An Extended Study on Tense and Aspect Markers in Pagu

Dalan Mehuli Perangin Angin

dalan@usd.ac.id

English Letters Department, Universitas Sanata Dharma, INDONESIA

Abstract

This paper revisits four clitics of Pagu (a West-Papuan language spoken in North Halmahera, Indonesia) those that have been described as Tense and Aspect markers (Wimbish 1991): -oka, -ou -osi, and -uli. The first one is considered a tense marker for 'non-future' time, while the other three are aspect markers for 'perfective', 'imperfective', and 'repetitive' respectively. Following a metatypy approach (Ross 2006; 2001), I argue that while these clitics have the tense-aspect functions, at the same time under a unified analysis, each should have an extended function vis. a 'locational marker of space and time', 'confirmative', 'durative', and 'repetitive presupposition marker', respectively. These meanings and functions are based on the speakers' interpretation of them in the local lingua franca (a variety of the North Maluku Malay). This supports Bowden's (2012) argument that the indigenous languages of North Halmahera (Papuan) have influenced the present varieties of Malay spoken as the lingua franca in the region.

Keywords: Papuan language; metatypy; TAM markers; North Maluku Malay

Introduction

This paper analyses the functions and meanings of the four clitics: *-oka*, *-ou*, *-osi* and *-uli* of Pagu, a Non-Austronesian language spoken in the Halmahera Island. The morphology of Pagu is complex, with morphemes seeming to display richer functions than previously described which tends to be narrow and mostly follow linguistic categories found in European languages, particularly tense and aspect (Wimbish 1991).

If we study the wide range of Pagu data where each of the mentioned clitics occurs and look at the local Malay translations, we will see that it has more than just tense and aspect functions. In fact, the local Malay translations on Pagu transcriptions done by the native speakers of both languages were key to understanding the meanings and functions of the morphemes.

I believe the indigenous language of Pagu has influenced the people to speak their Malay

variety, the lingua franca spoken Northern Maluku. See, for instance, Bowden's (2012) discussion on the retention of features of indigenous languages on the North Maluku Malay in order to mark their identity as local people that differ from other Malay varieties throughout Indonesia. The Pagu people's retention of features of the morphemes in their local Malay is necessary for them to maintain the expressions, thoughts, and concepts of their ancestral language. Therefore, studying how the language express the Pagu clitics will help us understand their functions/meanings more profoundly.

Changes in morphosyntactic type and grammatical constructions in multilingual communities such as Pagu are very common worldwide, known as *metatypy* (Ross 2006; 2001). Although not all morphemes have local Malay equivalents, one can grasp the speakers' understanding of them through in-depth interviews and elicitations with questions such as literal translations of the morphemes in different contexts (Himmelmann 1998). In addition, body gestures can help express meanings (Fast 2014; Black 2011).

In this paper, I assume that the local Malay (a variety of the North Maluku Malay especially spoken by the Pagu people) has experienced some metatypy processes from their indigenous Pagu language morphemes. In other words, there must be certain expressions of each of the clitics in the local Malay. Thus, their closest functions and meanings are best described based on the speakers' interpretation in this Malay variety.

The Two Languages

Pagu is spoken at the southeastern end of the northern peninsula of Halmahera Island, North Maluku Province, Indonesia (Figs. 1 and 2). Administratively, it belongs to the North Halmahera Kabupaten (Regency), with Tobelo as the capital.

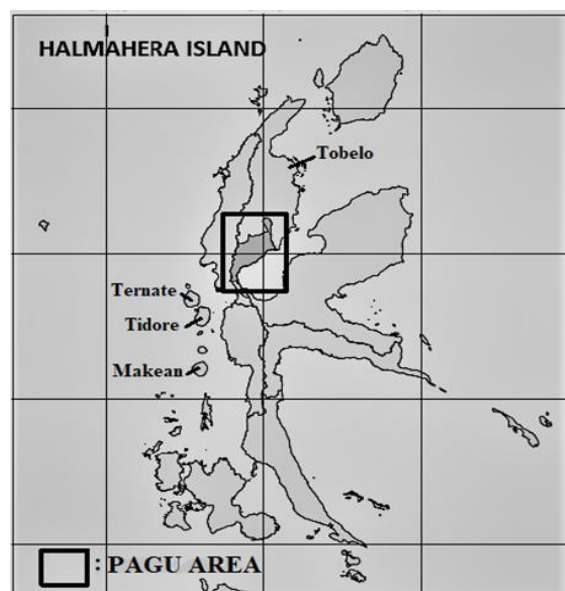**Figure 1**. Map of Indonesia showing Halmahera

Figure 2. Map of Halmahera showing the Pagu area

According to the 2012 census, the language is spoken by half of the total population of 5500 (Hisyam et al. 2012). It is mostly used by people over forty years while the youngest speakers of the language are around twenty-five years old. It lacks generational transfer, as parents tend to speak the local Malay, which is the lingua franca of the region (Hisyam et al. 2012). Based on Wurm's (1982) categories, we can classify Pagu as an 'endangered language', where good speakers of the language are young adults (Perangin-Angin 2018).

The first attempt to revitalize the Pagu language was conducted by the Indonesian Institute of Sciences (LIPI) with a multi-disciplinary team, consisting of two anthropologists, a historian, and a linguist (myself), from 2011 to 2014. It produced several works including: (i) a triglot 'pocket' Pagu-Indonesian-English dictionary consisting of approximately one thousand five hundred

word-entries, (ii) teaching-learning materials for elementary school grades one, two, and three, and (iii) a regulation of the local government that states that Pagu and the two other indigenous languages in the North Halmahera regency, Modole and Boeng (a dialect of Tobelo spoken in the northern region that borders Pagu and Modole), are a compulsory subject in elementary, junior, and high school.

Malay is classified as an Austronesian language (Eberhard et al. 2020). It has been used in the region for roughly four hundred years (Robertson 1906). Due to long contact with Malay and the fact that Malay is more economically, socially, and politically beneficial than Pagu, Malay has become more prominently used. Malay is widely used in all Pagu villages, especially in coastal areas, as residents come from various communities in Halmahera and outside the island. Over half of the Pagu population consider themselves native speakers of the local Malay, and others have little or no knowledge of Pagu (Perangin-Angin 2018).

Local Malay referred to in this paper is the intra-ethnic variant of North Maluku Malay spoken by the Pagu people. According to Bowden (2012), this Malay variant is heavily influenced by the Ternate language, another indigenous language belongs to the West Papuan language family (Voorhoeve 1983). This can be seen from many of its words in the Malay variant, such as *ngana* (singular second person) and *ngoni* (plural second person). North Maluku Malay has become the lingua franca in the region used by people with different indigenous languages, and has gradually become the first language for many. While people from different backgrounds use the lingua franca with each other for business, they also have their own variants.

The Malifut Kecamatan (sub-regency), for instance, has two ethnic groups: the Pagu and Makean people. The latter was relocated from Makean Island (see Fig. 2) to Malifut by the local government in the 1970s due to a volcanic threat (Wilson 2008). Currently, the same dialect of North Maluku Malay as that used in Ternate, the biggest city in the province, is generally used in everyday conversations. However, people from the same community tend to use a dialect that has features of their indigenous language. In this paper, local Malay refers to the Malay variant spoken by Pagu people to each other. For instance, the Pagu articles *o* and *ma* very commonly appear in front of noun phrases.

Pagu Verbal Morphology

Pagu verbs are very rich in morphology (Wimbish 1991; Perangin-Angin 2018). Any verbs including ditransitives, transitives, intransitives/adjectives/statives in Pagu must be attached by one or two pronominal prefixes that cross-references with the subject and/or object argument.

The subject alignment does not follow the Split system (Holton 1997; 2008) where some unspecified verbs (either active or statives) select the subject pronoun prefixes (subjective paradigm) and some others object pronoun prefixes (objective paradigm). Rather, the active and stative verbs behave differently. The active verbs can be said to be aligned syntactically as the verbs must always be marked by a subject prefix that cross-references with the subject. The statives on the other hand can be syntactically or semantically aligned depending on the speakers' perception whether the subject (undergoer) suffers from the event or not. Thus, for example, the stative *sawin* 'hungry' can be marked by the subject prefix *wo-* (3SM.S) 'he' or the object *wi-* (3SM.O) 'him'. While the former can be interpreted as non-empathetic 'he is hungry', the latter empathetic 'something caused him to be hungry (so he is suffering from it now)'. Morphosyntactically, there is no difference between active and stative marking i.e. *wo-leal* (3SM.S run) 'he runs' and *wo-sawin* (3SM.S hungry) 'he is hungry'

The object alignment on the other hand follows some particular semantic hierarchy of the object. Firstly, any human object of a two-place predicate must be marked by an object prefix. Seconldy, a non-human object of a two-place predicate by contrast can be marked or unmarked depending on whether it is *active accomplishment* (the action changes the state of the object) or *activity* (the action does not

change the state of the object); The terms are known as Aktionsart verb classes, first developed by Vendler (1957) and further improved by other scholars including Dowty (1979) and Van Valin (2005). While the former is marked the latter is unmarked, e.g. 'hitting a coconut' can be an activity (e.g. 'the coconut is still intact') or active accomplishment (e.g. 'now the coconut has been cut into two'). Finally, in a three/more place predicate, beneficiary object is always marked over a patient object. For example in 'she asked me about the rice for the woman', the patient 'me' is unmarked whereas the beneficiary 'the woman' is marked (Perangin-Angin 2018).

In addition, verbs can also be attached by clitics and other affixes. Prefixes can be inflectional or derivational. The derivational ones are prefixes such as the reflexive marker *ma-*, causative *si-*, simultaneous *maka-* etc. The inflectional prefixes are the pronominal prefixes (argument markers). The TAM markers (*-oka*, *-ou -osi*, and *-uli*), the negator *-uwa* and the directional markers *-ino* 'to here' and *-ika* 'to there' are clitics in the form of suffixes (they appear after the stem or after another clitic).

Schematically, the Pagu verbal morphology looks like the figure below. The verb stem must always be preceded by one or two argument markers (pronominal prefixes) followed by the derivational one and closed by one or more TAM markers/clitics.

Table 1. Order of Pagu verbal morphology

Argument markers	Derivational	Stem (+reduplication)	clitics

Sentence (1) demonstrates verbal morphology. The verb stem *olik* 'bathe' is marked by the derivational reflexive prefix *ma-* and pronominal prefix *wo-* that cross-references with the pronoun *una* 'he'. Two clitics are attached: the tense marker *-oka* and aspect marker *-ou*.

(1)   *Una$_i$ wo$_i$-ma-olik-oka-ou.*
       3SM   3SM-REFL-bathe-N.FUT-PERF
       'he has/had bathed himself'

The glossing of (1) follows Wimbish (1991). The perfect reading of the sentence results from the occurrence of *-oka* and *-ou*, which function as a past tense marker (non-future) and perfective marker, respectively. We will see in the discussion that each of the clitics will be analyzed to have a broader function in order to have its thorough array of description.

Methodology

Descriptive linguistic activities or writing a grammar of little studied and unstudied languages have been compared with 'making a map', where researchers see the *landscape* of the target language from high above in order to see its overall *view* (Payne 1997). In addition, they must also walk on the 'ground' to see idiosyncrasies of the *building structures* (the structures of the languages themselves). However, many linguists have considered the tendency to see and describe what they see based on the Western paradigm, such as basing their description predominantly on their European linguistic knowledge (Gil 2001) or a misconception of learning non-European grammars (Purwo 2014). This suggests the approach of escaping Eurocentrism in order for linguists to achieve better language description.

Practically, asking questions regarding Pagu morphological elements that function as *tense* and *aspect* markers will limit our view of the structure, ignoring other possible functions of those elements. Rather, the functions and meanings of particular elements in the language should be considered independent of European categorization. This paper emphasized the functions and meanings of the target elements *-oka*, *-ou*, *-osi*, and *-uli*. In order to understand their functions and meanings thoroughly, I utilized speakers' knowledge who provide them with translations in local Malay.

In addition, I adapted a unified analysis of each morpheme. Each morpheme has a broad range of functions that may yield different interpretations of sentences depending on the context. For instance, the clitics *-oka* and *-ou* in (1) can function as a

'non-future' tense marker and a 'perfective' aspect marker, respectively. Based on overall interpretations of the clitics in a broader context, the former functions as a locational marker of time and space and the latter as a confirmative marker that confirms whether a state or action occurred. Thus, the clitics are glossed based on these functions. Hence, the perfective meaning of (1) is arguably derived from this literal meaning: '(that) he bathed himself *there* (referring to a certain time in the past) is confirmed (completed).'

The data used in this study were taken from the LIPI project (six times during the period from February 2012 to June 2014 – where each fieldwork roughly lasted in three weeks) and fieldworks conducted four times during the period from December 2014 to June 2018. They consist of both audio and video recording. In addition, elicitations from informants were collected on the two occasions and over the phone. Most of the recorded data were transcribed in the annotating program ELAN (Sloetjes & Wittenburg 2008) and Toolbox.

ELAN data consisted of Pagu transcriptions and local Malay translation performed by native speakers. Additionally, I interlinearized these data with Indonesian and English translations. Interlinearization (providing a series of functions and meanings of morphemes) was achieved based on local Malay translations and multiple cross-checks with speakers and translators.

Results and Discussion

This section discusses the functions and meanings of the four clitics *-oka*, *-ou*, *-osi* and *-uli*. The following subsections respectively will specifically discuss each of them.

The Clitic -oka as a Deictic Locational Marker of Both Time and Space

There are no in-depth studies of the clitic *-oka* of mainland languages of the North Halmahera Family. While several researchers have discussed the clitic most treat it

exclusively as a tense marker (Holton 2003; Kotynski 1988; Wimbish 1991).

On the other hand, Shelden (2002) treats a similar element from Galela, the particle KA, as a spatio-temporal deictic marker and argues that KA functions 'to point in *an alternate direction* to a place in space and time' ('alternate direction' means toward any direction away from the speaker). However, the Pagu *-oka* is a *locational* marker, whereas the Galela KA is a *directional* one. In Pagu, locational and directional meanings are carried out by different clitics: *-oka* and *-ika*, respectively. (Note that Pagu is chiefly a CV-CV language. This means both *-oka* and *-ika* will be truncated into *-ka* when the last sound of the stem it attaches to is a vowel. Speakers will distinguish whether the clitic is locational or directional based on the context). For instance, the locational phrase 'I'm **in/at** the market' requires *-oka*, while the directional phrase 'I'm going **to** the market' uses *-ika*. However, Shelden (2002) neither considers the Galela KA as a locational marker nor mentions if it functions as a tense marker.

I argue that in Pagu, *-oka* not only functions as a tense marker but rather as a marker of a broader scope, namely, a locational deictic marker of both time and space. This is based on in-depth interviews with speakers. An equivalent feature appears in local Malay translations of Pagu transcriptions. For instance, *di sana* can literally be translated as 'at there', where this distal direction can refer to a certain time or place. The expression *kalamareng di sana* 'yesterday at there' is usually said while pointing the forefinger upward and backward in order to refer to a specific time in the past. Alternatively, when referring to a certain place, a speaker will normally point horizontally in a certain direction.

In addition, the local Malay proximal *di sini* 'in here' has a dual temporal and locational paradigm, where the speaker usually uses their forefinger to point to the nearest ground to refer to 'now' or 'here/this place'. The Pagu proximal demonstrative *nane/nena* 'here/this' acts in the same manner.

The Clitic -oka as a Temporal Marker

Tense in European languages is defined as 'a location of time' (Comrie 1985; Bhat 1999); that is, it relates to a certain time of a situation or event. Tense is never used to refer to a space ('locate situation in space'). Thus, it has a time-specific function.

As a temporal marker, *-oka* can modify not only (i) a certain event or condition, same as the *tense* function, but also (ii) a specific time, such as an hour, day, or moment.

As a tense marker, it can refer to either past or future but not present, as its distal meaning 'there' can only refer to the distal location in the future or past. The present location of time is proximal, which can only be expressed by the proximal demonstrative *nane* 'this/here.'

The clitic *-oka* can also yield a present (progressive) meaning when it occurs with *-osi* (see (20) below). In addition, it can produce a habitual meaning (activities or events that regularly occur in the past and are predicted to occur in the future) when the element *ka* appears in the utterance (see [4] below).

Syntactically, *-oka* takes scope not merely over the immediate stem, but rather the whole phrase, either a verb phrase or a noun phrase (that is why I call it a clitic instead of an affix). See (2), (3), and (4) where *-oka* modifies the verb phrase which includes the verb and also the pronominal (prefix), and (5), (6), (7) and (8) where it modifies the entire noun phrase it attaches to.

The clitic *-oka* can attach to a predicate in order to modify a specific event in the past or future, as demonstrated in examples (2), (3), and (4) below. Sentence (2) exemplifies an event that happens in the past, while (3) is in the future. In addition, as exemplified by (4) below, it can also result in a habitual meaning (events that happen repeatedly from the past and in the future).

(2) *Ya-luat ma ya-luange*
     3PS -four but 3PS -three
     *yo-soneng-**oka***. (past)

3PS-die- LOC.there
'they were four, but three of them died   (sometime in the past there)'. The speaker is talking about his own children where he used to have four children, but three had passed away.

(3) *Gailoa o takol*
     tomorrow NRNM hour
     tumidiing dewela-ino
     seven morning-to.here
     *wo-masakai-**oka**.* (future)
     3SMS -cook- LOC.there
     'tomorrow at seven in the morning (or earlier) he'll cook.'

(4) *O takol tumudiing*
     NRNM hour seven
     *dewela-ino **ka***
     morning-to.here only
     *wo-masakai-**oka**.* (habitual)
     3SMS-cook-LOC.there
     'he always cooks at seven o'clock in the morning.'
     Lit. 'at seven in the morning (cannot be later but possibly earlier) he just cooks there.'

In (2), the clitic *-oka* refers to certain events in the past ('when the three children died'). In contrast, (3) refers to an event in the future ('cooking at seven in the morning tomorrow'). These tenses can only be known from the context.

The words in (4) are similar to those in (3), differing only in the absence of the adverbial time *gailoa* 'tomorrow' and the occurrence of the emphasizer *ka* 'only, just, no matter what'. The *ka* element indicates a habitual meaning ('no matter what, the cooking activity must be conducted at seven in the morning').

These three examples show that *-oka* not only refers to a specific event in the past, as in (1), but can also refer to the future and habitual actions when the event is modified by the element *ka*. This indicates that it should not be treated as exclusively a non-future marker but must be considered in its broader function as a deictic marker (meaning 'at there') used in the temporal realm (hence, temporal marker).

As a temporal marker, *-oka* can also attach to a noun phrase that functions as an adverb of the time of an utterance, referring to the past or the future. Sentences (5) and (6) below demonstrate this.

(5) *Hari Jumat-oka de o*
     day Friday- **LOC**.there then   NRNM
     ngoi to-ka-isa-osi. (future)
     1S   1SS -to-seaward-on.go.first
     'this Friday I'm going seawards.'
     (the speaker plans to go to Ternate for some errands)

(6) *Hari Jumat-oka*
     day   Friday- **LOC**.there
     kaugonika, o ngoi
     yesterday   NRNM   1S
     to-ka-isa.
     1SS-to-seaward(past)
     'on Friday yesterday, I went seawards.'

In both (5) and (6), *-oka* attaches to *Jumat* 'Friday', referring to the future in (5) and the past in (6). The meaning is understood based on the context and the occurrence of the adverb of time *kaugonika* 'yesterday'.

We will see later in the next sections that as a temporal marker *-oka* can cooccur with each of the three other clitics *-oka-ou*, *-oka-osi* and *-oka-uli*.

The Clitic -oka as a Spatial Marker

The clitic can also function as a spatial marker to mark the location in the spatial realm. It always attaches to the spatial reference noun (a location) to form an adverb of place as demonstrated by (7) and (8) below.

(7) *O aiwani i-lepe o*
      NRNM animal 3NHS-a.lot NRNM
     bongan-oka
     jungle- LOC.there
     'animals are a lot in the jungle there.'

(8) *Ami-pena mo-eye o*
     3SFPOSS-pen 3SFS-take NRNM
     tonak-oka
     soil-LOC.there
     'she took her pen on the ground there.'

In (7) and (8) above, *-oka* attaches to a noun phrase to modify it as an adverb of place, namely, *bongan* 'jungle' and *tonak* 'ground', 'floor'. It functions as a deictic marker to point to the place where the situation or event occurs.

The Clitic -ou

Previous research treats *-ou* as an aspect marker that functions as a perfective marker (Wimbish 1991:47). Traditionally, *aspect* is defined as 'different ways of viewing the internal temporal constituency of a situation' (Comrie 1976: 3). 'Internal temporal constituency' indicates that the situation or event undergoes a process within a certain expanse of time, which can be considered to be either an on-going or incomplete process (*imperfective*) or a completed process (*perfective*). Here, however, I will argue that it can have a broader function and thus should be treated as such. Syntactically, just like *-oka*, it is also a clitic because it modifies the whole phrase (verb and noun phrase) it attaches to instead of the stem only.

As (1) indicates, *-ou* is treated as a perfective marker. I argue that it is actually a *confirmative* marker, to *confirm* that the event or state (the predicate that is attached by *-oka*) is *certain* to happen in the present, future, or past. It can also attach to a noun phrase to *confirm* that it is the 'correct' one. The term 'confirmative' follows Janhunen (2012: 244), who argued that 'the confirmative conveys a confirmed fact based on the speaker's personal observation.'

This function is based on the speakers' interpretation in local Malay in most of its appearance in the transcriptions, namely, the word *suda*. In this language, it has a dual meaning of perfective and confirmative. The perfective indicates 'already', as in 'have you eaten?' The short answer can be *suda* 'done'; however, in a complete sentence, another form, *su*, must be used, such as *kita su makang* (1S PERF eat), meaning 'I have eaten'. Speakers never use *suda* for the perfective meaning in such an utterance.

On the other hand, the confirmative meaning can only use *suda*. It always occurs in

the final position. It can modify an NP such as *anak itu suda* (child that certain), 'that child for sure', or a clause *ngana baca suda* (2S read certain), 'just read it!'. The function of the Pagu *-ou* as a confirmative marker is the same as the local Malay *suda*.

Similar to the confirmative marker in local Malay, *-ou* modifies a predicate or a noun, the constituent that it attaches to.

The Clitic -ou with a Predicate

Predicates in Pagu can be states or active verbs. Morphologically, they both behave identically, as each of them must be preceded by a pronominal prefix. As described below, each must be attached to a pronominal prefix *wo-* that cross-references with the predicate's argument. Any of the predicates can be attached to *-ou* to produce a confirmative meaning.

(9) *Wo-sawin-ou.*
     3SMS -hungry-certain
     'he must be hungry (for sure).'
     (present)
     'he will be hungry (for sure).'
     (future)
     'he was hungry (for sure).'
     (past)
     ??'he had been hungry (for sure).'
     (past perfect)

(10) *Wo-tagi-ou.*
     3SMS-walk.away-certain
     'he must be going (for sure)
     (progressive)
     'he'll be going for sure
     (future)
     'he went out for sure'
     (past)
     ??'he had gone for sure.'
     (past perfect)

The confirmative meaning that results from *-ou* attaching to the predicate, as in (9) and (10), is closest to the meaning of *a high degree of certainty prediction* based on a personal view (let's say that the speaker's highest degree of certainty on the condition/event is of 95% to 99% (100% is the rate of a reality / what really happens). Sentence (9) exemplifies a

prediction of someone's certainty in relation to his feeling of hunger. It can be interpreted as 'the person must be hungry'. The tense can be future, present, or past based on the context. However, it cannot have a (past) perfect tense, shown by translations marked with ??. In order to have a past perfect meaning, *-oka* must occur before *-ou* (see (12)).

Likewise, the verb *tagi* 'go' with *-ou*, as in (10), produces a prediction of certainty in the past, future, or present tense only. It cannot have a past perfect tense without the clitic *-oka* (see (13)).

A Predicate with -ou Yielding an Imperative Utterance

A verb with *-ou* can produce an *imperative* sentence, particularly when the subject is a second person pronoun *no-* 'you' accompanied by an imperative stress on the penultimate of the verb (Perangin-Angin 2020). This imperative indicates asking someone to do something, based on the speaker's belief that it is absolutely necessary to happen. Thus, intransitive verbs such as *tagi* 'go' with *-ou* mean 'Just go!' when extra stress is used (marked with the capitalized syllable TA; see (11)).

(11) *No-TAgi-ou*
     2SS-walk.away-certain
     'just go!'

In addition, *-ou* in imperative sentence such as (11) is a confirmative marker that produces the same confirmative interpretation, 'You must go (for sure)!'. Note that if the extra stress is not present (but rather a regular stress) the confirmative meaning is still present. The imperative is however not so strong i.e. the urgency of the demand/command is much less. This is also the same with the transitives as demonstrated by (16).

A Predicate Followed by -oka and -ou Yielding a Perfective Meaning

A predicate with *-ou* alone cannot yield a past perfective meaning (to express an event or situation that has happened in the past)

unless it is preceded by *-oka*, as demonstrated by (1). Wimbish described *-oka* as a past tense marker (non-future) and *-ou* as a perfective marker.

Additionally, the perfective meaning can result from the overall function of *-oka* as a locational (time) marker and *-ou* as a confirmative marker, demonstrated by (12) and (13).

(12)   *Wo-sawin-oka-**ou**.*
     3SMS-hungry- LOC.there-certain
     'he has/had been/become hungry.
     Lit. 'he was hungry at a certain time in the past **for sure (confirmed)**.'

(13)   *Wo-tagi-oka-**ou**.*
     3SMS -walk.away-LOC.there-certain
     'he has/had gone away.'
     Lit. 'he had gone away at certain time in the past **for sure (confirmed)**.'

Examples (12) and (13) are similar to (9) and (10), respectively, except without the occurrence of *-oka* in the latter. The clitic *-oka* follows the predicate *sawin* 'hungry' in (12) and *tagi* 'go' in (13) while *-ou* occurs at the end. Here, the clitic *-ou* modifies both the predicate and *-oka*, indicating that the state or event in the past marked by *-oka* is confirmed by *-ou* (i.e. it indeed has/had happened in a certain time in the past). This produces a perfect meaning. Compared with (9) and (10) above, where *-oka* is not present, a perfect reading is not possible. This occurs only when both *-oka* and *-ou* are attached to a predicate in the respective order, where the former is a temporal marker and the latter is a confirmative marker, with the former modifying the predicate and the latter modifying both the predicate and the tense.

The Clitic -ou with a Noun Phrase

The clitic *-ou* can also attach to a noun phrase in order to confirm whether the attached noun is 'the preferred or correct one', demonstrated by (14) and (15) below.

(14)   *o*   *namo*   *gena-**ou***
     NRNM   chicken   that-certain
     'that chicken for sure/certainly'

(Context: in the market, someone finally decided after some thought which chicken to buy.)

(15)   *o*   *Fian-**ou***
     NRNM   Fian-certain
     'Fian for sure/certainly.'
     (Context: the teacher says this after thinking of which students should answer the question.)

In the two examples above, *-ou* attaches to a noun phrase *o namo gena* 'that chicken' and *o Fian* 'Fian', respectively. The phrases are uttered when the speaker *confirms* one over several options. In (14), there are several chickens to buy in the market, while in (15), there are several students in the class to whom the teacher wants to address a question.

It can also produce an imperative sentence when attached to the object of a two-place predicate (16).

(16)   *No-tibo*   *o*   *namo*
     2SS-buy   NRNM   chicken
     *GEna-**ou**!*
     that-certain
     'just buy that chicken!'
     Lit. 'you buy that (particular) chicken for sure'.
     (asking the listener to buy that particular chicken rather than the other ones).

As (16) demonstrates, the object of the predicate *tibo* 'buy' *o namo gena* 'that chicken' is assigned an extra stress on the penultimate (marked with the capital GE). This produces both a confirmative and an imperative reading; that is, the speaker is certain that the listener must buy the particular chicken.

The function of *-ou* applies only to the immediate phrase it attaches to. In (16), it modifies only the NP *o namo gena* 'that chicken'. Attaching *-ou* after the verb produces *no-tibo-ou*, only modifies the verb phrase to mean 'Just buy it! Do not just look at it! Do not just borrow it!

Similarly, in (12) and (13), *-oka* attaches to a predicate and modifies the clitic that

functions as the location of time marker (tense). This confirms that the state of being hungry in a certain time in the past (12) or the activity of going at a certain time in the past (13) indeed happened (perfect meaning). The clitic -*oka* that attaches to NP, as in (5) and (6) above, cannot be attached to -*ou* to produce a perfect meaning, as -*oka* functions as a tense marker only if it attaches to a predicate. The clitic -*oka* in (5) and (6) is merely a temporal location marker. The clitic -*ou* cannot confirm the time in order to produce a perfect meaning.

The Clitic -*osi*

The clitic -*osi* is described in as an imperfective marker (Wimbish 1991), as demonstrated by (17) and (18) below (glossing and translations are Wimbish'). It also occurs with -*oka*; however, the latter is treated as a tense marker, which differs from a temporal marker.

(17)   *Wo-oyom-**osi.***
       3SMS-eat-IMPRF
       'he will eat.' (but he hasn't quite started yet)

(18)   *Wo-oyom-**oka-osi.***
       3SMS-eat-NFUT- IMPRF
       'he is eating now.'

Its overall function suggests that -*osi* is a *durative* marker, marking a certain duration of a situation or event. Pragmatically (by *presupposition*), this duration is always interpreted to happen first at a certain time and be followed by another situation or event later. The figure below illustrates the meaning and function of -*osi*.
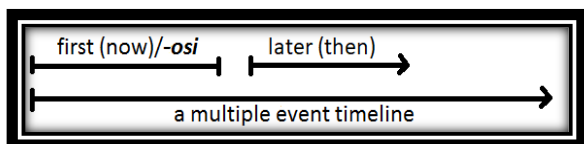

Figure 3. The durative marker -osi in a multiple event timeline

Similar to -*oka* and -*ou,* the function and meaning of -*osi* is based on the local Malay *dolo* 'first'. Note that *dolo* can function as an adverb which mean 'in the past'. However, -*osi* does not have the latter meaning. Both *dolo* and -*osi* function as durative markers, where the speaker presupposes that the intended event or state must be followed by another one.

Commonly, -*osi* attaches to a verb. Like -*ou*, it can occur with the time marker -*oka* and produce a perfect progressive reading (see (20) below).

The durative function of -*osi* means 'ongoing (at a certain moment) first', implying that the duration will always be followed by another duration of an action or event. I gloss it **on.go.first**. As such, examples (17) and (18) from Wimbish can be translated into (19) and (20) below.

(19)   *Wo-oyom-**osi.***
       3SMS-eat-on.go.first
       'he will/should/must/ eat first' (future), or
       'he was/is eating first' (progressive), or
       'he eats first' (present), or
       'he ate first (past)
       But NOT 'he has/had been eating first' (present/past perfect progressive)

(20)   *Wo-oyom-**oka-osi.***
       3SMS-eat-LOC.there-on.go.first
       'he has/had been eating first' (past progressive / perfect progressive)

Sentence (19) translates better as either 'he will/should/must eat first' (future), 'he was/is eating first (progressive), 'he eats first' (present), or 'he ate first' (past). This depends on the context (when the event happens, or tense) and the speaker's attitude (expectation, suggestion, necessity expressed through the modals will, should, must). However, it cannot produce a perfect progressive meaning, as given in the translation above. The speakers require -*oka* to occur between the predicate and -*osi* as shown in (20), as -*oka* functions to mark the location of time of the event, such as eating at a certain time in the past. In addition, -*osi* modifies the eating event in the past to produce the ongoing first meaning. This can be literally interpreted as 'the eating event has started sometime in the past and it is ongoing now until the next coming event'. As such, the sentence can be understood as a past perfect

progressive reading. It implies that the event is supposed to be followed by another event.

The clitic *-osi* can also modify other types of verbs (transitives or ditransitives) by attaching to the verb, as demonstrated by *tibo* 'buy' in (21) and *kula* 'give' in (22).

(21) *Wo-tibo-osi   o   bila.*
3SMS-buy-on.go.first   NRNM   rice
'he will/should/must buy rice first' (future)   or,
'he bought rice first' (past) or,
'he buys rice first' (present)   or,
'he was/is buying rice first' (progressive)

(22) *Mo-wi-kula-osi   o   pipi.*
3SFS-3SMO-give-on.go.first   NRNM
money
'she will/should/must give him money first' (future) or,
'she gave him money first' (past) or,
'she gives him money first' (present) or,
'she was/is giving him money first' (progressive)

In (21) and (22) above, *-osi* attaches to each of the verbs in order to yield an ongoing first meaning. The tense and the use of a modal in the English interpretations depend on both the context and the speaker's attitude.

A Predicate with -osi that Yield an Imperative Utterance

Like predicates with *-ou*, those with *-osi* can produce an imperative meaning when the subject is a second person and an extra stress is assigned to the penultimate of the predicate base word. Therefore, when stress is assigned to the penultimate syllable of the verbs *tibo* 'buy' and *kula* 'give' in (21) and (22), respectively, and the subject is replaced by *no-* 'you', the sentence becomes imperative, as demonstrated in (23) and (24). The capitalized syllable of each predicate below shows the extra-stress on the penultimate position.

(23) *Yo-TIbo-osi   o   bila.*
2SS-buy-on.go.first   NRNM   rice

'please buy some rice!'
Lit. 'you buy some rice first!'

(24) *Yo-wi-KUla-osi   o*
2SS-3SMO-give-on.go.first   NRNM
pipi
money
'please give him some money!'
Lit. 'you give him some money first!'

Literally, the 'ongoing first' meaning of the sentences with *-osi* in (23) and (24) is similar to those above. However, since the verb is assigned an extra stress, it becomes imperative. Compared with imperative sentences with *-ou*, those with *-osi* are more polite (in English, it can be roughly translated as 'please'), due to the impact of the pragmatic presupposition of *-osi*, that you may or can do or can have something else if you do this first (as a reward). Thus, these sentences are more polite, as they sound persuasive. Note, if the extra stress is absent it still yields an imperative. However, like the one with *-ou* as in (11) and (16) the urgency of the command is weak. It sounds like a suggestion i.e. 'it will be good for you to do it; if not it will be just okay'.

The Clitic -osi with a Noun Phrase

Other than attaching to the predicate, *-osi* can also attach to a noun phrase object instead. Thus, for the verbs *tibo* 'buy' and *kula* 'give' in the examples above, it can also attach to the object, as shown in (25) and (26) below. However, the meaning can differ from those where *-osi* attaches to the predicate.

(25) *Wo-tibo   o   bila-osi.*
3SMS-buy   NRNM   rice-on.go.first
Presupposition: 'he will buy some rice first, and then buy something else later'.

(26) *Mo-wi-kula   o*
3SFS-3SMO-give NRNM
pipi-osi.
money-on.go.first
Presupposition: 'she will give him some money first, and then   some other   thing later.'
When *-osi* attaches to the NP object, it becomes ambiguous. First, it can have the

same meaning as when it attaches to the predicate, as in (21) and (22). By presupposition, the next event is another activity, such as 'after buying some rice, she will go to the field' and 'after giving him money, she will have lunch'. Second, based on a presupposition, the activity remains the same in the next event; however, the NP object changes, such as 'after buying rice she will buy some fish' and 'after giving him money, she will give him some gift'.

The Clitic -uli

Wimbish (1991) describes -uli as a repetitive marker, glossed REPET. This is demonstrated in (27) (Wimbish 1991:51). Additionally, it also has another meaning 'this time', as illustrated by (28) below (Wimbish 1991:52). Note, Wimbish (1991) takes the form of the clitic as -oli instead of -uli. I take the latter after consultation with my informant based on its pronunciation in words it attaches to, where the first vocal is closer to /u/ than to /o/.

(27)   *Wo-oyom-oli.*
       3SM-eat-REPET
       'he eats again.'

(28)   *Dodoa-oli   na-tooma-uwa*?
       why-this.time 2S-kill-NEG
       'why didn't you kill it this time?'

I argue that the two meanings and functions of -uli described above belong to one single function, that is, a repetitive presupposition marker. It functions to signify whether the action or condition stated by the predicate occurs as a consequence of a certain cause appeared previously. The cause, however is not stated. Pragmatically, it can be interpreted as an adverb of reason: 'for a certain reason/motivation the event/condition (stated by the predicate) happens/happened/will happen (again)'. I gloss it REPET (repetitive) with this broader meaning.

This presupposed meaning is established based on the uses of three words of local Malay found in the translations of any appearance of -uli. Speakers and translators tend to use *ulang* 'repeat', *lagi* 'again', or *kong* 'then/next' to express the use of -uli in local Malay

translation. The following Pagu transcriptions fit the interpretation of -uli in different words: in (29) and (31) *ulang* 'repeat' is used to signify a repeated action, in (30) and (32) *lagi* 'again' is used for reasoning why things happen, while in (33) and (34) *kong* 'then' is used for reasoning why things should happen that way.

Based on this, examples from Wimbish in (27) and (28) above can have a pragmatic interpretation as in (29) and (30) below.

(29)   *Wo-oyom-**uli***
       3SMS-eat-REPET
       'he eats again.'
       Prag.   '(for a   certain reason/motivation) he eats now' (it can be interpreted as 'again' because by presupposition 'he must have had eaten previously')

(30)   *Dodoa-**uli**   na-tooma-uwa .*
       why-REPET   2SS-kill-NEG
       'why on earth didn't you kill it?'
       Prag. 'on what possible reason you did not kill it?

Sentences (29) and (30) above demonstrate that -uli is not merely a repetitive marker but rather a repetitive presupposition marker that means 'for a certain or any reason or motivation, the doer eats'. This can yield the meaning 'again' due to the pragmatic presupposition. The use of the present tense and the adverb 'now' are based on the context. In addition, the clitic can produce past and future tenses. In this interpretation, 'again' may be pragmatic, as the event must have had happened previously. Similarly, (30) has the same pragmatic meaning of 'for any possible reason' (see Prag). The question *dodoa* (why) is followed by -uli to provide a pragmatic reasoning for the killing not having happened.

Likewise, sentence (31) demonstrates that the repetition reading of 'again' results from the pragmatic interpretation (see Prag).

(31)   *Nena   mio-nyanyi-**uli***
       this   1EX-sing-REPET
       'here we'll sing again'.
       Prag. 'for some reason, we will sing now'

The sentence above can have a repeated reading due to the pragmatic meaning of the event that another singing action must have happened previously.

Due to its pragmatic implication, -*uli* can also be interpreted as an adverb of reason, such as 'besides', 'moreover', or 'furthermore', as in (32) and (33).

(32) *Ma   de   mo-lepe-uli.*
      but   and   3SFS- talk.a.lot-REPET
      '(but also) besides, she talks a lot.'
      Prag: 'but also, for any (possible) reason, she talks a lot.'

(33) *Ma   ngoak -osi*
      RNL   child-on.go.first
      no- urus-uli.
      2SS- take.care -REPET
      'moreover, you still need to take care of your children.' (so don't go)
      Prag: 'for any possible reasons, you still need to take care of your children.'

Furthermore, it can also mean 'in fact' like in (34) below.

(34) *Awi-pokol   ma*
      3SMPOSS-stomach   but
      ka i-kakasidel-uli
      just 3NHS-hang-REPET
      'in fact, his belly is hanging down'.
      Prag: 'for any possible reason, his belly is hanging down.'
      (Speaker is talking about her brother's big belly, which hangs down on the body)

Finally, as mentioned, -*uli* can also occur with the temporal deictic marker -*oka*, demonstrated by (35) below.

(35) *Wo-iyak-oka-uli.*
      3SMS-marry-LOC.there- REPET
      'he got married again.'
      Prag: 'for some certain reason/motivation, he got married (at a certain time in the past) again.'

Due to the occurrence of -*uli*, the event of getting married happened in the past must be interpreted as repetitive, indicating that 'there must be some certain reason for him to repeat the event of getting married'. The absence of -*uli* in the sentence produces a non-repetitive past event.

Conclusion

The functions of the four Pagu clitics, -*oka*, -*ou*, -*osi*, and -*uli*, undeniably exhibit the TAM functions of *tense*, *perfective*, *non-perfective*, and *repetitive* markers respectively. However, the results of the present study show that those four clitics must have broader functions: time and spatial locational, confirmative, durative, and repetitive presupposition markers, respectively. As such, the TAM functions of each of the clitics are a minor part of the big picture.

Avoiding the restrictions of traditional categories is necessary for describing little studied languages. For Pagu, focusing exclusively on elements responsible for TAM markers reveals only fragmentary functions of the clitics. This study demonstrated the necessity of escaping Eurocentrism in order to document the extensive functions and meanings of the elements. This can be achieved by utilizing the local knowledge revealed through studying elements in their other language (the lingua franca) as a result of the language change process (metatypy).

References

Bhat, D. N. S. (1999). *The prominence of tense, aspect and mood.* Amsterdam: John Benjamins.

Black, R. M. (2011). Cultural considerations of hand us. Journal of Hand Therapy. *24* (2), 104-111.

Bowden, J. (2012). Local languages, local Malay and Bahasa Indonesia; A case study from North Maluku. *Wacana, 14* (2), 313-332.

Comrie, B. (1985). *Tense.* Cambridge: Cambridge University Press.

Comrie, B. (1976). *Aspect*. Cambridge: Cambridge University Press.

Dowty, D. (1979). *Word meaning and Montague Grammar*. Dordrecht: Reidel.

Eberhard, D., Simons, G., and Fennin, C. (eds.). (2020). *Ethnologue: Languages of the World*. Twenty-third edition. Dallas, Texas: SIL International.

Fast, J. (2014). *Body Language*. New York: Pocket books.

Gil, D. (2001). Escaping Eurocentrism: fieldwork as a process of unlearning. In P. Newman and M. Ratliff (eds.), *Linguistic Fieldwork*, 102-132. Cambridge: Cambridge University Press.

Himmelmann, N. P. (1998). Documentary and descriptive linguistics. *Linguistics, 36,* 161-195.

Hisyam, M., Purwoko, D., Usman, and Perangin-Angin, D. (2012). *Vitalitas Bahasa Pagu* [the Vitality of the Pagu Language]. Jakarta: PMB-LIPI and PT. Gading Inti Prima.

Holton, G. (2008). The rise and fall of semantic alignment in North Halmahera, Indonesia. in M. Donohue, and M. Wichmann, S (eds.) *The typology of semantic alignment*, 252-276. Oxford: OUP

Holton, G. (2003). *Tobelo*. Muenchen: Lincom Europa.

Holton, G. (1997). Grammatical Relations in Tobelo. Master Thesis. University of California, Santa Barbara.

Janhunen, J. (2012). *Mongolian*. Amsterdam/Philadelphia: John Benjamins (London Oriental and African language library; vol. 19).

Kotynski, E. A. (1988). *Tabaru phonology and morphology*. Workpapers of the Summer Institute of Linguistics at the University of North Dakota. 144-216. Grand Forks. University of North Dakota Press.

Payne, T. E. (1997). *Describing morphosyntax: A guide for field linguists*. Cambridge: Cambridge University Press.

Perangin-Angin, D. (2020). Two Adjacent Vowels in Pagu and their Alternating Word Stress Placement. *International Journal of Humanity Studies*, *3*(2), 178–191. https://e-journal.usd.ac.id/index.php/IJHS/article/view/2402

Perangin-Angin, D. (2018). *A descriptive grammar of the Pagu language.* Hong Kong: The University of Hong Kong. (Doctoral dissertation.)

Purwo, B. (2014). Constructing a new grammar of Indonesian: from expectation to reality. In E. Tagliacozzo (ed.), *Producing Indonesia: the state of field of Indonesian studies*, 195-215. New York: Cornell Southeast Asia Program Publications.

Robertson, J. (1906). *Magellan's voyage around the world by Antonio Pigafetta: The original text of the Ambrosian MS*., with English translation, notes, bibliography, and index. 3 vols. Cleveland, Ohio: Arthur H. Clark.

Ross, M. (2006). Metatypy, In Keith Brown (ed.), *Encyclopedia of language and linguistics, 8,* 95–99. Second edition. Oxford: Elsevier.

Ross, M. (2001). Contact-induced change in Oceanic languages in North-West Melanesia. In Alexandra Y. Aikhenvald; R. M. W. Dixon (eds.). *Areal diffusion and genetic inheritance*. Oxford: Oxford University Press. pp. 134–166.

Shelden, D. (2002). The Galela particle KA: four deictic functions. *Journal translation and textlinguistics*, *14*, 53-76. Dallas: SIL.

Sloetjes, H., and Wittenburg, P. (2008). Annotation by category - ELAN and ISO DCR. In Proceedings of the 6th International Conference on Language Resources and Evaluation (LREC 2008).

Van Valin, R. D. Jr. (2005). *Exploring the syntax-semantics interface*. Cambridge: Cambridge University Press.

Voorhoeve, C. (1983). *The non-Austronesian languages in the North Moluccas*. In. Masinambow, E. K. M. (ed.) *Halmahera dan Raja Ampat sebagai kesatuan majemuk* [Halmahera and Raja Ampat unity in diversity], *2* (2), 13-39. Jakarta: PPT – LIPI.

Wilson, C. (2008). *Ethno-religious violence in Indonesia: From soil to God*. Routledge.

Wimbish, S. (1991). *An Introduction to Pagu through the analysis of narrative discourse*. MA thesis, University of Texas at Arlington.

Wurm, S. (1982). *Papuan languages of Oceania*. Ars Linguistica 7. Tubingen: GNV.

Abbreviations

1EX	first plural exclusive
1S	first person singular
1SS	first person singular subject
2SS	second person singular subject
3NHS	third non-human subject
3PS	third person plural subject
3SFPOSS	third person singular female possessive pronoun
3SFS	third person singular female subject
3SM	third person singular male
3SMO	third person singular male object
3SMS	third person singular male subject
IMPRF	imperfective
Lit.	literal meaning
LOC	locative
NEG	negative
NRNM	non-related noun marker (marking a noun that has not been introduced in the discourse)
PERF	perfective
Prag.	pragmatic interpretation
REPET	repetitive
RNL	related noun linker (marking a noun that already has a certain relation with another noun in the discourse)