Variation in aspect and modality in some languages of Northeastern Borneo

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In most of the languages of Northeastern Borneo the categories of aspect and modality are almost always expressed lexically and often are optional. This paper discusses the expression of perfective and imperfective aspect as well as mood and negation as conveyed through a wide range of mostly unbound morphemes in four North Sarawak languages. The languages consist of two Kenyah variants, Lebu' Kulit, and Òma Lóngh as well as two langauges spoken by former hunter-gatherers, the Punan Tubu'and the Penan Benalui. The data used draws from bot narratives and elicited material.

The lexemes used are in large part discourse context and verb semantics dependent, and differ in all the languages. The lexical meaning of the form used for the pefective is usually 'finished' and for the imperfective it is 'in the middle'. The exception is in Punan Tubu' and Penau Benalui where the infix <*en*> marks the undergoer voice and also bears the meaning of perfectivity. Quotative verbs are generally used to express evidentiality and no bound evidentials are found.

1. Aspect in Borneo and beyond

The rich diversity of languages spoken in Borneo is reflected in the different aspect and modality markers that occur in the various languages. Precise information regarding the TAME markers in most of the languages of Central Borneo is lacking, perhaps due in part to the fact that in general these markers are optional. Aspect and modality are almost always expressed lexically and often seem to be non-obligatory, and in large part, discourse context and verb semantics contribute to the expression of TAME features. After all, as Himmelmann (2005: 60) points out, in many Western Austronesian languages the 'auxiliaries' are elements that usually convey notions of tense, aspect, mood, negation, or manner and are phonologically independent. The free and clitic aspectual adverbs used for TAM marking in most of the Western Austronesian languages of Indonesia is also displayed in the World atlas of linguistic structures -WALS (Dryer 2011). Kaufmann (2011) provides an overview of TAM marking in Indonesia, and concludes that while 'inner aspect' marked by reduplication and <*in*> infixation, and 'outer aspect' can be reconstructed as PAN *dala and PAN *pa, most of the modern Indonesian TAM markers are un-reconstructable because those that exist are very diverse, while sometimes they are lacking completely. Those that do exist are therefore recent innovations. As Kaufman (2011) points out, in Old Malay, 'all the inherited aspect markers were abandoned and replaced (functionally) by lexical items meaning 'want', desire', towards, 'finish' etc. A general overview of some languages of Borneo confirms this to be the case in Borneo, too, as can be seen in Clayre & Cubit (1963) for Kayan, Clayre (2002) for Lundaye, Tjia (2007) for Mualang, Adelaar (2002) for Salako, Sercombe (2006) for Eastern Penan, and Inagaki (2011) for Kadorih, among others.

This paper describes a wide range of strategies used in a variety of languages from Northeastern Borneo to express TAM and evidentiality. It especially focuses on two Kenyah variants spoken in East Kalimantan: Lebu' Kulit, and Òma Lóngh and compares the strategies found in these languages to those employed in the neighboring languages of Penan Benalui and Punan Tubu'. This comparison draws on narrative texts (see Soriente, 2006 and Soriente et al, To appear) and elicited material. The Kenyah represented in this study are from the Òma Lóngh group, which constitutes a population of 3000 spread

across six villages in Bulungan Regency of East Kalimantan, and from the Lebu' Kulit group, which consists of roughly 8000 people living in several villages spread over the Bulungan Regency, Kutai and Berau in East Kalimantan and Sarawak. The Penan Benalui and the Punan Tubu' are representative of two groups of former hunter gatherers located in the Malinau Regency of East Kalimantan.These languages number 450 and 4000 speakers respectively, and they are closely related to each other or to the Kenyah languages.

The TAM markers of the languages investigated are usually optional, and occur as free lexemes in specific positions in the verbal complex. They interact with modals, negation, main verbs and particles to create a range of aspectual and modal meanings.

Perfective action is marked in the various languages by different lexemes that generally occur before the verb. They can be omitted in some pragmatic situations or when some adverbs or adverbial phrases like 'yesterday', 'some time ago', 'earlier', 'later' etc. indicate the time of the action

On the other hand, for imperfective, spatial expressions like *daleu* (inside) in Lebu' Kulit, *daò* in Òma Lóngh, *an tang* (in the middle), *an luang* (inside), *an belua'* (in the middle) in Punan Tubu', and *reng* (in the middle) in Penan Benalui, are employed, but these markers too, are optional. Data from elicitation sessions indicates that an imperfective action can be unmarked morphologically and when it is expressed it is conveyed through the use of spatial lexemes. Imperfective action is better expressed by the use of the deictic 'this', the adverb meaning 'still' or often by verbal reduplication when continuous action is being expressed.

Modality and negation are also not expressed morphologically, with the only exception being the polyfunctional prefix or proclitic *ke-* which occurs with various verbs. What is peculiar is the great number of particles employed across these languages to express modality, and to mark the souorces of evidence in the source of information in statements. These particles that are not grammatical often occur in naturalistic data, but are difficult to elicit because they are so discourse dependent.

The first section of this paper discusses Kenyah Lebu' Kulit. Then follow sections on Kenyah Òma Lóngh, Punan Tubu' and Penan Benalui.

2. Kenyah Lebu' Kulit

Lebu' Kulit is a Kenyah language belonging to the Kayan-Kenyah subgroup of the western branch of Malayo-Polynesian and part of the North Sarawak branch. According to previous work, (Soriente, 2004 and 2008) it belongs to the branch labeled Kayanic, or as Lowland Kenyah in Blust (2007, 2010) or Kenyah Wahau in Ethnologue (Lewis et al, 2013). Other members of this group are Uma' Timai, Uma' Pawa' Uma' Ujok, Uma' Kelep and the extict Nyibun. It counts about 8000 speakers spread in around 15 villages in East Kalimantan and Sarawak.   Some documentation is found in Soriente, (2006) who presents some features that set it off the main branch of the Kenyah languages (Soriente, 2004 and 2008).

Like many Austronesian languages Lebu' Kulit does not express tense, nor is any morphology employed for aspect and mood. Rather, time is expressed by time adjuncts like *mena'a da* 'in the past', *o'o re* 'earlier', *o'o* 'later', *menalem da* 'yesterday', *nempam* 'tomorrow' etc. Aspectual features are marked analitically by free morphemes.

2.1. Perfective

Perfectivity is marked by a number of lexemes that can be optional:

- *lepek*   'finished' PFCT preceding verbs
-             completed action particle occurring at the end of the utterance
- *no'o*   completed action particle occurring at the end of the utterance
- *uvan*   'trace' occurring before verbs
- *dité*   'seen' also an evidential
- *<en>*   infixation on transitive verbs meaning passive and perfective.

Lepek is an aspect marker that indicates that an action is complete as in examples (1) through (4). It also often marks resultative aspect as in example (6) . Moreover, *lepek* also functions also as a time conjunction in subordinate clauses as can be seen in example (5).

(1) *ié   lepek   na'at   aki',   mpei   a   na'at   iku'*
     ié   lepek   N-ta'at   aki',   mpei   a   N-ta'at   iku'
     3SG   PFCT   AV-see   1SG   NEG   3SG   AV-see   2SG
      'he has seen me but he has not seen you'

(2) lepek   na   releu   menia'   o   di'   sulo   ketai   releu
     lepek   na   releu   meN-tia'   o   di'   sulo   ke-tai   releu
     PFCT   DIR   3PAU   INTR-shout   CMPL   EMPH   then   IRR-go   3PAU
      'they shouted and then they went'

      ketei   lepek   ketena'
      ke-tei   lepek   ketena'
      IRR-go   PFCT   story
       'so this is how the story of Usung Bayung went'

(4) lepek   na   sinen   a   da   kumé di',
     lepek   na   sinen   a   da   kumé di',
     PFCT   DIR   mother   3SG   PRTCL say   EMPH

      "anak   mo'   uva'   ketai"
      "anak   mo'   uva'   ke-tai
      child   don't   want   IRR-go
       'the mother had warned him, "son, don't go" (but he went and was killed'

(5) *tiga   ta   pa   kenya   o   na   lepek   na   ledo*
     tiga   ta   pa   ken-ya   o   na   lepek   na   ledo
     good   DIR   PRTCL   say-3SG   CMPL   DIR   PFCT   DIR   woman

     ti   ngetem   lo   ti   aseu   ti   o   di'
     ti   N-tem   lo   ti   aseu   ti   o   di'
     that   AV-stuck needle that   dog   that CMPL   EMPH
      'well, she said, after that the woman stuck a needle on the dog's hair'

(6) *sé   baleu   a   uvan   a   mena'a'   na   lakei   a*
     one   widow   3SG   because   3SG   in.the.past DIR male   3SG

     lepek   matai
     PFCT   dead
      'she is a widow because long time before her husband had died'

Lepek is an optional marker. It is often omitted when other elements expressing perfective aspect are used. These include the lexemes *uvan* 'trace' and the marker of agentive in undergoer sentences, or *dité* 'seen' (which is also used as an evidential). These all have the function of indicating that the action is completed. The particles *o* and *no'o* in final position also have the function of marking a completed event. The following example (7) shows that perfective event is marked by the lexeme *uvan*. This can also be interpreted as an agentive, though the verb has a fossilized form with the *<en>* infix on the verb *uyan* 'make, do'. Infixation is used in other languages in Borneo to mark undergoer past action (see Soriente, 2013) and is not productive in the Kenyah languages. It is not clear whether this is a relic or a form borrowed from adjacent languages. In (8) the lexemes *dité* and *uvan* have a resultative function. The same holds for example (9) where *uvan* is employed as a perfective marker before the verb and as preposition before the 3rd person of the personal pronoun *a*. In sentence (10) the aspect of perfectivity is emphatsised by both *dité* and *lepek*. This is an excerpt from a political speech where some sentences needed some pragmatic stress. Example (11) displays the use of the particle *no'o* at the end of the utterance with the function of indicating that the action is completed.

(7) *un*   *lu*   *kelunan*   *ya'*   *uvan*   *Tuhan*   *Ngenuyan*
     un   lu   kelunan   ya'   uvan   Tuhan   N-ke<en>uyan
     be   1PL   person   REL   trace   God   AV-NMLZ-UV-make
      'we are human beings created by God'

(8) *Pejulung*   *ra*   *ni*   *nai*   *ilan*   *dulu*   *kini*   *ni*   *na*
     Pejulung   ra   ni   nai   ilan   dulu   ke-ini   ni   na
     Pejulung   3PL   this come   bring   people LOC-here   this DIR

     nginyé   *dité*   *Lebu*   *Kulit*   *ni*   *uvan*   *nai*   *pasei*   *da*
     N-inyé   dité   Lebu   Kulit   ni   uvan   Nai   pasei   da
     AV-like.this seen   Lebu   Kulit   this   because   come   spread   PRTCL
      'Pejulung and the others have taken the people here, this is how the Lebu' Kulit people
      have moved and spread all over the place'

(9) *buké*   *nakini*   *uvan*   *tai*   *pesaliu*   *na*
     buké   na-ka-ini   uvan   tai   pe-saliu   na
     if   DIR-LOC-this trace   go   INTR-change   DIR

     kimet   *lu*   *uvan*   *a*
     kimet   lu   uvan   a
     pikir   1PL.INC   because   3SG
      'but now our thoughts have changed because of that'

(10) *ikam*   *teleu*   *pegayeng*   *ketu'*   *dité*   *ineu*   *ya'*   *lepek*   *nempeleu*   *atur*
     ikam   teleu   pe-gayeng   ketu'   dité   ineu   ya'   lepek   nem-peleu   atur
     2PL   PL   INTR-work   all   seen   what   REL   PFCT   PL-2PL   arrange
      'you work out what you have planned to do'

(11) *tai*   *takut*   *na*   *kelunan*   *ra'*   *ini*   *no'o*
     go   afraid   DIR   person   REL-PL   this   CMPL

     nga   *tai*   *na*   *balai*   *tai*   *bulak*   *Na*
     so   go   DIR   part   go   move   DIR
      'they had become afraid, therefore a part of them moved'

2.2 Imperfective

As with the perfective, marking of imperfecive aspect is optional and can be expressed through the following ways:

- *daleu*   inside/in the middle
- *ini/iti*   this/that
- reduplication

It can be expressed using the locative preposition *daleu* 'in the middle' as in example (12), (which can also mean 'when' – see example (13)) or with use of the deictics *(i)ni* 'this' and (*i)ti* but without any other marker as in example (14).

(12) *no,*   *daleu*   *ra*   *uman-uman*   *mengiti*   *di'*
      no   daleu   ra   RED-uman   meN-iti   di'
      EXCLM   in.the.middle   3PL   ITER-eat   AV-that.way   EMPH
      'well, they were eating, that's it'

(13) *nai*   *ngendani*   *niya*   *pa*
      nai   N-dani   na-ia   pa
      come   AV-close   DIR-3SG   PRTCL

      daleu   *iré*   *uman*   *(i)ti*   *no'o*   *di'*
      in.the.middle   3PL   eat   that   CMPL   EMPH
      'then he got closer when they were eating'

(14) *ni*   *mpei*   *un*   *dité*   *liung*   *ineu-ineu*   *un*   *di'*
      (i)ni   mpei   un   dité   liung   RED-ineu   un   di'
      this   NEG   exist   seen   movement   PL-what   exist   EMPH

      sedi'   *pekajep*   *pira*
      sedi'   pe-kajep   pe-ira
      hopefully.not   INTR-peep   also-3PL
      'nothing was seen moving, hopefully there wasn't anybody peeping at them'

2. 3 Mood and modality

The markers for mood and modality are:

- *ke-*   as a prefix or a free lexeme located before verbs
- *uva'*   'want'
- *senteng*   'can'
- *harus*   'have to'

There is no dedicated morpheme for the expression of future tense or irrealis mood; however, the prefix or proclitic *ke-* or *ka-* that in some cases occurs as a free lexeme, can convey an intention, an approaching event, a hypothesis, a refusal, a possibility, or an expectation. In (15) below the free lexeme *ke* marks an hypothesis whereas the proclitic *ke-* in *kenai* and *kebara'* in example (16) convey the idea of an approaching event and an intention. Very often the proclitic *ke-* in its function of marking an intention, combines with the modal verb *uva'* 'want' (see example (17) below).

(15) *buké*   *ileu*   *ncé*   *ke*   *nebawa'*   *ketai*
      buké   ileu   ncé   ke   N-tebawa'   ke-tai
      if   1PLINCL   NEG   IRR   AV-make.effort   IRR-go

tapa	*Lu*	*o*
tapa	Lu	o
left.behind	1PLINCL	CMPL

'if we do not make an effort we'll be left behind'

(16) | *mbei* | *teleu* | *kebara'* | *teleu* | *makang* | *un* |
|---|---|---|---|---|---|
| mbei | teleu | ke-bara' | teleu | makang | un |
| NEG | three | IRR-let.know | PAU | strength | exist |

'we'll not let them know what our strengths are'

The modals *uva'* 'want' also marks a future action, (see examples (17) through (20)). The form s*enteng* 'can' indicates possibility and permission (example (21)). No special lexeme for obligation is employed except for the Indonesian borrowing *harus* 'must'. The lexeme *sap* indicates its negation and can be translated as 'no need to'.

(17) | *ileu* | *uva'* | *ke* | *sekening* | *ngempei* | *daau* | *ketena'* | *ti* |
|---|---|---|---|---|---|---|---|
| ileu | uva' | ke | sekening | N-mpei | daau | ketena' | ti |
| 1PLINCL | want | IRR | hear | AV-what | voice | story | that |

'we want to the hear how the story goes'

(18) | *ncé* | *un* | *uva'* | *teleu* | *tai* | *pura,* | *un* | *kimet* | *ya'* | *tai* | *kileng* |
|---|---|---|---|---|---|---|---|---|---|---|
| NEG | exist | want | 1PLINCL | go | separate | exist | think | REL | go | bent |

'we shall not proceed separate, our thoughts might go wrong'

(19) | *haa* | *kelunte* | *té* | *ié* | *uva'* | *té* | *ié* | *ke* | *petira'* |
|---|---|---|---|---|---|---|---|---|
| haa | ke-lunte | té | ié | uva' | té | ié | ke | pe-tira' |
| EXCLM | IRR-sleepy | PRTCL | 3SG | want | PRTCL | 3SG | IRR | INTR-talk |

ngan	*mé'*	*leu*	*ba'am*
with	1PLEXCL	PL	EXCLM

'haa, he is very sleepy now, but he will talk to us'

(20) | *nia* | *dué* | *luai* | *ini* | *mpei* | *ra* | *uva'-uva'* | *kenai* | *a* |
|---|---|---|---|---|---|---|---|---|
| ni-a | dué | luai | ini | mpei | ra | RED-uva' | ke-nai | a |
| this-3SG | two | time | this | NEG | 3PL | ITER-want | IRR-come | 3SG |

ko'	*Nyapa'*	*un*
LOC	Nyapa'	exist

'this is the second time they will not give it to Nyapa'

(21) | *senteng* | *nilu* | *kumé* | *neng* | *kebelua'* | *urip* | *nem* |
|---|---|---|---|---|---|---|
| senteng | ne-ilu | kumé | neng | ke-belua' | urip | nem |
| can | ne-1PLINCL | towards | at | NMLZR-middle | live | 2PL |

nini	*nakini*
RED-ni	nakini
ITER-this	now

'we can say you are now in the middle of your life'

2.4 Negation and evidentiality

Negation and evidentiality in Lebu' Kulit are marked by:

- *ncé*   with verb of existence
- *mpei*   with any verb and nouns

- *nu'un*   final particle
- *nyen*   prohibition 'don't'
- *mo'*   prohibition 'you better don't'
- *ken*   say (with cliticized personal pronouns)
- *ba'an*   say (with cliticized personal pronouns)
- *dau*   voice
- *dité*   seen

Negation is expressed by the negators *ncé* and *mpei*. The first generally negates existence and is usually followed by the verb of existence *un* (see example (18) above). The negator *mpei* (which also means 'where') tends to negate actions (see example (20) above). Most negative utterances can have a final particle *nu'un* that further emphasizes negation as in example (22). Prohibitions are marked by the lexemes *nyen* and *mo'*. (See examples (23) and (24)).

(22) *na   tu   adet-adet   pu'un lu   da   mpei lu*
      na   tu'   RED-adet   pu'un lu   da   mpei lu
      DIR   All   PL-customary.law old   1PLINCL PRTCL   NEG 1PLINCL

      ngelan   a   nu'un   o
      N-lan   a   nu'un   o
      AV-true   3SG   NEG   CMPL
      'all the old laws have been abandoned, we don't believe in them any longer'

(23) *nyen   teleu   uva'   suto'   bang   ngeli'o'*
      nyen   teleu   uva'   suto'   bang   N-li'o'
      don't   PL   want   offend   only   AV-deceit
      'we better never offend and deceit people'

(24) *nyé   teleu   ketai   ta   Usung,   mo'   sekening   daau   sinam   na!*
      nyé   teleu   ke-tai   ta   Usung,   mo'   sekening   daau   sinam   na!
      that   three   IRR-go   DIR Usung   don't hear   voice mother DIR
      'let's go, Usung, don't pay attention to your mother's words!'

Evidentials are not expressed with bound morphemes but nearly every utterance needs to contain an evidential marker indicating whether the expressed event was seen, felt or reported by someone. All evidential markers in the language are open class lexemes that exhibit an additional evidential function. They include *dité* 'seen', *ken* 'say' *dau* 'voice' *baen* 'word', *gen* 'feel'. These quotation words have the special characteristic of hosting a clitic pronoun. Thus, they appear in utterances as *k(en)=é'* (I say) *ken=ya* (he says) *ke=lu* (we say), *ke=ra* (they say), *dé=é'* (my voice), *ban=ya* (he says), etc. or with the agglutinated form *g(en)=é'* (I feel). Example (25) shows the use of *dité* 'seen' where the speaker distances himself somehat from the utterance. This is also the case in example (26) where the quotative form *kenya* (he says) is employed too. In example (27) the speaker makes clear that he is not directly involved in what is said in the utterance.

(25) *ié   ti   ya'   ileu   ke   pekimet   mengempei   ketai*
      ié   ti   ya'   ileu   ke   pe-kimet   mengempei   ke-tai
      3SG   this   REL   1PL   KE   INTR-think   how   IRR-go

> *lu   ka   ngebaya'   dité*
> lu   ka   N-baya'   dité
> 1PL   KA   AV-follow   seen
> 'that's what we think, how we went along with them (as was seen)'

(26) *nai   a   menesai   no'o   kenya*
      nai   a   \<en\> besai no'o   ken=ia
      come   3SG   \<UV\>row   CMPL   say=3SG

      mpei   nia   dité   kejala'   a   da   nu'un   o
      mpei   ni-ia   dité   ke-jala'   a   da   nu'un   o
      NEG   this-3SG seen   NMLZR-net   3SG   PRTCL   NEG   CMPL
      'he came rowing (it is said so) after   he had lost his net (as was seen)'

(27) *alé'   ma'an   gen   ke   pisiu   ié   ke   pisiu   Kenya*
      alé'   ma'an   gen   ke   pe-isiu   ié   ke   pe-isiu   Kenya
      very   difficult feel   IRR   INTR-word   3SG   IRR   INTR-word   Kenyah

      ni   ke-dau   tamen   a   da
      this   IRR-voice   father   3SG   DA
      'it is very difficult (it is felt) to speak Kenyah with him, says the man'

3. Kenyah Òma Lóngh

Kenyah languages are known to display a very high level of dialectal variation, and Òma Lóngh is among the ones that presents the most striking fieatures that set it off from the main branch. It is spoken by about 3000 people and is perhaps the most divergent and least understood of the Kenyah languages. Indeed, it is the sole member of one of the three main branches of Kenyah languages (see Soriente, 2004, 2008), as evidenced by its highly idiosyncratic phonological (see Blust 2007) and morphological properties (see Soriente, to appear).

Within the Kayan-Kenyah subgroup, it is listed in the upper Pujungan subgroup with the languages of Uma Lasan, Uma Baha and Uma Alim. This language is mainly spoken in Indonesia but there are also a few groups in Sarawak (Soriente, 2004, Soriente 2008 and Lewis et al, 2013). Òma Lóngh is spoken in the Malinau and Bulungan regencies of East Kalimantan, mainly in the villages of Setulang (Malinau Regency) and Pimping (Bulungan Regency), as well as Batu Kajang and in the town of Malinau. Like most Kenyah speakers, the Òma Lóngh are multilingual as they are able to speak other Kenyah languages as well, such as Lepo' Tau and Uma Lasan. From a sociolinguistic perspective, it is noted that almost all Òma Lóngh speakers are bilingual or multilingual: they learn Indonesian as the official language of the Republic of Indonesia at school, and most of them also speak other Kenyah languages. Since their language itself is very idiosyncratic its speakers tend to switch very easily to other Kenyah variants and exhibit very accentuated linguistic exogamy. On the other hand speakers of other Kenyah variants find it difficult to fully understand and to master Òma Lóngh.

3.1. Perfective

Markers of perfectivity in Òma Lóngh are:

- *tene*   PFCT preceding and following the verb
- *póne*   PFCT
- *lepe'*   finished, PFCT preceding verbs

- *hóbó*   semelfactive, preceding verbs
- *òbèny*   'trace' occurring before verbs

Much like Lebu' Kulit, the perfective in Òma Lóngh is marked by an open class marker, *tene* that occurs in most of the utterances where a perfective aspect is expressed. The lexemes *póne* and *lepe'* (which closely resembles its cognate *lepek* in Lebu' Kulit), both of which can mean 'finish', have also been recorded in a number of utterances. For the semelfactive aspect, the marker *hóbó* is used. As with Lebu' Kulit *uvan*, the lexeme *òbèny* is also used to mark the agent of undergoer action, and it can signal that the action is completed. Very often these lexemes are used together in the same clause.

In examples (28) and (29) the lexeme *tene* is used to indicate aspectual characteristic of the verbs. In (28) it is stressed that 700 years have passed since people had stayed in Sa'an and that now they are not there any longer, whereas in (29) the verb *tèsen* 'know' is marked for perfective action because today's knowledge is the result of something that happened in the past. The same holds for (30) where the lexeme *lepe'* is also used to accompany the verb *kanane* 'use' therefore to emphasize that it is not used any longer. In (31) *lepe'* and *tene* refer to the implied verb 'exist' to stress that somebody is dead, is not there any more. Generally *tene* is preferred to mark stative verbs like *tèsen* whereas *lepe'* is used with other verbs as in (30) and (34). In (32) the semelfactive marker *hóbó* marks the verb *tèsen* because it has to be stressed that nobody ever knew this history before that. In (33) the perfective marker *póne*, which is used much less commonly, is employed with the verb *baca* 'read'.

(28) *mase'*   *tè*   *tene*   *sui*   *tuju*   *ató*   *òmèny*   *éle*
      maybe   go   PFCT   more   seven   hundred   year   1PLINCL

      ke   *Sa'èny*   *te*
      LOC   Sa'an   DIR
      'maybe we stayed for more than 700 years in Sa'an'

(29) *a'eng*   *tene*   *le*   *tèsen*   *ó'ó*   *lepó*   *Ònya*   *Sè'ò*   *zé*   *he*
      NEG   PFCT   1PLINCL   know   later   after   Ònya   Sè'ò   that   PRTCL
      'we don't know anything after Ònya Sè'ò'

(30) *a'eng*   *tene*   *ki*   *tèsen*   *je*   *lepe'*   *ta'eng*   *kanane*   *tene*   *re*
      a'eng   *tene*   *ki*   *tèsen*   *je*   *lepe'*   *ta'eng*   *kanèny-e* *tene*   *re*
      NEG   PFCT   1SG   know   because   PFCT   NEG   use-3SG   PFCT   PFCT
      'I don't know because it has not been used any more'

(31) *lepe'*   *ta'eng*   *tene*   *e,*   *matè*   *tene*
      finished   NEG   PFCT   3SG   dead   PFCT
      'he is gone, he is dead'

(32) *a'eng*   *hóbó*   *re*   *de'*   *tèsen*   *de'*   *tè*   *Ònya*   *Sè'ò*   *ngèny*
      NEG   PFCT   3PL   REL   know   REL   go   Ònya   Sè'ò   with

      de'   *tè*   *Apèny*   *Lempu*   *zé*
      REL   go   Apèny   Lempu   that
      'nobody ever knew who was before Ònya Sè'ò and Apèny Lempu'

(33) *póne   ki   baca'   ó'óre   mè*
     PFCT   1SG   read   earlier that.time
     'I have read it'

(34) *zó   òbèny   lepe'   nafa   éle   re*
     zó   òbèny   lepe'   N-tafa   éle   re
     3SG   trace   finished AV-abandon 1PL.INCL PRTCL
     'he has abandoned us'

3.2. Imperfective

The markers of imperfective aspect are as follows:

- *énó*   exist
- *leve'*   in the middle
- *daò*   inside, in the middle
- RED   reduplication

Imperfective aspect, when marked, is expressed by various strategies. Progressive aspect can be marked by the verb 'to be/exist' but progressive is more typically marked with adverbs such as 'now' as in example (37). Examples (35) and (36) show the employment of *énó* 'exist' with the function of showing the progressive aspect. In naturalistic data, one also finds instances of imperfective actions being marked by adverbs/prepositions meaning 'in the middle' like *leve'* or *daò*. Habitual and iterative aspect, regardless of tense, can be marked by reduplication of the verb.

Example (38) displays the employment of *leve'* 'middle' to indicate the progressive action whereas in (39) through (43) the adverb *daò* 'in the middle' and its variant *raò* are used to express an action that is in progress.

(35) *énó   e   nyòrèj   dae   ku   té   méé*
     énó   e   N-sòrèj   dae   ku   té   méé
     exist 3SG   AV-write voice 2SG   there like.that
     'she is recording (and writing) your voice'

(36) *sekali   nè   e   fena'at   té   lèny   énó   étó*
     sekali   nè   e   feN-ta'at   té   lèny   énó   étó
     one.time   come   3SG   INTR-AV-see there really exist seen

     ketòza'   bali   zé   na'at   étó   zó   lutu   té
     ke-tòza'   bali   zé   N-ta'at   étó   zó   lutu   té
     IRR-observe ghost that AV-see   aspect 3SG   tidur di.situ
     'when he he looked at it, he clearly saw that the ghost was observing him sleeping'

(37) *nyòrèj   sòrèj   ki   me   falè   ki   mii*
     N-sòrèj   sòrèj   ki   me   falè   ki   mii
     N-write   letter 1SG   towards friend 1SG   now
     'I am writing a letter to my friend'

(38) *sa'   jòte'   leve'   ama'*
     cook   rice   middle   mother
     'mum is cooking rice'

(39)   *daò*   *le*   *tè*   *ntu*   *Sa'èny*   *nyé*
       in.the.middle   1PLINCL   go   bathe   Sa'an   that
       'we are having a bath in the Sa'an River'

(40)   *je*   *raò*   *éle*   *mane*   *méé*   *le*
       je   raò   éle   mény=e   méé   le
       because   in.the.middle   1PLINCL   hold=3SG   like.that   LE
       'because we were holding it'

(41)   *daò*   *évó*   *òmény*   *jòte'*   *pé*   *dó*   *pény-pény*
       daò   évó   òmény   jòte'   pé   dó   RED-pény
       in.the.middle   3DU   eat   rice   father   3PL   ITER-throw

       ke   *lighe'*   *anune*   *jòte'*
       ke   lighe'   aneng=e   jòte'
       at   back   posses=3SG   rice
       'when they were eating rice, the father kept on throwing the rice on his back'

(42)   *daò*   *nè*   *évó*   *ngalangh*   *janèny*   *tene*   *zé*   *évó*   *felai-felai*
       daò   nè   évó   ngalangh   janèny   tene   zé   évó   RED-felai
       in.the.middle   come   3DU   along   road   PFCT   that   3DU   ITER-talk
       'they were coming along tha road, they talked and talked'

(43)   *daò*   *e*   *talò*   *isi*   *nòcen-nòcen*   *afé*   *zé*   *té*
       daò   *e*   *talò*   *isi*   *RED-nòcen*   *afé*   *zé*   *té*
       in.the.middle   3SG   absorbed   aspect   ITER-N-hit.w.head   fire   that   there
       'he was hitting his head against the fire'

(44)   *òbèny*   *ala*   *zó*   *hetem*   *temali*   *e*   *ézé*
       òbèny   ala   zó   fe-tem   temali   e   ézé
       trace   take   3SG   INTR-exact   pregnancy   3SG   that
       'she was taken when she was pregnant'

Reduplication of various verbs marks habitual action in the following examples (45) through (47) and iterativity as in examples (48) through (53).

(45)   *dé*   *tè*   *le*   *kelale'-kelale'*   *te*   *tepeng*   *dé*
       dé   tè   le   RED-ke-lale'   te   tepeng   dé
       that   go   1PLINCL   HAB-IRR-confused   at   ancestor   that
       'that is what is confusing us about our ancestors'

(46)   *tangen*   *kam*   *òèj*   *keng-keng*   *ngadèny*   *i'ek*   *de'*   *zi*
       tangen   kam   òèj   RED-keng   ngadèny   i'ek   de'   zi
       happy   2PL   MOD   HAB-say   name   small   REL   this
       'you would always call people by their nick-names'

(47)   *aghi*   *Apèny*   *Fè'èj*   *rae-rae*   *re*   *keng*   *aghi*
       aghi   Apèny   Fè'èj   RED-rae   re   keng   aghi
       1SG   Apèny   Fè'èj   HAB-voice   people   say   1SG
       'I am *Apèny Fè'èj*, this is how people call me'

(48) *métó-métó   kena   le   ja'at   ngadèny jè'è   le,   nyòrèj   móngh*
RED-N-fétó   ke-na   le   ja'at   ngadèny jè'è   le   N-sòrèj   móngh
HAB-look.for IRR-go   1PLINCL bad   name   that 1PL   AV-write all
'we are looking for bad names for us to write them down'

(49) *harus   le   tè   fóte-fóte   de'   mugheng-mugheng   téle*
harus   le   tè   RED-fóte   de'   RED-mugheng   téle
must   1PL.EXCL go   ITER-question REL   PL-old   DIR-1PL.INCL
'we have to keep on asking our elders'

(50) *ntó   ne   eng   kelèvet-kelèvet   ngadèny   é'ó   ti'i   zé   keci   lu*
ntó   ne   eng   RED-kelèvet   ngadèny   é'ó   ti'i   zé   keci   lu
or   NE   exist HAB-repeat   nama   3PL   there that say-1SG LU
'or they repeat their names in that situation (I say)'

(51) *te   ngadèny   ne   be   re   fó'óngh   ala-ala   ngadèny   tepeng,*
te   ngadèny   ne   be   re   fó'óngh   RED-ala   ngadèny   tepeng,
at   nama   person if   person purpose   HAB-take name   old

dé   ta   felèvet
that go   repeat
'as for names, when somebody takes the name of their ancestors, it is on purpose that it gets repeated'

(52) *zó   hazu   de'   fezèj-fezèj   tavè   kelònèny   ne   ézé*
zó   hazu   de'   RED-fezèj   tavè   kelònèny   ne   ézé
3SG   maybe   REL   ITER-disturb   feeling person   DIR   that
'maybe he is the ghost who keeps on disturbing the feeling of people'

(53) *ngeda-ngeda   móngh   ènem   de'   kè'en   le   perlu*
RED-N-keda   móngh   ènem   de'   kè'en   le   perlu
HAB-AV-poison all   What   REL   by   1PL.INCL   need

kata   éle   ne
towards   1PL.INCL   DIR
'he poisons everything we need in our place'

3.3. Negation, mood and evidentiality

Negation of an event is marked by a wide range of strategies.

- *aeng*   to negate verbs
- *ta'eg*   to negate verb of existence and nouns
- *au*   prohibition
- *è'el*   prohibition
- *òèj*   modal

Aeng tends to negate verbs and *ta'eng* nouns, whereas *au* or *è'el* are employed to prohibit. These are often accompanied by *òèj*, a marker of modality, used mostly in prohibitions, but also to express intention, an approaching event, a hypothesis, a refusal, a possibility, or an expectation. The prefix/proclitic *ke-* only occurs with *tè* 'go' and *nè* 'come' and marks irrealis mood (see examples (60) and (61)) . Example (54) shows the use of the negator *a'eng* with a verb whereas in (55) the negator *ta'eng* negates a noun. Prohibitions

are displayed in example sentences (56) and (57) where also the modality particle *òèj* occurs. This modality particle is also exemplified in (58) and (59).

(54) *fèmet   bate   Òzò   I'ek   jé   a'eng   tene   ncam   ketè*
     fèmet   bate   Òzò   I'ek   jé   a'eng   tene   ncam   ke-tè
     think   stone   Òzò   I'ek   that   NEG   PFCT   can   IRR-go

     fabèj   jó   ta'èny
     fabèj   jó   ta'èny
     chase   3SG   see
     'he thinks of the Òzò I'ek rock, that it won't be able to chase him again'

(55) *avane   engne   kam   de'   nè   òbe'   kenè   ala*
     avan=e   eng-ne   kam   de'   nè   òbe'   ke-nè   ala
     then=3SG   exist-DIR 2PL   REL   come   want   IRR-come   take

     teghene'   fu'eng   dé,   ta'eng   de'   madiengh
     teghene'   fu'eng   dé   NEG   REL   new
     'so you came to get our old stories, not the new ones'

(56) *au   òèj   mengkangh   nyó   òzò   có'   ta*
     au   òèj   meN-kangh   nyó   òzò   có'   ta
     don't   MOD   AV-carry   3SG   orphan   order   go

     ngèny   ne   me-asèj
     ngèny   ne   me-asèj
     with   people INTR-road
     'don't carry him, let him walk with other people'

(57) *léfe   kavó   ke   kòma   ne,   è'elle   kavó*
     léfe   kavó   ke   ke-òma   ne,   è'el-le   kavó
     let   2PL.DU LOC   LOC-home   DIR   don't-PRTCL   2PL.DU

     òèj   nè   fempek
     MOD   come   go.out
     'you two stay just at home, don't go out!'

(58) *je   re   òèj   jere'   étó   aghi   ke   ce   te   re*
     because   people   MOD   laugh   seen   1SG   LOC   far   DIR   PRTCL
     '(I don't like) that people make fun of me'

(59) *je   òèj   ala   ngadèny   tó'ó*
     because   MOD   take   name   parent
     'because they would take the name of their parents'

(60) *ketè   tele   ke   Irian   có   tò,   òmèny   có   tè*
     ke-tè   tele   ke   Irian   có   tò   òmèny   có   tè
     IRR-go   1PLINCL LOC   Irian   one   day   year   one   go

     ke   Irian   bòlèny   bòlèny   tele
     ke   Irian   bòlèny   bòlèny   tele
     to   Irian   month   month   three
     'we will go to Irian one day, next year, to Irian, in the month of March'

(61) *nè   Bòngèny kenè   mesé'   famen, a'eng e   maghangh*
     nè   Bòngèny ke-nè   N-fesé' famen   a'eng e   me-aghangh
     come   Bòngèny IRR-come AV-open door   NEG   3SG INTR-brave
     'Bòngèny was going open the door but he did not have the courage'

Evidentiality, as in Lebu' Kulit, is not grammatical but the language employs a range of lexemes and evidential verbs to mark the source of information expressed in a sentence.

- *disi*   aspect, appearance
- *étó*   seen
- *baen*   utter (with cliticized personal pronouns)
- *dae*   voice (with cliticized personal pronouns)
- ken   say (with cliticized personal pronouns)
- len   feel (with cliticized personal pronouns)

These are *disi* 'aspect', *étó* 'seen', quotative verbs like *baen, dae , ken* 'say, utter' with the clitic pronouns in forms like: *ba=ci* (I say) *ba=cu* (you say) *ban=e* (he says) *ba=cam* (youPL say) *ba=do* (they say) *ba=nyo* (he says), *da=re/ra=re* (they say, *ke=ci* (I say), *ke=cu* (you say) *ko=do* (they say) *kó=nyó* (he says) *kó=le* (we say) *kun=e* (he says) *kón=am* (we say) *len* (feel) *len=ci/le=ci* (I feel) *le=ku* (you feel)*, le=le* (we feel). Below, from (62) through (64), are some example sentences where the evidentials *étó* 'seen' and *disi* 'aspect' are employed. In (65), the evidence of a statement is marked by a quotative verb *kónyó* (he says) and by a verb of feeling *lenci* 'I feel' in (66).

(62) *ki   meli   safè   de'   tè'a   étó   ó'ó*
     ki   N-beli safè   de'   tè'a   étó   ó'ó
     1SG AV-buy dress   REL   nice   seen   later
     'I will buy you a nice dress'

(63) *méé   étó   bevèj-bevèj tasa   le   ke   Sa'èny ne*
     méé   étó   RED-bevèj   tasa   le   ke   Sa'èny ne
     like this seen   PL-feature   time   1PLINCL   at   Sa'an   DIR
     'apparently our habits in Sa'an in the past where exactly like these'

(64) *bangh étó   zó   ngetòmen-ngetòmen ngempangen anake*
     bangh étó   zó   RED-N-ketòmen   N-bangen   ana'=e
     only   seen 3SG   ITER-AV-embrace   AV-happy   child=3SG
     'he was embracing (it was seen) his child'

(65) *tè   mana   sòngè   ntu   zó   ó'ó   je*
     tè   N-fana sòngè   ntu   zó   ó'ó   je
     go   AV-heat water   bathe   3SG   later   because

     a'eng tè'a   udite   kónyó
     a'eng tè'a   udij=e   keng=nyó
     NEG   nice   life-3SG word-3SG
     'heat the water, bathe him because he is not feeling well, he said'

(66) *bangen lenci   je   tè'a   isi   e   re*
     bangen len=ci   je   tè'a   isi   e   re
     happy   feel=1SG because   nice   aspect   3SG PRTCL
     'I am happy (I feel) because of his kindness'

4. Punan Tubu'

The Punan Tubu'-Malinau-Mentarang are the largest community of hunter-gatherers living in a one area in Borneo, the Malinau Regency in East Kalimantan. They possibly number as many as 4000 speakers and include the Punan Tubu', Punan Malinau, Punan Mentarang and Punan Sekatak or Punan Berusu'.Most live in a resettlement camp (Respen Sembuak, now called Respen Tubu' next to the capital town of Malinau), while some inhabit the upper part of the Tubu' river in the Malinau Regency. Data for this paper were collected with the Punan Tubu' community in Respen Tubu', Malinau. Punan Tubu' is a branch of the North Sarawak subgroup. Morphologically this language behaves like most of the other languages of the Kayan-Kenyah subgroup with prefixes and no suffixes. Aspect is mostly marked analytically. Nevertheless this language employs the *<en>* infixation to express undergoer voice (see Soriente 2013) and this infix can also have a perfective meaning.

4.1. Perfective

Perfectivity is marked by the following markers:

- *belum*   PFCT/finished
- *<en>*   passive and perfective of transitive   verbs
- *tubit*   semelfactive

Perfectivity is mostly marked by the optional word *belum*, which expresses perfect of experience, of result and of a persistent situation. It seems that this word only appears in isolation when no other devices are employed to indicate the aspect of the event (see examples (67) and (68)). Undergoer sentences morphologically expressed by the infixation of *<en>* often have the perfect interpretation, thus, undergoer sentences are usually not marked by *belum* as in example (73). Furthermore, *belum* can also function as a time conjunction in subordinate clauses. *Tubit* marks semelfactive aspect (see example (74)). The time of an event is only expressed through the time adjuncts *lou'ah* 'that day', *tovun* 'tomorrow', *bénih* 'now', *maléh* 'yesterday', *uron* 'in the past', *unih, unéi* 'earlier', *ano'* 'later' as in examples (69) through (72) below.

(67) *belum   kou   mom?*
     PFCT   2SG   bathe
     'have you bathed yet?'

(68) *déh   belum   a'   déh   tat   a'up   nah   hén   pén   ké'*
     déh   belum   a'   déh   tat   a'up   nah   hén   pén   ke=é'
     go   PFCT   person go   from   morning exist 3SG   take   say-1SG

     janéi   wo'   ji'   ne=(h)én
     bird   REL   one   then=3SG
     'the person has gone since this morning, he has taken that one bird (I say)'

(69) *miri'   unan   hén   dorén   hén   ne   rin   betai'*
     N-piri'   unan   hén   dorén   hén   ne   rin   betai'
     AV-lay-down   with   3SG   visible 3SG   kemudian 3SG   hamil

     pe   lou'ah
     pe   lou'ah
     also   hari.itu
     'she had laid down with him and it was clear later that she had become pregnant that day'

(70) *iro   déh   ti'   lou'ah   yah?*
      3DU   go   aggressive   that.day   EXCLM
      'they have fought against each other, right?'

(71) *mekevoh   hén   déh   nah   lou'ah*
      me-kevoh   hén   déh   nah   lou'ah
      ST-dead   3SG   go   be   day=that
      'he died that day'

(72) *na   uli'   ne   detou   petékung   lou'ah*
      na   uli'   ne   detou   pe-tékung   lou'ah
      EXCLM   go.back then   3PL   INTR-gather day=that
      'well, they have all come back in the village'

(73) *kévi'   a'   an   lirin   tukung   an   lun   tukung   tenenah*
      kévi'   a'   an   lirin   tukung   an   lun   tukung   <en>tenah
      all   person at   close   village at   place village <UV>destroy

      otuh   Kaci',
      otuh   Kaci',
      ghost   Kaci'
      'all the people living in the village and next to it were destroyed by the ghost Kaci''

(74) *hok   tubit   pelok   hén,   belum   inah   hén   mekevo'*
      hok   tubit   pelok   hén,   belum   inah   hén   me-kevo'
      1SG   PFCT   meet   3SG   PFCT   that   3SG   ST-die
      'I met him once, after that he died'

4.2. Imperfective

Imperfective markers in Punan Tubu' are:

- *an tang*   between
- *an luang*   in the middle
- *an belua*   in the middle
- *déh*   go
- *téi*   come
- *lela*   still
- *ledun*   while
- *reduplication*

Imperfective aspect does not have a dedicated marker and is often omitted. In a limited number of cases the spatial expressions *an tang* (in the middle), *an luang* (inside), *an belua'* (in the middle) in Punan Tubu', are employed, but these markers are not obligatory. Progressive aspect is expressed with the verbs *déh* 'go' (which precedes the word expressing the action) or *téi* 'come', or via reduplication and the employment of adverbs like *lela* 'still' or *ledun* 'while'.

There is a prefix *nye-* that derives verbs on nominal bases that, among the others, exhibits progressive aspectual properties but this has to be better investigated.

Examples (75) and (76) show instances of progressive aspect expressed through the spatial expression 'in the middle/between'. Examples (77) to (80) employ the motion verbs *déh* 'go' and *téi* 'come'. In (81) and (82), the imperfective action is marked by the

adverbs *lela* 'still' and the conjunction *ledun* 'while', and in (83) and (84) examples of reduplication where iterativity marks non completed action are displayed. Examples (85) and (86) are instances of imperfectivity marked by deictics whereas (87) and (88) are utterances where no aspect marker is employed.

(75) *nak   inah   an   luang   keman   kun*
      child   that   at   between eat   food
      'the child is (in the middle of) eating rice'

(76) *hén   an   tang   menarik*
      hén   an   tang   meN-tarik
      3SG   at   between   AV-dance
      'she is dancing'

(77) *detou   uva'   déh   mekéi   an   aun   tukuk*
      detou   uva'   déh   me-kéi   an   aun   tukuk
      3PL   new   go   INTR-go.up   at   over   mountain
      'he is climbing the mountain'

(78) *hén   déh   mena'   tandik   rin*
      hén   déh   N-pena'   tandik   rin
      3SG   go   AV-do   story   3SG
      'he is continuing his storytelling'

(79) *Roman   téi   nekering   an   jungat   teban*
      Roman   téi   ne-kering   an   jungat   teban
      Roman   come   AV-stand   at   doorway   door
      'Roman is standing on the doorway'

(80) *hén   déh   ngelekan   you   wo'   muit   tat   levu'*
      hén   déh   N-kelekan   you   wo'   muit   tat   levu'
      3SG   go   AV-chase   chicken REL   AV-go.out from   house
      'he is chasing the chicken that went out from the house'

(81) *tat   kou   téi   jam   yan   hok   lela   lekah,   ovi'   maling   nun*
      from   2SG   come   hour   eight   1SG   still work   NEG   NEG   rest

      hok   melai   lekah
      1SG   not.yet   work
      'if you come at eight I will be still working'

(82) *maléh   ledun   inah   hén   matuk   an   atang,*
      maléh   ledun   inah   hén   N-patuk   an   atang
      yesterday in.the.meanwhile that   3SG   AV-cook   at   kitchen

      nak   hén   puvé'   an   atan
      nak   hén   pe-uvé'   an   atan
      child   3SG   INTR-play   at   yard
      'yesterday while she was cooking in the kitchen, her son was playing in the yard'

(83) *telipan*   *nggap-nggap*   *kiné'*   *rin*   *déh*
      telipan   RED-nggap   ke-iné'   rin   déh
      cockroach   ITER-peck   NMLZR-because   3SG   go
      'the cockroach is pecking and pecking so that she can leave'

(84) *péma'-éma'*   *ne*   *doh*   *lou'ah*   *tubit*
      pe-RED-éma'   ne   doh   lou'ah   tubit
      INTR-ITER-say   then   3PL.   that.day   PFCT

      doh   *kah*   *jainah*   *rin*   *ke*   *doh*
      doh   kah   jainah   rin   ke   doh
      3PL   walk   like   3SG   to   3PL
       'he had been asking here and there that day, then he went, they say'

(85) *ovi'*   *ngalung*   *surat,*   *hén*   *turui*
      ovi'   N-kalung   surat   hén   turui
      NEG   AV-carving   letter   3SG   sleep
      'he is not writing a letter, he is sleeping'

(86) *hén*   *tandik*   *an*   *arin*   *hén*
      3SG   story   at   y.sibling   3SG
      'he is telling a story to his brother'

(87) *lekah*   *hok*   *inih*
      work   1SG   this
      'I am working'

(88) *hén*   *leka*   *bénih,*   *ovi'*   *ngom*   *téi*
      3SG   kerja   now   NEG   can   come
      'he is working now, he cannot come'

4.3 Negation, mood and evidentiality

Negation, mood and evidentiality are marked in Punan tubu' by the following:

- *ovi'*   negates verbs and nouns
- *maling*   marks an opposition
- *ke-*   irrealis mood
- *it*   want
- *ngom*   can
- *padai*   be able
- *ke-*   quotative

Negation, mood and evidentiality are not marked by bound morphemes but rather by free lexemes, with the exception of the prefix *ke-* , which marks modality.

Ovi' negates nouns and verbs, *maling* marks opposition or a statement contrary to expectations (see ex. 92-93). *Ovi'* tends to precede the subject in the syntactic structure as can be seen in examples (89) and (90), whereas *maling* occurs before the verb (92-93):

(89) *detou*   *ovi'*   *detou*   *melai*   *vi'*   *umoh,*   *ovi'*   *detou*   *padai*
      3PL   NEG   3PL   not.yet   many   field   NEG   3PL   know

> *jam   kun   hén*
> can   food   3SG
> 'they don't yet have ricefields because they do not know how to make food'

(90) *ovi'   déh   iro   melai   ku'ung*
     NEG   go   3DU   not.yet gather
     'they have not gotten together yet'

(91) *ovi'   ne   hok   ngami   kou   kenah   uron,   ovi'   nih*
     ovi'   ne   hok   N-ami   kou   kenah   uron,   ovi'   nih
     NEG   then   1SG   AV-hope 2SG   that   in.the past NEG   here

     kén   an   nak   hén   nah
     kén   an   nak   hén   nah
     say3SG   at   child 3SG   exist
     'I was not expecting you would be like this, he said to his son'

(92) *hok   mu'   nak   kah,   nak   maling   kah*
     1SG   order child walk   child NEG   walk
     'I made/caused the child to walk, but he didn't walk'

(93) *hok   mé'   nak   inah   keman, nak   inah   maling yo'   keman*
     1SG   give   child that   eat   child that   NEG   unwilling   eat
     'I made the child eat, but he didn't want to eat'

Mood or epistemic modality, i.e. the expression of the degree of a speaker's certainty regarding an utterance, is conveyed using modal verbs. These include *it* (want) (for future actions), *harus* 'have to'or simply adverbs like *laung* 'really', or strong intonation, for obligation, *ngom*, for the epistemic modality of possibility, and *jam* 'know' and *padai* ' be able'. Following are some examples showing the use of modal verbs.

(94) *lacét   kou,   aruk   it   déh   kah*
     quick   2SG   boat   want   go   walk
     'you must hurry up, the boat is going to leave'

(95) *tovun   kou   ovi'   kengom   leka*
     tovun   kou   ovi'   ke-ngom leka
     tomorrow   2SG   NEG   IRR-can work
     'tomorrow you shouldn't be able to work'

(96) *John   it   teniran   tovun,   héi   wo'   it   téi*
     John   it   <en>tiran   tovun   héi   wo'   it   téi
     John   want   TER-marry   tomorrow who   REL   want   go

     tat   adat   ngenong   hén
     tat   adat   N-genong   hén
     from   customs N-see   3SG
     'John will get married tomorrow, who is going to be the witness?'

(97) *héi   wo'   neju   tero   mangun lakin   tero   tovun?*
     héi   wo'   ne-ju   tero   mangun lakin   tero   tovun?
     who   REL   UV-angkat 1PL.INCL become leader 1PL.INCL tomorrow

tat	adat	ngenong	hén	tat	adat
tat	adat	N-genong	hén	Tat	adat
from	customs	AV-see	3SG	from	customs

'who among us will be chosen to become our leader tomorrow?'

(98)
hok	kah	déh	lulung,	tat	hok	uli'	ano'	tanah	mangun
1SG	walk	go	before	from	1SG	go.back	later	there	become

pa'	ne	lekah	ketou	pa'
also	then	work	2PL	also

'I am leaving now, when I come back, all your work has to be finished'

(99)
arin	ku	tovun	ngalung	surat
arin	ku	tovun	N-kalung	surat
y.sibling	1SG	tomorrow	AV-carving	letter

'my brother will be writing letters tomorrow'

(100)
tovun	kou	ovi'	nyatung,	ungéi	réh	seniom
tovun	kou	ovi'	N-satung	ungéi	réh	seniom
tomorrow	2SG	NEG	AV-swim	water	that	cold

'tomorrow you won't be swimming, the water will be cold'

As in other Borneo languages, there is not a dedicated class of evidentials but in most utterances it is necessary to express whether the truth of a statement comes from the fact that it is said, heard, or felt. In Punan Tubu there is a proclitic sometimes occurring as a free morpheme *ke-* that has a quotative meaning. It always becomes the hosts of clitic pronouns: *ke=rin* 'he says', *ke=detou* 'they say', *ke=kou* 'you say' *ke'* 'I say', *kén* 'he says'[1]. Examples (101) through (103) display these quotative verbs with cliticized pronouns. This *ke-* can be also prefixed to any noun to indicate who says what: *keBilung* 'said Bilung'. The same cliticized pronouns attach also to the lexem *kuén* 'word, intention' like *kuok* 'I say, I mean' in example (104).

(101)
gemi'	kén	ngenong	rin	kun	auh	aji'
gemi'	ke=hén	N-genong	rin	kun	auh	aji'
smile	say=3SG	AV-see	3SG	food	dog	other

'she had the most beautiful looking smile, 'I swear''

(102)
nyelu	va'	nyelu	nyipén	hén	jan	héi	kedoh
nyelu	va'	nyelu	nyipén	hén	jan	héi	ke=doh
till	mouth	till	tooth	3SG	good	who	say=3PL

'including her mouth, including her teeth, said them'

(103)
hok	pelok	ké'	ji'	liwai	man	hén	mekevo'	uva'
hok	pelok	ke-é'	ji'	liwai	man	hén	me-kevo'	uva'
1SG	meet	say-1SG	one	kali	father	3SG	INTR-kill	new

'I met your father once, then he died'

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[1] It is worth briefly mentioning that clitic pronouns in this language are affixed to inalienable nouns and also to some verbs and lexemes. Moreover, whereas the aspect markers and the negation markers cannot host these clitics, modal verbs and evidential verbs nevertheless can. Only singular pronouns can become clitics (*-k, -m, -n*), and the position of the arguments is irrelevant for the realis/irrealis distinction.

(104) *ja'*   *ku'* *an*   *tilau* *bayau* *ke* *kou* *kuok*   *uron*   *néi*
      ja'   ku' an   tilau bayau ke kou kuén=hok uron   néi
      probably 1SG at   place tiger   KE 2SG word=1SG long.time earlier
      'probably I was in the tiger's place that time, I say'

5. Penan Benalui

The Penan Benalui are a group of former hunter gatherers people originally inhabiting several areas in the highlands of Central Borneo and nowadays living in seven communities of the Malinau district of East Kalimantan and not always in contact with each other: Long Bena (52 people) and Long Belaka (165 people) on the Lurah River, Long Lame (also k.a. Long Lame Baru) (190 people), Long Sungai Taket (population included in Long Lame), on the Bahau River, and other villages of settled Kenyah people in the Pujungan regency like Long Uli (42 people) and Pujungan (2 persons). Data for this paper are mostly from the Long Lame Baru village.

The Penan Benalui language is spoken by almost 450 people and has been considered a member of Western Penan group which also comprises also the Penan Geng, Penan Silat, and Penan Apau in Sarawak between the Baram and the Balui rivers. Eastern Penan languages are spoken in Sarawak and Brunei and are considered slightly different in vocabulary and phonetics. The Penan Benalui is a very small group that has lived for many years separated from groups in Sarawak apparently speaking sister languages.

They are generally bilingual, speaking the language of the settlers they are in contact with, namely the Kenyah, with which they have historical relations. They are claimed to speak the language of any settled neighbor and are always defined by Kenyah as multilingual. Nowadays, with the spread of Indonesian as a national language, Penan Benalui also communicate with non-neighboring Kenyah in Indonesian, and this also is the language used with other Punan as demonstrated during the cross-Punan meetings. Penan Benalui is classified as belonging to the Kayan-Kenyah subgroup sharing with Kayan and Kenyah languages similar morphological behavior with prefixation and no suffixation. On the other hand Penan Benalui displays undergoer voice with the the employment of the *<en>* infixation (see Soriente 2013). Like the other languages discussed before, Penan Benalui does not express tense, nor is any morphology used for aspect and mood, but rather, time is expressed using time adjuncts such as *saau* 'in the past', *nii* 'earlier', *daap or éda* 'later', *malem* 'yesterday', *sagam* 'tomorrow' etc. and most aspectual features are marked analitically by free lexemes that can be optional. As already mentioned for Punan Tubu the *<en>* infix   can have a perfective reading.

5.1 Perfective

The markers of perfective aspect in Penan Benalui are:

- *pengah*   finished, PFCT
- *<en>*   passive and perfective of transitive   verbs
- *tubit*   semelfactive

Perfective aspect is expressed analitically through the lexeme *pengah*[2] which also conveys the meaning of 'finished' and can also be used as a temporal adverb 'after' in temporal clauses. In examples (105) through (107), *pengah* functions as a perfective

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[2] The same lexeme is employed in Kelabit (see Clayre 2002). In Western and Eastern Penan spoken in Sarawak and Brunei, the perfective lexeme is *lepah*, a cognate of Kenyah *lepek.*

marker, whereas in (108) it is a temporal adverb 'after' that links two sentences. As already mentioned, the undergoer voice marking infix *<en>* also has a perfective meaning. Sentences (109) and (110) demonstrate this. Neverthelss there are cases like example (111) where the free lexeme *pengah* is used together with an infixed verb.

(105) *pengah   éh   naat   akeu'   iah   ieng   éh   naat   kaau*
        PFCT   3SG   see   1SG   but   NEG   3SG   see   2SG
        'he has seen me but he hasn't seen you'

(106) *kekat   sakai   pengah   masek   bibi*
        all   guest   PFCT   go.in   whole
        'all the guest have all come in'

(107) *ineu'   puun   amee   pengah   ko'   tei   la'   Jakarta?*
        what   be   father   PFCT   2SG   go   to   Jakarta
        'have you ever been to Jakarta?'

(108) *melu   apu   pengah   melu   ale   apu   melu   apu*
        drain.water   sagu   after   drain.water take   sagu   drain.water   sagu
        'we drained water, after draining water, we took the sagu'

(109) *akeu'   kenala'   nah*
        akeu'   <en>kala'   nah
        1SG   -en-laughter   3SG
        'I have been laughed at by him'

(110) *éh   mange   tu   deneban*
        éh   mange   tu   <en>deban
        3SG   cry   because   <UV>hit
        'she is crying because she was hit'

(111) *balak   ya'   pengau   senua'   pengah   kinan*
        banana   REL   new   <en>buy   PFCT   <en>eat
        'the bananas that were just bought were eaten up'

5.2 Imperfective

Imperfective aspect has no dedicated marker, but can be marked by the following:

- *me/meN-*   transitive and intransitive verbs
- *tei*   go
- *reng*   in the middle
- RDP   reduplication

When non explicitly expressed by a lexeme, the stative or intransitive prefix *me-*[3] as in (112) or the active transitive (*me)N-* in (113) and (114).

(112) *padi   ki'   melakau*
        padi   ki'   lakau
        relative 1SG   INTR-walk
        'my brother is walking'

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[3] The verbal prefix *me-* also has a stative function.

(113) *mam   moru*
      mam   N-poru
      father   AV-bathe
      'daddy is bathing'

(114) *akeu'   menyurat   mona'   bakéh   ki'*
      akeu'   meN-surat   mona'   bakéh   ki'
      1SG   AV-letter   for   friend   1SG
      'I am writing a letter for my friend'

Sometimes the motion verb *tei* 'go' followed by another verb indicates imperfectivity as can be seen in examples (115) and (116). Reduplication has the function of expressing imperfective action in (116).

(115) *akeu'   tei   melakau-melakau   tong   ba'*
      akeu'   tei   RED-me-lakau   tong   ba'
      1SG   go   ITER-INTR-walk   LOC   forest
      'I went walking in the forest'

(116) *ireh   kelunan   Kenyah   tei   pejagan   dalem   sawah*
      ireh   kelunan   Kenyah   tei   pe-jagan   dalem   sawah
      3PL   person   Kenyah   go   INTR-work   inside   paddy
      'the farmer (the Kenyah) went working in the paddy'

More generally, imperfective action can just be unmarked as in (117) where only the context determines the aspect. Alternatively the use of adverbials such as *reng* 'in the middle' or *déneh* 'now' can express imperfective action as in (118)

(117) *ireh   pula   parai*
      3PL   plant   rice.plant
      'they're planting rice'

(118) *reng   nen   panah   ma'*
      in.the.middle   mother   hot   cooked.rice
      'mom is cooking rice'

5.3 Modals, negators and evidentials

Modals, negators and evidentials in Penan Benalui are:

- *ju'*   want, will
- *sukat*   can
- *harus*   must
- *ieng*   negator
- *amai*   prohibition
- *pia'/mia'*   say

Modals are *ju'* 'want, will' *sukat* 'can' and the Indonesian borrowed verb *harus* 'must'.

The modal *ju'* is generally used to mark an approaching event (see example (119)) or to denote an intention as in examples (120) and (121).   The modal verb *sukat*, illustrated in (122), marks a possibility and *harus* in (123), a necessity.

(119) *iah   ya'   ju'   alee   akeu'*
       3SG   REL   want   take   1SG
       'it is going to be taken by me'

(120) *akeu'   ju'   moru*
       akeu'   ju'   N-poru
       1SG   want   AV-bathe
       'I will have a bath'

(121) *sagam   akeu'   ju'   tei   la'   kota*
       tomorrow   1SG   want   go   to   town
       'tomorrow I'll go to town'

(122) *mesep   bee   gonin   bee   Baau   ireh   sukat   ireh   sep*
       me-sep   bee   gonin   bee   Baau   ireh   sukat   ireh   sep
       me-drink water   raw   water   Bahau   3PL   can   3PL   drink
       'they drank the raw water of the Bahau, yes they could drink it'

(123) *ireh   harus   posot*
       3PL   must   rest
       'they must rest'

The negator *ieng* has a tendency to occur before pronouns as in example (124) and *amai* is used to prohibit something or to express the desire that something does not happen as in example (125).

(124) *ieng ireh puun   puto   mamah,   ieng   ireh   puto   sakit   kena'*
       NEG   3PL   exist   often   feverish   NEG   3PL   often   sick   appear
       'they did not often get feverish, they did not get often sick (it appears)'

(125) *amai   beleka   tuei   ugai   akeu'*
       NEG   need   come   naked   1SG
       'I'd better not come, I am naked'

In Penan Benalui the quotative verb *mia'* (say) or the noun *pia'* (word) occur very frequently in utterances where it is necessary to mark the source of information. When the source of information is vaguer, then the word used is *kena'* [4] 'appear, resemble'. In example (126) the speaker is repeating somebody else's words whereas in (127) the source of information is not certain and the invocation to the spirits is felt as vague.

(126) *mia'   pia'*   *ireh   kovok   één   katon   apu   niin*
       N-pia' pia'   ireh   kovok   één   katon   apu   <en>miin
       N-say   language   3PL   monitor   that   sack   sago   <UV>bring

       ireh   moli   *één*
       ireh   N-poli   één
       3PL   AV-come.home   that
       'it was said, the monitor, the sack of sago was brought by them'

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[4] *Kena'* is now grammaticalized in the question word 'how' and in the conjunction 'like'.

(127)   *kena'   énéh   tei   kah   aseu'   ketei   pitah   balei   Gaau*
        kena'   énéh   tei   kah   aseu'   ke-tei   pitah   balei   Gaau
        appear   that   go   2PL   dog   IRR-go   look.for   spirit Gaau
        'you dogs, go look for the spirit Gaau! (it appears)'

6. Conclusion

In conclusion, all these languages, which are otherwise unintelligible, make use of TAME markers that are very diverse from each other. Nevertheless, despite the fact that these markers are different lexemes, the strategies to mark TAME show some similarities. The marker of perfectivity in al these languages is a free morpheme except for a few instances. These exceptions are the polyfunctional prefix *ke-* that occurs as a modality marker in Kenyah and occasionally in Penan Benalui and Punan Tubu'. The infix *<en>* is also used extensively as a marker of undergoer voice in Punan Tubu' and Penan Benalui. In all the languages studied, the major marker of perfectivity is a free lexeme with the meaning of 'finished'. For the imperfective aspect, in the cases it is expressed, the strategy used is to employ adverbial expressions meaning 'in the middle, betweeen'. All the other TAME markers are non morphological. As I have shown, for the most part these languages express TAME properties using unbound lexical items. These lexical items are optional, and can be omitted if the relevant TAME properties are otherwise clear from discourse of sentential context. It is interesting to note that in all the languages studied, the quotative verbs have an important role in the expression of evidentiality. In particular in Kenyah and in Punan Tubu the quotative verb *ken* 'say' bears the clitic pronouns and in the case of Punan Tubu this epistemic marker is being morphologized as it attaches also to nouns.

Abbreviations

1	first person	2	second person
3	third person	AV	actor voice
CAUS	causative	CMP	completed
DIR	directional	DU	dual
EMPH	emphatic particle	EXCL	exclusive
EXCLM	exclamation	HAB	habitual
INCL	inclusive	INTR	intransitive
IRR	irrealis mode	ITER	iterative aspect
LOC	locative	NEG	negator
NMLZ	nominalizer	PAU	paucal
PFV	perfective	PL	plural
PRTCL	particle	RECP	reciprocal
RED	reduplication	REL	relativizer
SG	singular	ST	stative
TR	transitive	VBLZR	verbalizer

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