) *Kua kaku   **atu**   le   folau.*
      PFV arrive CFG   SPC   travellers
      'The travellers arrived (at your place).' (id.:112)

(83)   *Kua kaku **ake**   le   folau.*
        PFV arrive TRANSV SPC travellers
        'The travellers arrived (over there).' (id.:113)

The same symmetric compatibility is found between directionals and perception or speech verbs:

(84)   *E   io   **mai**   a   ia.*
        NPST agree CPTE ABS 3SG
        'He agrees with me/us.' (id.:111)

(85)   *E   kau io   **atu**   e   tā   ano.*
        NPST 1SG agree CFG NPST 1DU.INCL go
        'I agree with you, we are going to leave.' (id.:112)

(86)   *E   kau logologo **ake**   ka   āvaga loku kaune'a.*
        NPST 1SG hear   TRANSV IMM   marry my   friend
        'I hear that my friend is getting married.' (id.:113)

In East Futunan, there are, however, incompatibilities between verbs such as *'au* 'come' or *ave* 'take' and some of the directionals, due to semantic incompatibilities; consequently, there is an asymmetry in the combination of motion and manipulation verbs with directionals. For example, *'au* 'come' cannot combine with the centrifugal directional *atu*, but can be followed by the transverse directional *ake*:

(87)   *'Au **ake**   mu'a ei   loku   tama!*
        come TRANSV first eh! my   son
        'Do come there first, my son!'

On the other hand, the verb *ave* 'take' cannot combine with the centripetal directional *mai*.

2.4. Other uses of directionals

Although the majority of the occurrences of the directionals pertain to spatial reference, they are also found in several other functions:

(i) As benefactive participants (including addressees, as in (89)), they may occur instead of the explicit beneficiary participant, as in the examples below.

EAST FUTUNAN

(88) *Na kakau **mai** le toe e lona tinana.*
     PST send CPTE SPC child ERG his mother
     'The mother sent me/us her child.' (Moyse-Faurie 1997:111)

(89) *E kau kole **atu** ke ke 'au.*
     NPST 1SG ask CFG that 2SG come
     'I am asking you to come.' (id.:112)

(90) *Seu **ake** sana ne'akai!*
     serve TRANSV his food
     'Serve him some food!' (id.:113)

(ii) They may convey aspectual or modal values. In East Uvean, for example, *atu* may confer a continuous aspect value as in (91), whereas *ake* is oriented towards the future (92):

EAST UVEAN

(91) *'E lelei age ke ke 'alu o hoko **atu** tau akó i Falani!*
     NPST well TRANSV that 2SG go COMP continue CFG your study STAT France
     'It would be good if you go and continue your studies in France!'

(92) *I te 'aho **aké** ne'e matou olo o gelu.*
     STAT SPC day UP PST 1PL.EXCL go(PL) COMP fish
     'On the next day, we went fishing.' (Moyse-Faurie 2016:89)

(iii) All the directionals can occur in constructions expressing comparison of similitude or inequality (Moyse-Faurie 2018):

EAST FUTUNAN

(93) *E fetoso loku loto ke lasi **ake** au i le 'uluaki.*
     NPST pull my will that big TRANSV 1SG OBL SPC elder
     'I want to be bigger than my elder (brother).'

3. Combination of prepositions and directionals

In the last part of this article, I will examine the uses and distribution of the Source and Goal prepositions on the one hand, and the deictic directional adverbs on the other hand, taking into account their combinatorial possibilities, the spatial meaning they convey, the position of the participants, and the verb meaning, in order to better understand the asymmetry between Goal and Source as far as the combination of prepositions and directionals is concerned.

3.1. Combination of the centripetal directional and the Source preposition

The centripetal directional can combine with the Source preposition whether the two forms are phonologically similar (East Uvean) or not (East Futunan, Niuafo'ou, Marquesan). In East Futunan, as mentioned before, the Source preposition (SOURCE) is *mei*, which is different from the centripetal directional modifier *mai* 'towards the speaker'. In East Uvean, both morphemes are formally identical, but still differ in their syntactic and semantic functions, in the same way as *mei* and *mai* in East Futunan, as can be seen in the examples (94) and (95) in which they both occur.

EAST FUTUNAN

(94)   *E   ke   makape   **mai**   **mei**   fale?*
       NPST   2SG   run   CPTE   SOURCE   house
       'Are you going to run towards us from the house?'

(95)   *E   mapusi   **mai**   le   matagi   **mei**   'uta.*
       NPST   blow   CPTE   SPC   wind   SOURCE   inland
       'Wind is blowing towards us from inland.'

In Niuafo'ou, both morphemes are also formally distinguished, the directional *mai* indicating the direction towards the deictic centre, and the preposition *mei* the Source/origin of the trade, as is shown in (96).

NIUAFO'OU

(96)   *Ne   au   fakatau   **mai**   te   peni   **mei**   kolo.*
       PST   1SG   trade   CPTE   SPC   pen   SOURCE   town
       'I bought a pen in town.' (Tsukamoto 1988:167)

In the East Uvean example (97), we find exactly the same meaning contrast between the directional and the preposition, in spite of their formal identity:

EAST UVEAN

(97)   *'E   hake   **mai**   (ia)   **mai**   tai.*
       NPST   go.up   CPTE   (3SG)   SOURCE   sea
       'He is coming toward us from the sea.'

3.2. Combination of the centripetal directional and the Goal or static/essive prepositions

In East Futunan, the centripetal directional can combine with the Goal preposition (98) as well

as with the static preposition and the Source preposition (99), each having different referents

belonging to different phrases.

EAST FUTUNAN

(98) *E   falele **mai** le   niu   **ki**   loku   fale.*
      NPST lean   CPTE SPC coconut GOAL my   house
      'The coconut tree is leaning towards my house.' (Moyse-Faurie 1997:111)

(99) *E   pale   **mai** le   ta'ine **i**   le   gā   kākega **mei**   le   vai.*
      NPST go.up CPTE SPC girl   STAT SPC CLS ladder SOURCE SPC river
      'The girl is coming up toward us on a small staircase, coming from the river.'
      (traj074-FUD)

In East Uvean, it is also possible to combine the centripetal deictic directional either

with the Goal preposition (100) or with the static one (101), each phrase having different

referents:

EAST UVEAN

(100) *'E   au   tu'ania na'a   lua tuai   **mai**   **ki**   te   fonó.*
       NPST 1SG fear   fear.that 2DU be.late CPTE GOAL SPC meeting
       'I fear that you will be late for the meeting. ' (Moyse-Faurie 2006:106)

(101) *'E   lelei age   ke   ke   ha'u   apogipogi o   tokoni **mai***
       NPST well   CFG that 2SG come tomorrow   COMP help   CPTE

       ***i**   te   gāue'aga!*
       STAT SPC field
       'It will be good if you come to help me tomorrow in the fields.' (id.:240)

Quite frequent is the combination of the centripetal directional *mai* and the Goal

preposition *ki*, if both have the same personal referent:

EAST UVEAN

(102) *Tuku tau   'ita   **mai** **kiā**   au!*
       stop   your anger CPTE GOAL 1SG
       'Stop being angry at me.'

(103) *Foki   **mai**   **kiā**   au!*
       return CPTE   GOAL   1SG
       'Come back toward me!'

The Samoan directional *mai* "indicating direction towards the speaker or some other chosen point of" (Mosel & Hovdhaugen 1992:380) may combine with the static locative preposition *i* (104) and such is also the case in Tuvaluan (105).

SAMOAN

(104) *...le   teine lenei 'o   tā'oto **mai** **i**   le   fuefue.*
       …SPC girl DEIC PROG lie   CPTE STAT SPC *fuefue*
       '…this girl who was lying in the *fuefue* [a plant].' (Mosel & Hovdhaugen 1992:380)

TUVALUAN

(105) *te   fale   tēlā i   mua **mai** **i**   te   maneapa*
       SPC   house DEIC STAT front CPTE STAT SPC maneaba
       'the house on this side of the *maneaba*' (Besnier 2000:347)

No asymmetry can be found between the three prepositions expressing Source, Goal and Place; they can equally combine with the centripetal directional.

4. Other constructions linked to spatial expressions

In this last descriptive section, I will rapidly mention three other constructions related to the expression of space, here again looking for asymmetry between Source and Goal.

4.1. Constructions with the multifunctional conjunction/adverb *mo*

We have seen that only one preposition is devoted to the expression of the Goal, whereas two locative prepositions can express the Source. In addition, another construction using the conjunction *mo* can also express the Source, even if its main meaning ('with, and, also') confers an additive or comitative value. *Mo* can express the Source in a comparison process between the position of the figure and the point of origin of the (most often fictive) motion, as in (106) and (107), the latter repeated from (63):

EAST FUTUNAN

(106) *E   tusa   loku fale   **mo** le   tānuma.*
       NPST to.face my   house   COM SPC cemetery
       'My house is facing the cemetery.' (Moyse-Faurie 1997:87)

(107) *Nao   mavae atu   nei fua a   Petelo **mo**   tātou*
     IMM.PST leave CFG   now just ABS Petelo COM 1PL.INCL
     'Petelo just left us.' (id.:95)

     A similar function performed by *mo* is described in Tuvaluan by Besnier (2000:343) in the context of "verbs denoting motion or motion-like ideas away from the referent of the object":

TUVALUAN

(108) *Tamaliki ne   afuli nē au   **mo**   te   lulu puaka.*
     child   PST chase ERG 1SG COM SPC pen pig
     'I chased the children away from the pig pen.' (Besnier 2000:343)

4.2. The *faka-* adverbial derivation

Locative nouns (109) and toponyms (110) can be adverbialised with the prefix *faka-*[7], conferring the meaning 'in the direction of', 'in the vicinity of', in Bourdin's terms (1997:191). More precisely, this derivation confers a semantic specification of Goal-Approximation. The derived adverb is part of the predicative verb phrase, immediately postposed to the verb.

EAST UVEAN

(109) *'E   hake   **faka'uta**   ia   Mikaele.*
     NPST go up   PREF.inland ABS Mikaele
     'Mikaele is going up in the direction of the plantations.' (Moyse-Faurie 2016:169)

EAST FUTUNAN

(110) *Na   ano   **fakaSa'avaka**   māua.*
     PST go   PREF.Sa'avaka 1DU.EXCL
     'We both went toward/in the direction of Sa'avaka.'

     This Goal-Approximation derivation is only attested with centrifugal motion verbs, and hence cannot indicate a Place or Source approximation.

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[7] Besides this locative 'approximative' adverbializing function, the prefix *faka-* derives adverbs of manner; its main function, however, is to derive bivalent or trivalent verbs from monovalent or bivalent ones, with a causative meaning.

4.3. Incorporation of local nouns

Finally, a construction consisting of a verb of position or motion, immediately followed by a local noun or a noun referring to a place, is worth mentioning since it concerns only the expression of Goal or Place, and not that of Source. This construction is similar to what is known as object or noun incorporation, one of the well-known valency-reducing strategies, resulting in an intransitive verbal compound. When a noun referring to a place is incorporated to the verb, the resulting compound often confers a habitual meaning to the local or motion event.

In (111), *fale* 'house' is introduced by the stative/essive preposition *i*, indicating that the figure is right now staying at her place, and not elsewhere, while in (112), the verbal compound *nofo fale* indicates that the figure habitually stays at home:

(111)   *Kua   nofo   **i**   **fale**   a   le   tai'ine.*
        PFV   stay   STAT   house   ABS   SPC   young.girl
        'The young girl is now staying at home.'

(112)   *Kua   nofo   **fale** a   le   tai'ine.*
        PFV   stay   house ABS   SPC   young.girl
        'The young girl is usually staying at home.'

5. Conclusion

We can conclude that in the Polynesian languages investigated in this article, the expression of Goal and Source is of similar complexity, though realised in different ways. Different types of asymmetry have been found. Goal is expressed by a single marker, *ki*, to which can be added some specification to indicate that the Goal has been reached, or to indicate the spatial relations on the absolute up/down axis with complex prepositions (cf. § 1.5.2). With regard to Source, different markers can be used, and this situation is remarkable in a typological perspective, as it is a case of configurational asymmetry between Goal and Source: the expression of Goal is more straightforward than the expression of Source.

It is thus not a question of complexity which distinguishes between the expression of the Source and the expression of the Goal, but a question of variety of resources offered to

express fine-grained distinctions for Source vs. Goal depending on the position of the figure, which enables to detail different perspectives. In the case of the Source expression, if the figure is still at its point of departure, the static/essive preposition is used; in contrast, if the figure has already left its initial point, the source/ablative preposition is required.

Another case of asymmetry relates to the fact that there is only one Source oriented deictic directional, 'towards speaker', whereas there are two Goal oriented directionals, 'away from speaker and addressee' and 'towards addressee' (cf. §2.1). The Goal preposition also has more fine-grained possibilities for the encoding of Goal-Extent, due to its possible combination with verbs in order to form complex prepositions. These complex prepositions can take into account the position of the figure which will reach the Goal. Source has a richer choice as far as locative prepositions are concerned, but it has no complex verbal prepositions except for the temporal 'since' meaning (cf. §1.5.2). Contrasting with the Goal-Approximation strategy expressed with the *faka-* derivation, no equivalent construction has been found for the Source. As stated by Kopecka & Ishibashi (2011:147), asymmetry between Source and Goal expressions is not unilateral, and must be studied taking into consideration each component and construction involved in the expression of Goal, Source and Place in a given language.

Abbreviations (others than the Leipzig glossing rules conventions)
ABS absolutive marker, ANAPH anaphoric, CFG centrifugal directional, CPTE centripetal directional, COLL collective, COM comitative, COMP complementiser, DEIC deictic, DIR directional, DU dual, EMPH emphatic particle, ERG ergative marker, EXCL exclusive, GOAL allative preposition, HUM human, IMM immediate, INC inceptive, INCL inclusive, INT intensifier, NPST non past, NSPC non specific article, PFV perfective, PRED predicative marker, PREF prefix, PROG progressive, PST past, RESTR restrictive particle, SOURCE ablative

preposition, SPC specific article, STAT static/essive preposition, SUCC successive, TRANSV

transverse directional.

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