

Tense, aspect and mood in some West Indonesian languages

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1. Introduction

Ross' reconstruction of Proto Austronesian morphology expresses aspect and mood, but not tense. In various West Indonesian languages (Batak, Javanese, Malayic and South East Barito languages) we see a further reduction of the original PAN aspect and mood affixes, along with the development of new markers of grammatical aspect and mood. Tense is generally absent in these languages, but not in Malagasy. (The latter belongs to the South East Barito language group, the other members of which are spoken in South Borneo).

	<i>Actor</i>	<i>Patient</i>	<i>Location</i>	<i>Circumstantial</i>
INDICATIVE				
<i>Neutral</i>	<um>V	V-ən	V-an	Si-V
<i>Perfective</i>	<umin>V	<in>V	<in>V-an	Si-<in>V
<i>Durative</i>	<um>-R-V	R-V-ən	R-V-an	Si-R-V
NON-INDICATIVE				
<i>Atemporal</i>	V	V-u	V-i	án-i + V (V-áni)
<i>Projective</i>	<um>V-a	V-aw	V-ay	án-ay + V (V-ánay)

Chart I: PAn verbal morphology (Ross 2001)

In the following four sections, I will follow the developments of TAM markers in four West Indonesian languages (or language groups) that I happen to have some familiarity with, to wit the Batak, Javanese, Malayic and South East Barito languages. I will do so by (1) trying to find out what happened to the aspectual and modal affixes reconstructed for PAn, and (2) looking for TAM affixes that cannot be traced to PAn and must be innovative. In the final section I will present some general conclusions.

2. Batak

Toba Batak does not have tense or mood affixes. (The imperative is marked by absence of voice marking.) It is not clear whether UO marking involves aspect. The language has four sets of UO markers:

1. di- (with 2nd and 3rd person agents), hu-/ ta- (with 1st person agents)
2. ni- or <in> (with 2nd and 3rd person agents), hu-/ ta- (with 1st person agents)
3. -on
4. tar-

table I **di-/ hu-/ ta- prefixation (based on bùat ‘to take’)**

1s	hu-búat	1p.incl.ta-búat	
		1p.excl.	hu-bùat hámi
2s	di-buàt hó	2p	di-buàt hàmu
3s	di-buàt (ibána)	3p	di-buàt nasída

table II **ni-/ <in> affixation (based on bùat)**

1s	(na) hu-búat	1p.incl.(na) ta-búat	
		1p.excl.	(na) binùaknámí
2s	(na) binuákmu	2p	(na) binuákmu? ¹
3s	(na) binuákna	3p	(na) binuàknasída

Van der Tuuk (1864), Nababan (1981) and Wouk (1984) more or less agree in their interpretations of *tar-* and *-on*.

tar- is a potentive prefix expressing ability. Van der Tuuk also mentions the confix *ha-* - *an* as a variant form.

The suffix *-on* derives verbs expressing an intention or obligation. Nababan qualifies it as a “promissory” suffix denoting future tense. Wouk labels it as a modal suffix marking irrealis. According to Van der Tuuk, *-on* derivations function as predicates meaning ‘something that has to be done’:

<i>Indada au sukkunonmu</i>	<i>[sukkun-on-mu],</i>	<i>ama-tta</i>	<i>i</i>	<i>do</i>
not 1s	ask-UO-2s.POSS	father-1s.POSS	distal	+affirmative

‘It is not me you should ask, but my father’

In other cases, *-on* derivations mean ‘something bound to happen’:

<i>Tu</i>	<i>dia</i>	<i>pe</i>	<i>ibana</i>	<i>sai</i>	<i>panggora-on</i>
towards	where	ever	(s)he	always	shout-UO

‘wherever she goes they will shout at her’

Sometimes, according to Van der Tuuk, they express future action:

<i>Matsadi</i>	<i>tonggi on</i>	<i>pangan-on</i>
sweet	very this	eat-UO

‘very sweet to eat’

<i>Jadi-hon</i>	<i>inum-on</i>	<i>ni</i>	<i>gaja</i>
create-APPL	drink-UO	GEN	elephant

‘make water that can be drunk by the elephants!’

As to *di-/ (hu-/ta-)* and *ni-/ <in>*, the above authors have very different – and partly contradictory – interpretations. Van der Tuuk does not attribute any tense or aspectual meaning to these voice markers. According to him, *di-* etc. occurs in constructions where agent and undergoer are both prominent:

¹ Nababan does not give a specific derivation with a 2nd person plural pronoun.

Molo na tutú do na hona niultopmí [ni-+ultop+-mu+i]
 if REL true +affirmative REL hit UO-shoot.with.blowpipe-2s.GEN-that
 ‘if it is true you hit that with your blowpipe...’

di-ruar-i nasida tu balian
 UO-come.out-APPL they towards outside
 ‘They went outside’

Ni- etc. occurs in constructions with no specific agents, and more particularly in subordinate clauses and nominalisations:

Pidong na niultopmí [ni-+ultop+-mu+i]...
 bird REL UO-shoot.with.blowpipe-2s.GEN-that
 ‘the bird you shot with your blowpipe...’

aha niulám [ni+ula+mu] tu ladang on?
 what UO-do-2s.GEN towards field;area this
 ‘what are you doing in these parts?’

(N.b.: probably to be analyzed as *aha NA niulám tu ladang on?* ‘what is it that you are doing in these parts?’)

Nominalisations:

tinakkomí [<in> + takko+mu+i] (UO+steal+2s.GEN+that) ‘the things you’ve stolen’
pinahan [<in> + pahan] (UO+feed) ‘cattle’

ni- etc. furthermore occurs in imperatives which are not directed at a particular person, and in UO constructions with no specific agent:

ni-alap ma ogung i!
 UO-fetch +wish gong that
 ‘Let the gong be fetched!’

pinalua [<in>+ pa- + lua] pe ursa on
 <UO> CAUS- free +future.tense deer this
 ‘This deer will be set free’

Nababan describes *di-* etc. as a “simple” transitive passive prefix, and *ni-* etc. as its completive counterpart. “Completive” implies that the action has already taken place, in contrast to *di-*, which is neutral in terms of tense/ aspect, and the promissory *-on*, which expresses future actions. Nababan also attributes grammatical aspectual meanings to active prefixes; his active and passive affixes can be combined in the following paradigm:

	active voice	passive voice
simple	mang-	di- etc.
completive	<um>	ni- etc.
promissory	---	-on
distributive	masi-	---
imperative	ø	---
potential	---	tar-

Chart 2: Toba Batak voice affixes

A problem with Nababan's claims is that there are no solid means to verify them because he does not give clear contrastive examples. Nor does he give examples in context: while there is a small text at the back of his grammar, it does not contain instances of *ni-/ <in>*. Van der Tuuk does have many examples, although they are sometimes not translated², and they sometimes also miss the appropriate context to demonstrate aspectual meaning. (Note however that VdT does not assume that there is such a meaning).

Wouk (1984), in a paper investigating the conditions triggering the alternation between actor and undergoer orientation (or “+actor trigger” and “-actor trigger”) in Toba Batak, tests, among others, aspect as a possible factor. She notes the tendency for *mang-* and *ni-* etc. to occur in imperfect clauses, although the alignment is not absolute since *mang-* still occurs in perfect clauses in 15% of the attested *mang-* cases, and *ni-* etc. occurs in perfect clauses in 5% of the attested *ni-* etc. cases. *Di-* etc. is more or less neutral to perfectivity (45% of occurrences in perfect clauses and 55% in imperfect ones).

The tendency for *mang-* and *ni-* etc. to occur in imperfect clauses perceived by Wouk is in direct contrast to Nababan's observation that *mang-* is aspect neutral and *ni-* etc. denotes completive aspect. Incidentally, Wouk notes a tendency in her language consultants to translate *mang-* constructions into English with present tense verbs, and constructions involving *di-* etc. with past tense verbs. Wouk eventually rejects aspectual motivations for voice triggering because in the case of *di-* etc., which is the most frequent UO marker, there is no correlation with aspect, and in the case of *ni-* etc., the correlation with imperfect aspect runs counter to predictability.

Another source for Batak, this time of a southern variant, is Woollams' Karo Batak grammar (Woollams 1996). Karo Batak morphology, does not express TAM (except for the imperative which is marked by absence of affixation to the verbal base). It has a general Undergoer prefix *i-*, which is often realized as \emptyset , especially when various UO clauses are given in sequence:

<i>La</i>	<i>banci</i>	\emptyset - <i>simbak</i> ,	<i>la</i>	<i>banci</i>	<i>i-togan</i>
not	can	UO-reject	not	can	UO-contradict

‘It cannot be rejected, it cannot be contradicted’

A variant form *ni-* occurs in old texts; it also occurs in nouns, where it has a resultative meaning, such as *t<in>angko* ‘something stolen’ (< -*tangko* ‘to steal’), *s<in>uan* ‘crop’ (< -*suan* ‘to plant’, Woollams 1996:89). (Woollams furthermore distinguishes two *tar-* prefixes, *tar1-* expressing abilitative meaning, and *tar2-* denoting involuntariness, accidentality and/or spontaneity).

3. Javanese

Of the various dialects of Javanese, Standard Javanese and Old Javanese are probably the ones that have been studied most thoroughly. Standard Javanese is based on the court language of Yogyakarta and Solo, and Old Javanese is the language of pre-15th century literature in Java, which is still in use as a liturgical language in Bali.

1. The original PAn perfect aspect marker **ni-/ <in>* became an UO marker in Old Javanese. In standard Javanese this UO marker has largely been replaced by *di-*, although it does survive in literary style. Both Old Javanese *ni-/ <in>* and standard Javanese *di-* are UO markers in constructions with a foregrounded agent. If the agent is backgrounded or absent,

² This is apparently in cases where previous explanation and examples already provide sufficient information to the reader to sort out the meaning by him or herself.

Old Javanese *ka-* (/k-) and standard Javanese *kə-* (/k-) are used instead (if it is expressed it is introduced by a preposition). Neither of these dialects expresses tense or grammatical aspect morphologically. Old Javanese *<in>* is infixed to the verb, which is followed by the agent in the form of a 1st, 2nd or 3rd person enclitic pronoun or a noun phrase. Standard Javanese *di-* is prefixed if the agent is a 3rd person; if the agent is a 1st or 2nd agent, there is no prefix, and the agent is expressed by the proclitics *taʔ-* ‘1st person’ or *koʔ-* ‘2nd person’, or a noun phrase directly preceding the verb. Examples from Old Javanese (Zoetmulder 1983:50-51):

t<in>uṅgaṅ-an *iré* *kaṅ* *kuda*
 <UO>ride-APPL 3.GEN ART horse
 ‘He rided the horse’

Ika-ṅ *wṛṣabha* *p<in>aṅguh-ta* *Airâwaṇa* *ikâ*
 that-REL buffalo <OU>meet-2.GEN Airâwaṇa that
 ‘The buffalo you came across, that is Airâwaṇa’

Yan *kita* *huwus ka-təkân-a* *[ka-təka-an-a]* *swami...*
 if you already UO-arrive-APPL-IRR husband
 ‘If you already have found a husband,...’

tan *dadi* *ka-ton dé niṅ* *wwaṅ* *campur*
 not happen UO-see by person mixed
 ‘It is not possible that she be visible to impure people’

Examples from standard Javanese:

dòmèt-mu *nèng* *ndi?* *taʔ-sèlèh-ké* *(nèng) méja*
 wallet-2.POSS LOC where 1.PROCLIT-put-APPL LOC table
 ‘where is your wallet? I put it on the table’

Dòmèt-ku *nèng* *ndi?*
 wallet-1.POSS LOC where

koʔ-sèlèh-ké *(nèng) méja* / *di-sèlèh-ké* *(nèng) méja*
 2.PROCLIT-put-APPL LOC table 3.PROCLIT-put-APPL LOC table
 ‘where is my wallet? ‘You put it on the table’ / ‘She put it on the table’

dòmèt-é *k-èri* *nèng* *méja*
 wallet-DEF UO-leave LOC table
 ‘The wallet is left on the table’

dòmèt-é *kə-təlisut*
 wallet-DEF UO-misplace
 ‘The wallet is misplaced’

The Old Javanese sample sentences in Zoetmulder (1983) generally refer to past events, which must be due to the fact that they were all taken from literary sources. The standard Javanese sentences with *taʔ-/ koʔ-/ di-* are definitely neutral as to tense and aspect, as is shown in the following one, which combines with *arəp* (+future), *lagi* (+progressive) and *wis* (+perfect) :

Iki dompèt-mu : arəp/ wis/ lagi/ di-sèlèh-ké nèng méja
 this wallet-2s.POSS +FUT +PRF +PROG UO-put-APPL LOC table
 ‘Here’s your wallet: she’ll put it /has put it /is putting it on the table’

Standard Javanese *di-* is historically not related to Old Javanese *ni-* but must have developed from an earlier word *de* (< *day/*dai) ‘cause, reason; action, way, manner’. The latter still occurs as a nominaliser of verb clauses in Old Javanese (Adelaar 2009).

2. Both Standard and Old Javanese have a modal suffix *-a* (standard Javanese *-[ɔ]*), which is a reflex of PAn **-a* expressing optative/hortative in AO verbs (Ross 2009:296). In Old Javanese, “arealis” *-a* adds to the verb the notions of future, wish, command, obligation, suitability, aim, potentiality, concession and irrealis (Zoetmulder 1983:150-163).

Future:

Aku sumaputana [s<um>aput-an-a] kita ləbû
 1 <AO>cover-APPL-IRR 2 sand
 ‘I’ll cover you with sand’ (Zoetmulder 1983:155)

Possibility (or suitability):

Tan dadi mpu brahmân âñinum-a madya
 not happen lord brahmin AO-drink-IRR alcohol
 ‘It is not possible (suitable) that a Brahmin drinks alcohol’ (Zoetmulder 1983:162)

Wish, possibility:

Sabhāgya ñhulun maty-a dé-nta
 happy 1 die-IRR because-2.GEN
 ‘I’d feel happy if I were to die because of you’ (Zoetmulder 1983:160)

Imperatives can also be expressed by the verbal base without voice affixation. Example:

Laku tēbər ta kita!
 move fly EMP 2
 ‘Come on, fly away!’

Note that verbs with <*in*> lose this UO infix and have *-ən* suffixed in imperative forms:

aŋ-(h)undaŋ [AO-call] ‘to call’, *(h)<in>undaŋ* [UO-call] ‘be called’ (Zoetmulder 1982)

→ *Undaŋ-ən juga sira!*
 call-IMP.UO just, only 3
 ‘Just call him! [lit. ‘that he be called’] (Zoetmulder 1983:114)

Standard Javanese irrealis *-a* expresses a potential, intention, conditional, optative or hortative (Ogoblin 2005:605-606). Examples:

conditional:

Daya-daya təkā-n-a ing omah
 Do.one’s.best arrive-n³-IRR LOC house
 ‘she did her best to arrive home’

³ This *-n-* often appears between roots ending in a vowel and the following suffix.

hortative:

ng-ombé-a banyu godhogan!
 AO-drink-IRR water boiled
 ‘Drink boiled water!’

It not only occurs with verbals but also with pronouns, adverbs, auxiliaries, conjunctions and the like (e.g. *aku* ‘I’ → *aku-a* ‘if it were me’; *mréné* ‘here’ → *mréné-a!* ‘please come here!’; *kəmul* ‘blanket’ → *kəmul-a!* ‘use as a blanket...!’ (Ogloblin *ibid.*).

In the low register (ngoko) form of Standard Javanese, the imperative in AO verbs is marked by the absence of AO affixes on the verbal base. Standard Javanese has a suffix *-ən* marking imperative mood in UO verbs which otherwise have no suffix. Examples:

Nutup [N-tutup] → *Lawan-e tutup-ən!*
 AO-open] door-DEF close.IMP.UO
 ‘to open’ ‘Open the door!’

3. Another modal category in Javanese is Old Javanese *ndak-*, standard Javanese *dak-* or *tak-*, which is a propositive prefix expressing an intention or preposition made by a first person, as demonstrated in the following Old Javanese sentence (Zoetmulder 1893:54):

Ilu ta, ndak wör-akən kita
 follow EMPH 1.PROCL fly-APPL you
 ‘Come along, I’ll take you through the air!’

One would be tempted to explain these proclitic pronouns as clitic forms of the first person singular pronoun *aku*. However, they apparently derive from an early Javanese hortative deictic particle *nda* ‘there! come!’ followed by a clitic *-k* (← *ak* ‘conjunctive particle with connotation of the first person’); the combination still occurs in Old Javanese (Zoetmulder 1982).

The Standard Javanese propositive morpheme *tak/dak/ndak* occurs in AO constructions and expresses a readiness or intention. It is a function word, which can be separated from the following verb by another word; it does allow the co-occurrence of a 1st person pronoun as a subject. Compare:

Aku tak nusul [N-susul] Bapak dhéwéan
 1 PROPOS AO-follow father alone
 ‘Let me follow Father by myself’

Aku tak dhéwéan waé nusul Bapak
 1 PROPOS alone just, only follow father
 ‘Let me alone follow father’

In UO clauses, this morpheme is cliticised to the verbal base, which also has *-é* (or *-ipun* in high register forms) suffixed:

Tak=plathok-an-é kayu-mu
 PROPOS=chop-APPL-PROPOS wood-2.GEN
 ‘Let me chop your wood’

The suffix *-é* (*/-ipun*) is identical in form to the 3rd person possessive suffix. However, it probably reflects PAn **-ay*⁴, the projective marker in locative and circumstantial voice as reconstructed by Ross (2001) (see Chart I above). In that case, the high register suffix *-ipun* is due to false analogy.

4. Malayic

Malay and most other Malayic varieties go further than Javanese in that neither tense, nor grammatical aspect or mood, are morphologically expressed. Nevertheless, the PAn modal suffix **-a* is still extant in (among others) Old Malay and in Kanayatn (Kendayan), where it expresses conjunctive mood (Adelaar 1992).

However, in the Kanayatn branch of Malayic, some verbal affixes do express grammatical aspect. Transitive verbs have a nasal prefix in AO as well as UO voice; however, in UO voice, completed action is marked by the presence of a nasal prefix, whereas non-completed action is marked by its absence. Compare the following four sentences, of which (1) and (2) show the presence of the nasal prefix in transitive verbs in any AO construction, whereas (3) shows its presence in a clause expressing completed action, and (4) its absence in a clause expressing non-completed action.

- (1) *Ià munuh enekη aηkoà*
 3RD.PERSON N-kill [N-*bunuh*] pig that
 ‘He killed that pig.’ (Actor-oriented)
- (2) *Ià anà? munuh gnekη aηkoà*
 3RD.PERSON not N-kill (N-*bunuh*) pig that
 ‘He did not kill that pig.’ (Actor-oriented)
- (3) *Enekη aηkoà dah ià munuh*
 pig that already 3RD.PERSON N-kill [N-*bunuh*]
 ‘He killed that pig.’ (Undergoer-oriented)
- (4) *Enekη aηkoà anà? ià bunuh*
 pig that not 3RD.PERSON kill
 ‘He did not kill that pig.’ (Undergoer-oriented)

While in general, the nasal prefix in Kanayatn is most probably a reflex of the Proto Malayic AO prefix **mAn-* (which in turn reflects PAn **maŋ-*), its development into a marker of completed action in UO constructions is unexpected and cannot be explained as a retention from Proto Malayic or PAn. While in western Malayo Polynesian languages nasal prefixation tends to mark Actor-orientation and is associated with low transitivity, completed action is rather associated with high transitivity. The development may be due to contact with Bidayuhic languages, but this remains to be demonstrated. (Moreover, it would not solve the problem of how nasal prefixation came to mark completed action but would only relegate the need for a solution to a different subgroup of Austronesian).

⁴ Adelaar (to appear) and Wolff 1973.

5. Reflexes of the PAn perfect tense marker *ni-/*<in> in South East Barito languages.

The South East Barito languages are spoken in Kalimantan (Indonesian Borneo) in the eastern part of Central Kalimantan province and in parts of South Kalimantan province. The most documented South East Barito language in Kalimantan is Maanyan. Together with Samihim (which appears to be a closely related dialect of Maanyan), it is also the South East Barito language most closely related to Malagasy, as far as shared sound correspondences and vocabulary are concerned.

In Maanyan, neither tense nor mood are expressed morphologically (imperative is marked by the verbal stem). There are two UO constructions, which are used in slightly different ways:

1. *na-* + verbal base: the emphasis is on the completion of the action (perfect aspect), while the agent is somewhat backgrounded and may or may not be expressed by a prepositional phrase introduced by *daya*;

2. verbal base immediately followed by agent: the agent is an encliticised possessive pronoun or agent noun phrase; emphasis is on the agent; the action is imperfect. Compare the following text:

<i>Puang pikir</i> <i>not think</i>	<i>ammau,</i> <i>long</i>	<i>hi</i> <i>article</i>	<i>Gayuhan</i> <i>G.</i>	<i>balalu nyamulu [N-saN-wulu),</i> <i>then AO-applicative-body.hair</i>	
<i>nulu,</i> <i>AO-burn</i>	<i>palus</i> <i>then</i>	<i>na-retet-retet</i> <i>UO-RDP-cut</i>	<i>katuluh</i> <i>all</i>	<i>lunek-ni</i> <i>meat-3poss</i>	<i>sementara</i> <i>while</i>
<i>ulu-ni</i> <i>head-3poss</i>	<i>na-taleung</i> <i>UO-set.aside</i>	<i>na-simuh</i> <i>UO-save, store</i>	<i>daya</i> <i>by</i>	<i>Gayuhan,</i> <i>G</i>	<i>takut</i> <i>afraid, concerned</i>
<i>rasa</i> <i>know</i>	<i>ineh-ni</i> <i>mother-3poss</i>	<i>amun</i> <i>if,when</i>	<i>hawi</i> <i>return</i>	<i>teka</i> <i>from</i>	<i>ume.</i> <i>field</i>

‘Without further ado, Gayuhan skinned it and burned it. Then the meat was cut up while Gayuhan set aside its head and stored it so that his mother would not find out when she came back from the field’.

<i>Ude</i> after	<i>yeru</i> that	<i>hanye</i> 3s	<i>nuen</i> <i>[N-luen]</i> AO-cook	<i>dami</i> as soon as	<i>mandru</i> cooked (rice)	<i>palus</i> consequently
<i>kuta-ni</i> eat-3poss		<i>re-erai</i> one-one	<i>dahulu</i> all	<i>puang</i> not	<i>ka-andrei</i> invol.-wait	
<i>ineh-ni</i> mother-3poss		<i>teka</i> (come) from	<i>ume</i> field			

‘When he had cooked side dishes and as soon the rice was done, he ate it all by himself without waiting for his mother to come from the field’

Another construction, *ka-* + verbal base, is characterised by the fact that the agent is not in full control of the action. Such a construction can be passive-like such as *elan* ‘to wake up’ vs. *ka-elan* ‘to be awoken’, but it also includes verbs such as *ka-dinung* ‘to (happen to) see, visible’, *ka-itung* ‘to remember, come to mind’, and *ka-eau* ‘to talk’ (compare *ninung* ‘to see’, *ingat, ngingat* ‘to remember’, *ng-eau* ‘to say’).

na- is a reflex of the prefix PAN *ni-/*<in>. Its vowel is explained by the fact that in Maanyan, PAN antepenultimate vowels (*a, *i, *u) have generally merged to *a*, and since most Maanyan roots are disyllabic, the prefixes they take are usually in antepenultimate position.

N.b. The 2nd passive construction (i.e. verbal base immediately followed by agent) is a continuation of the original PAN UO and is still the default UO construction in Malagasy.

Malagasy is one of the few Austronesian languages that clearly distinguished tense. Examples:

Malagasy AO verbs and adjectives distinguish past tense (*n-*, *nu*), present tense (*m-* or ϕ -) and future tense (*h-*, *ho*).

mangalatrã Paoli ‘Paul steals’ (*maN-halatrã Paoli* ‘PRS.AO-steal Paul’)
nangalatrã Paoli ‘Paul stole’ (*maN-halatrã Paoli* ‘PST.AO-steal Paul’)
hangalatrã Paoli ‘Paul will steal’ (*maN-halatrã Paoli* ‘FUT.AO-steal Paul’)

miakatrã aho...,
ni-akatrã aho...,
hi-akatrã aho ‘I will lift’ (*hi-akatrã aho* ‘FUT.AO-lift 1s’)

Compare also the adjective *m-a-lemy* ‘wet’, *n-a-lemy* ‘wet (+past)’, *h-a-lemy* ‘wet (+future)’

Underived verbs (which have no prefix with *m-*): no distinction between present and past; future marked with *ho*, e.g.:

tonga izao izy ‘she’s arriving now’ (*tonga* ‘to arrive’; *izao* ‘now’; *izy* ‘3s’)
tonga omaly izy ‘she arrived yesterday’ (*omaly* ‘yesterday’)
ho tonga rahampitso izy ‘she’ll arrive tomorrow’ (*rahampitso* ‘tomorrow’)

In UO verbs, tense is expressed by prefixation of ϕ -/*n*-/*h*- before the verbal base:

<i>ome-nã</i>	<i>azy</i>	<i>ny</i>	<i>vola</i>
give-UO	3s.OBL	ART	money

‘the money is given to him’

<i>n-ome-nã</i>	<i>azy</i>	<i>ny</i>	<i>vola</i>
PST-give-UO	3s.OBL	ART	money

the money was given to him’

<i>h-ome-nã</i>	<i>azy</i>	<i>ny</i>	<i>vola</i>
FUT-give-UO	3s.OBL	ART	money

‘the money will be given to him’

If the base begins with a consonant, ϕ -, *no-* (+past) and *ho-* (+future) are prefixed:

<i>vono-in-ny</i>	<i>ny</i>	<i>akoho</i>
kill-UV-3s.GEN	DEF	chicken

‘He is killing the chicken’

<i>no-vono-in-ny</i>	<i>ny</i>	<i>akoho</i>
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PST-kill- UV-3S.GEN	DEF	chicken
'He killed the chicken'		

<i>ho-vono-in-ny</i>	<i>ny</i>	<i>akoho</i>
FUT-kill- UV-3S.GEN	DEF	chicken
'He will kill the chicken'		

One of the Malagasy regional dialects, Sakalava, uses the infix <in> to mark past tense in UO verbs, as demonstrated in the following Sakalava example. This allomorph of *n-* supports Dahl's view that the Malagasy past tense marker *n-* has developed from PAN *ni-/*<in> (see below):

f<in>ili-n'olo [*<in>* + *fili* + -*e/-in-* *olo*] *omale* *ny* *sefo*
 <PST> choose -UO person yesterday article chief
 ‘They chose a new chief yesterday’

Deictic adverbs are also marked for past tense by a prefix *t-* (future tense is not morphologically distinguished). Examples:

E-to *an-trano-ko* *izy*
visible-prox in-house-my 3s
'He's here in my house (I see him)'

<i>T-e-to</i>	<i>an-trano-ko</i>	<i>izy</i>
PST-visible-prox	in-house-my	3s
'He was here in my house (I saw him)'		

<i>A-o</i>	<i>am-bata</i>	<i>ny</i>	<i>pataloha-nao</i>
invisible-prox.inside	in-suitcase	article	pants-your
‘Your pants are in the suitcase (not within sight)’			

T-a-o *am-bata* *ny* *pataloha-nao*
PST-invisible-here.inside in-suitcase article pants-your
'Your pants were in the suitcase (not within sight)'

This *t-* is also used with the multipurpose preposition *amin-* and with some interrogative pronouns, e.g. *aiza Raikoto?* ‘where is Raikoto?’ vs. *t-aiza Raikoto?* ‘where was Raikoto?’.

According to Dahl (1954, 1988), these tense distinctions are generally due to Bantu influence, although formally the past tense marker *n-* is related to Maanyan *na-* and ultimately derives from PAN **ni-/<in>*. He also argues that Malagasy *ho* is based on an erroneous interpretation of the Costal Bantu (or “Sabaki”) “infinitive” marker **ku* as a future marker. Cf. structure of Sabaki verb in future tense:

pronominal prefix + *ta(ka) [+FUTURE] + *ku [+INFINITIVE] + lexical verb.

Kiswahili counterpart: *wa-ta-ku-ja* (3rd.person.plural-future-infinitive-come) ‘they will come’

Tracing *ho* to the Sabaki infinitive marker *ku makes sense, although Dahl's proposed pathway is problematic and unnecessarily complicated:

1. It is not likely that an affix so close to the verbal root (as *-ku- in *wa-ta-ku-ja*) was borrowed into Malagasy as an external prefix *ho-/h-*, let alone as a free-standing *ho*.
2. In Kiswahili and other Sabaki languages, the prefix *ku-* does occur at the beginning of any “infinitive” verb: it is likely that this general infinitive prefix was interpreted as a future marker rather than the infix *-ku-* which only occurs in future tense verbs derived from monosyllabic roots, as claimed by Dahl.

Maanyan has lost all PAn modal suffixes. Malagasy has several modal suffixes, but it is not altogether clear how they relate historically to PAn modal suffixes (see below). Malagasy *-a*, *-y* and *-o* are imperative suffixes. In very general terms, *-a* occurs with AO verbs, *-y* with UO verbs in which the stressed syllable already contains *-o-*, and *-o* with other UO verbs. Examples:

mody ‘to return’ → *modi-a!* ‘Come back!’

sàsa ‘laundry’ → *manàsa* ‘to do the laundry’ → *sasà-na* ‘what is being washed’

<i>sasà-o</i>	<i>ny</i>	<i>làmba!</i>
laundry-IMP	ART	clothes, textile
‘Do the laundry!’		

tòro ‘show, indicating’ → *manòro* ‘to show, indicate’; *a-tòro* ‘to be shown’

<i>mba</i>	<i>a-torò-y</i>	<i>làlana</i>	<i>àho</i>	<i>azafàdy</i>
+request	UO=show-IMP.UO	road	1s	please
‘Please show me the way!’ (Rasoloson and Rubino 2005:479)				

Formally and semantically these suffixes agree rather well with *-a (a projective marker suffixed to AO verbs), and *-u and *-i, atemporal markers suffixed to non-AO verbs, see Chart I). However, in inherited vocabulary final *a always became Malagasy y. From a sheer sound change perspective, this suggests that the suffix *-y* (and not *-a*) reflects PAn *-a. Furthermore, the *-o/-y* alternation is phonologically motivated (showing a phonotactic constraint also observed in the lexical history of Malagasy). So, it is not entirely clear how to interpret these suffixes historically, even if some of them may be inherited from PAn.

6. Concluding remarks

1. In the languages under investigation there is definitely a reduction of the original PAn TAM affixes, and in general, there are no new morphological developments to compensate for the reduction. Malay, Maanyan and Karo Batak have gone furthest in this respect, having no TAM affixes at all.
2. The modal suffix is more resistant than the aspect affixes: only the Batak languages seem to have lost it completely. Malay has also lost it, but it was maintained in various other Malayic varieties.
3. The only language that has clear tense distinctions is Malagasy, which is clearly innovative and due to contact with coastal Bantu languages in the past. However, Malagasy also has various modal suffixes: at least some of these are retentions from PAn.
4. The present comparison is rather sketchy and does not go very deeply into the various aspects that are pertinent to a comparative historical study of TAM markers. One remarkable factor complicating this comparison is the sometimes very different ways

scholars deal with grammatical aspect. This is clear in the Toba Batak case, where Nababan, Wouk and Van der Tuuk each tell a rather different story. In the case of Nababan, he also does not provide sufficient critical examples or textual material to prove his point.

5. The historical developments of the PAn perfect marker *ni-/*<in> are remarkable for two reasons. First, we see a development from a perfect aspect marker in PAn to an UO marker in Maanyan and other South East Barito languages in Borneo to a past tense marker in Malagasy (perfect > UO > past). It seems that between PAn and Malagasy there is a tendency to come full circle. Second, while the development from UO to past tense is in accordance with a very common grammatical change (cf. Heine and Kuteva 2002), the development from perfect aspect to UO is much less obvious.

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