Interpreting the geography of TA(M) marking across Indonesia

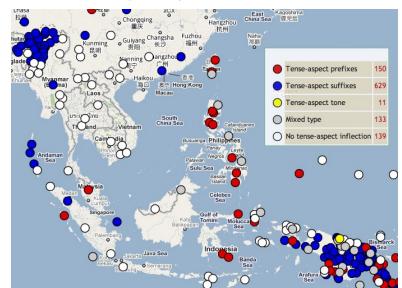
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1 TAM marking in Proto-Austronesian: an overview

- Brandstetter (1916) on verbs in Indonesian languages: "three means of forming tenses: formatives, auxiliary words of form, and reduplication."
- Almost a century later, we can now state the basic distribution more precisely:
 - "Northern" (Philippine and Formosan) languages: $<\!\!in\!\!>$ affixation and $1\sigma/\!\mathrm{mora}$ reduplication & inflected auxiliaries
 - "Southern" (elsewhere) languages: free and clitic aspectual adverbs (uninflected auxiliaries)
 - This generalization is almost captured by WALS:



• Gonda (1954, p.250) was the first to marshall data against a tense interpretation of Indonesian temporal marking,

"A careful investigation into all devices used in the IN. languages to express what is generally regarded as tense categories will no doubt deepen our insight into the originally, or essentially, non-temporal, character of the relevant forms and phrases."

• Gonda (1954, p.241) was also the first to note the problem of reconstructability of TAM markers in Indonesian languages:

"The very diversity of these elements in the historical period may point to a comparatively recent origin of the phenomenon."

• Here, we will try to further refine the notion of aspect most commonly at play in Indonesian languages and discuss why modern Indonesian TAM auxiliaries are un-reconstructable.

1.1 Some key notions in Aspect and Tense

- Reichenbach (1947), three temporal pivot points: **S** point of speech (Tense)
 - \mathbf{E} point of event (Tense, Aspect)
 - \mathbf{R} point of reference (Aspect)
- An important distinction between two types of aspect markers:

Tense: Relation of event time to speech time, e.g. PAST, REMOTE PAST, PRESENT, FUTURE, REMOTE FUTURE.

Inner aspect: Relation of event time to reference time, e.g. PERFECTIVE, IMPERFECTIVE, PROGRES-SIVE, INCIPIENT

Outer aspect: Relation of event time to expected reference time, e.g. ALREADY, STILL

- Cf. the controversial PERFECT, encountered in the aspect literature.
 - Bybee (1985, p.159): 'a situation that is relevant to another situation'.
 - Li, Thompson & Thompson (1982, p.21): perfect has a 'deictic function'.
 - Boutin (1991, p.21) refers to Bonggina as PERFECTIVE-PERFECT and pa as IMPERFECTIVE-PERFECT and pa
- Dahl (1985) nearly makes this distinction although it doesn't figure prominently in his study.¹
- The inner/outer distinction is often confounded in the literature. For instance, in (1), there is an expectation that the subject would get injured but it happened earlier than presumed.
 - (1) Indonesian

dia **sudah** luka! 3SG ALREADY wounded 'He's already wounded!' (Gonda, 1954, p.253)

• There is no such expectation in (2). This is the major difference between the so-called PERFECTIVE in Indonesian-type and Philippine-type languages, respectively.

¹Dahl (1985, p.134) states:

[&]quot;...a statement containing a 'perfect of result' should rather be characterized as being made against a background state of affairs in which the event referred to in the sentence has not yet taken place. What is said then would be that the present state of affairs differs from the background one by the event's taking place. Words like *fortfarande*, 'still', on the other hand, also presuppose a background state of affairs but are used precisely to indicate the lack of a difference between the state-of-affairs and the actual one."

- (2) Tagalog **na**-sugát-an=siya! PV.ABIL.BEG-wound-LV=3S.NOM 'He's wounded!'
- *Background expectations* are the key:
 - (3) Tagalog
 - a. Nandito=pala ang=asawa=ko! here=SURP NOM=spouse=1S.GEN 'My wife is here!' (completely unexpected)
 - b. Nandito=na=pala ang=asawa=ko! here=ALREADY=SURP NOM=spouse=1S.GEN 'My wife is here already!' (earlier than expected)
- Another difference between inner and outer aspect in Philippine languages is that the former is implicated in finiteness distinctions while the latter is not.
 - (4) Tagalog
 - a. 'want' type complements require infinitives:
 - (i) Gusto=ko=ng mag-tanong want=1sg.gen=lnk AV-ask 'I want to ask.'
 - (ii) *Gusto=ko=ng mag-ta~tanong want=1SG.GEN=LNK AV-IMPRF~ask
 - (iii) *Gusto=ko=ng nag-ta~tanong want=1SG.GEN=LNK AV.BEG-IMPRF~ask
 - b. Aspectual clitics are permitted in infinitive contexts:
 - (i) Gusto=ko=ng mag-tanong=pa want=1SG.GEN=LNK AV-ask=STILL 'I want to ask more.'
- Marking of inner aspect is obligatory on matrix declaratives:
 - (5) Tagalog
 - a. S<in>ulat=ko ang=lahat <BEG>write(PV)=1S.GEN NOM=all 'I wrote everything.'
 - b. S<in>u~sulat=ko ang=lahat <BEG>IMPRF~write(PV)=1S.GEN NOM=all 'I'm writing everything.'
 - c. Su~sulat-in=ko ang=lahat IMPRF~write-PV=1S.GEN NOM=all 'I'll write everything.'
 - d. %Sulat-in=ko ang=lahat write-PV=1S.GEN NOM=all (infelicitous in declarative context)

• Informal definitions:

ALREADY : Onset of event time precedes expected reference point

STILL : Termination of event time follows expected reference point

1.2 Reconstructing the morphology of inner aspect

- Previous work on Austronesian inner aspect: Reid (1992) Ross (2002)
- Two primary morphemes:
 - 1 σ -reduplication IMPERFECTIVE or PROGRESSIVE
 - <in> Perfective or begun (more doubtfully, realis)

	Actor	Patient	LOCATIVE	Conveyance
Realis (V/N)	*M-stem	*STEM-en	*STEM-an	*Sa-/Si-STEM
	*k <um>iRim</um>	*kiRim-en	*kiRim-an	*Sa-/Si-kiRim
Realis perfective (V/N)	*M-< <i>in</i> >stem	* <in>stem</in>	* <in>STEM-an</in>	*Sa-/Si-STEM
	*k< <i>um-in</i> > <i>iRim</i>	*k <in>iRim</in>	*k <in>iRim-an</in>	*S <in>a-/S<in>i-kiRim</in></in>
Realis imperfective (V/N)	*M-Ca-STEM	*M-Ca-stem-en	*M-Ca-STEM-an	*Sa-/Si-Ca-sтем
	*k <um>a-kiRim</um>	*ka-kiRim-en	*ka-kiRim-an	*Sa-/Si-ka-kiRim
Irrealis (V/N)	*Ca-STEM	*M-Ca-stem-en	*M-Ca-STEM-an	*Ca-STEM
	*ka-kiRim	*ka-kiRim-en	*ka-kiRim-an	*ka-kiRim
Optative/hortative (V/N)	*M-stem-a	*STEM-aw	*STEM-ay	*an-ay+STEM
	*k <um>iRim-a</um>	*kiRim-aw	*kiRim-ay	*an-ay kiRim
Imperative (V/N)	*stem	*STEM-u	*STEM-i	*an-i +stem
	*kiRim	*kiRim-u	*kiRim-i	*an-i kiRim
Dependent (V/N)	*stem	*stem-a	*STEM-i	*an-i +STEM
	*kiRim	*kiRim-a	*kiRim-i	*an-i kiRim

Table 1: Proto-Nuclear Austronesian verbal morphology following Ross (2002)

	Underlying form		PMP form		Common modern forms
ACTOR VOICE	*p <um>a<r>-</r></um>	\rightarrow	*maR-	\rightarrow	*maR-
ACTOR VOICE PERFECTIVE	CAUS <av><mid>- *p<um><in>a<r>- CAUS<av><prf><mid>-</mid></prf></av></r></in></um></mid></av>	\rightarrow	*minaR-	\rightarrow	*naR-/*miR-
PERFECTIVE	*p <in>a<r>- CAUS<prf><mid>-</mid></prf></r></in>	\rightarrow	*pinaR-	\rightarrow	*pinaR-

Table 2: Some aspect/voice paradigms with *paR- causative middle

	Underlying form		PMP form		Common modern forms
ACTOR VOICE	*p <um>a<n>- CAUS<av><dist>-</dist></av></n></um>	\rightarrow	*maN-	\rightarrow	*maN-
ACTOR VOICE PERFECTIVE	*p <um><in>a<n>- CAUS<av><prf><dist>-</dist></prf></av></n></in></um>	\rightarrow	*minaN-	\rightarrow	*naN-/*miN-
PERFECTIVE	*p <in>a<n>- CAUS<prf><dist>-</dist></prf></n></in>	\rightarrow	*pinaN-	\rightarrow	*pinaN-

Table 3: Some aspect/voice paradigms with *paN- CAUSATIVE DISTRIBUTIVE

1.3 Reconstructing the morphology of outer aspect

• Previous reconstructions of Austronesian outer aspect: Dempwolff (1934-38) *pa 'still (temporal)' and Wolff (2010) PAn *ła ALREADY and *pa STILL

	Correspondences	PAn *=dała	PAn *=pa
Formosan			
Seediq	(*d>d)	=da 'new situation'	
Kavalan	(*p>p)		= pa 'future'
Bunun	(*4>n)	$= \partial n$ 'already' (* $4 > n$)	
Puyuma	$(e < e^*)$	=fa 'already'	
Tsou		=da PRF	
Kanakanavu	(*p>p)		= pa 'still'
Paiwan	(*4>4 but $*4>n$ attested)	na = `already'	
Rukai	(*d>d; *4>4)	$=\eta a \text{ PRFV} (\text{irreg.})$	
	. ,	na = PRF (irreg., from Paiwan?)	
Pazih	(* 1 >1)	=la 'already'	
Philippine			
Batanic (Ivatan, Yami)		=dana 'already'	= pa 'still'
Yogad	(*d>r)	=ra/=da 'already'	=pa 'also'
Ilokano		=en 'already'	= pay 'still'
Kapampangan		=na 'already'	= pa 'still'
Tagalog		=na 'already'	= pa 'still'
Maranao		=den 'already'	
Yakan		=ne 'already'	= pe 'still'
Malaysia/Indonesia			
Timugon Murut	(*a>o)	= noh 'already'	= poh 'still'
Karo Batak		=nai 'already'	
Bolaang-Mongondow	(*a>o)	=don 'already'	
Buol	(*a>o)	=lon 'already'	=po 'still'
Mamuju		=do 'already'	=pa 'still'
Mori Bawah			= po 'still'

(6) Kavalan

qan=**pa**=ita tu saq eat=FUT=1.PL.INC.NOM ACC wine 'We (let's) drink wine.' (expected: 'Let's keep drinking wine.') (Lee 1986 p.65) (7) Yami

ko=k<om>an=rana so=wakay 1sg.NOM=<AV>eat=ALREADY OBL=sweet.potato 'I am eating a sweet potato already.' (Rau 2005, p.88)

(8) Iskubun Bunun

huɗ=in saikin ɗanum drink=ALREADY 1S.NOM water 'I have been drinking water.' (Nojima Motoyasu p.c.)

2 Tense/Aspect across Indonesian time and space

2.1 Old Malay

• The changes found throughout present day Indonesia are already well attested in the oldest Malay inscriptions. Note the lack of any aspect marking, uncharacteristic of more conservative languages:

(9) Old Malay

ni-vunuh kāmu sumpah ni-minu[m]=māmu PV-kill 2PL curse PV-drink=2PL.GEN 'You will be killed by the curse which is drunk by you.' (Mahdi, 2005)

• All of the inherited aspect markers were abandoned in Malay and replaced (functionally) by lexical items meaning 'want', 'desire', 'towards', 'finish', etc.

2.2 Sabah

2.2.1 Kimaragang Dusun (MP, North Borneo, Sabahan, Dusunic, Dusun)

Inner aspect: 1σ -REDUP > 1σ -REDUP; * < in > < in >Outer aspect: * = da a > = noh; * = pa > = poh

(10) ti-t<in>anom PROG-<BEG>plant 'being planted' (Kroeger 2002)

2.2.2 Timugun Murut (MP, North Borneo, North Sarawakan, Dayic, Murutic, Murut)

Inner aspect: 1σ -REDUP > \emptyset ; * < in > < in >Outer aspect: * = da a > = noyo; * = pa > = poyo

- (11) a. kalo=**poyo** ma-ragu gili NEG=STILL AV.STA-discuss that 'That can't be discussed yet.' (Prentice, 1971, p.93)
- b. kalo=**noyo** ma-ragu gili NEG=ALREADY AV.STA-discuss that 'That can't be discussed anymore.'

2.2.3 Banggi (MP, North Borneo, Sabahan, Paitanic)

Inner aspect: 1σ -REDUP > \emptyset ; * < in > > < in > "detached" anterior TA Outer aspect: * = da a > = na; * = pa > = paInnovated aspectual adverbs: *bas* ALREADY; *kahal* STILL

- (12) sia nda' pa m-ohodn
 3SG NEG STILL AV-eat
 'He has not eaten yet.' (Boutin, 1991, p.21)
- (13) Bas=nu m-ohodn ALREADY=2sg AV-eat 'Did you eat already?'
- (14) a. Bas=ku=na m-ohodn ALREADY=1SG=PRF AV-eat 'I already ate (and am done eating).'
 - b. Bas=ku m-ohodn
 ALREADY=1SG AV-eat
 'I already ate (but may eat more).' (Boutin, 1991, p.20)
- (15) Sia kahal m-ohodn=pa
 3SG STILL AV-eat=still
 'He is still eating.' (Boutin, 1991, p.20)

2.3 Sumatra

2.3.1 Acehnese (MP, Malayic, Achinese-Chamic, Achinese)

Inner aspect: 1σ -REDUP > \emptyset ; * < in > > < eun > NMLZOuter aspect: $* = data > \emptyset$; $* = pa > \emptyset$

- (16) t<eun>ulêh <NMLZ>write 'writing'
- (17) ka=geu-jak INCP=3SG-go 'He went.' (Durie, 1985, p.111)

2.3.2 Gayo (MP, Gayo)

Inner aspect: 1σ -REDUP > \emptyset ; $* < in > > \emptyset$ Outer aspect: $* = da a > = n \hat{e}$ 'anymore, evermore'; $* = pa > = p \hat{e}$ 'also, even' Innovated aspectual adverbs: *nge* ALREADY; *ilen* STILL

- (18) enti **nè** ara berhawa-napsu PROHB ALREADY EXT have.desire-lust 'Don't let (yourself) be lustful anymore.' (Eades, 2005, p.247)
- (19) banan kucak ilen, kècos-kècos ilen female small STILL REDP-speak.imperfectly STILL
 'The girl is still young, she still speaks imperfectly.' (Eades, 2005, p.246)

2.3.3 Karo Batak (MP, Sumatra, Batak, Northern)

Inner aspect: 1σ -REDUP > \emptyset ; $* < in > > \emptyset$ Outer aspect: * = da a > = nai; $* = pa > \emptyset$ but $p \dot{e}$ frozen in *sop* \dot{e} 'not yet' (Woolams, 1996, p.252) Innovated aspectual adverbs: *engo* ALREADY; *dena* STILL

(20)	la=nai	ukur-ta	mbué-mbué		
	NEG=ALREADY	thought-1PL.INC	L many-many		
	'We didn't have	e much to think a	bout anymore' (W	Voolams, 1996, p.94)	
(21)	Bagi-bagi engg	o ku-tanda-i l	kalak ah		
	as.if alrea	dy 1sg-know-lv j	person that		
	'It's as if I alrea	ady know that fel	low' (Woolams, 19	996, p.109)	
(22)	Ndauh denga l	kal gebuk api a	adah		
× /	far STILL	EMPH smoke fire t	that		
	'That smoke wa	as still a long way	away.' (Woolams,	, 1996, p.145)	
(23)	Karo Batak			Malay	
~ /	a. aku lenga	denga sarjan	a b.	aku masih belum	sarjana
	•	TILL STILL gradu		1sg neg neg.stil	5
		ot yet a graduate		'I'm still not yet a g	0
	I 111 50111 11	Ju Ju a graduate	(11.200,111.00)	I III SUIII IIOU YOU a S.	iaaaa.

2.4 Java

2.4.1 Javanese (MP), Sundanese (MP)

"Of the four languages in this group, Indonesian, Javanese and Sundanese are closely related and have relatively similar TMA systems, which are characterized by the complete absence of morphologically expressed categories. In particular, all these languages lack both PFV:IPFV and PAST. On the other hand, they all have PFCT, EXPER and PROG." – Dahl (1985:161)

Inner aspect: 1σ -REDUP > \emptyset ; $* < in > > \emptyset$ (NOMINALIZER) Outer aspect: $* = da!a > \emptyset$; $* = pa > \emptyset$ Innovated aspectual adverbs: Sundanese – geus ALREADY; keneh STILL Javanese – (u)wis ALREADY; isih STILL Indonesian – sudah ALREADY; masih STILL

(24) Sundanese

Sabab incu-na mah **geus** huntu-an, ari ako-am ompong **keneh** because grandchild-DEF FOC ALREADY tooth-DER as.for grandfather-3 toothless STILL 'Because the grandchild already has teeth, (but) his grandfather is still toothless.' (Müller-Gotama, 2001, p. 67)

2.5 Sulawesi

2.5.1 Tondano (MP, Sulawesi, Minahasan, North, Northeast)

Inner aspect: 1σ -REDUP > 1σ -REDUP; * < in > < in >Outer aspect: $* = da a > \emptyset$; * = pa > = (p)e? Innovated aspectual adverbs: = mow ALREADY

- (25) si l<im>aa=mow mana m=Bēnang sē patuari=ku 3SBJ <AV.PRF>walk=ALREADY to DET=Manado 3PL.SBJ sibling=1SG.GEN 'My siblings already went to Manado.' (Watuseke 1985:88)
 - But does =mo functionally replace *=data? Adriani identifies -mo as a focus marker in Pamona (Bare'e):

"De kracht van dit -mo, dat aan allerlei woorden kan gehecht worden, is de beteekenis van het woord te versterken, het meer nadruk te geven, het op de plaats en in de functie die het in den zin heeft meer te doen uitkomen." (Adriani 1931:479)

• The same can be said about the primary meaning of *-mo* in most of the other languages of Sulawesi which also display it.

2.5.2 The Pamona-Kaili languages (MP, Sulawesi, Kaili-Pamona)

Inner aspect: 1σ -REDUP > 1σ -REDUP; * < in > < in >Outer aspect: $*=data > \emptyset$; *=pa > =pa/piInnovated aspectual adverbs: =mo/mi ALREADY; da = FUTURE

- (26) a. Da ku-tinti siko FUT 1sG-hit 2sG
 'I shall hit you.' (Adriani et al., 1928, p.845)
 b. Ni-tinti-ku siko PRF-hit-1s.GEN 2sG
 'I hit you.'
 - The northern Pamona-Kaili languages preserve reflexes of *<*in>* as a marker of BEGUN in both the actor and undergoer voice. The southern Pamona-Kaili languages, e.g. Uma, Rampi, employ a basic unmarked form for both BEGUN and UNBEGUN (see Wolff (1996), Van den Berg (1996) and Mead (2002)).

"Unlike other languages of the Kaili-Pamona subgroup, Uma lacks a verbal prefix marking realis and irrealis. To some extent, the clitic -pi has assumed some of the functions of the irrealis mood." (Martens, 1988, p.206)

(27)	a.	Ku-'oli iı	nce tetu		Uma
		1sg-buy r	ice that		
		'I bought	that rice.'		
	b.	Ni-oli-ku	ose	etu	Daa
		PRF-buy-1	S.GEN rice	that	
		'I bought	that rice.'	(Martens p.17	0)

• Note that aspect marking differs in Pamona-Kaili languages from more conservative Austronesian languages in that subordinate verbs agree with matrix verbs in aspect/tense, i.e. there is no infinitive in subordinate contexts:

(28) Ledo

- a. Gera na-kava na-rau 3PL AV.RL-arrive AV.RL-angry 'He arrived angry.' (TBK p.66)
- b. Ngana randua hi ledo na-mala na-singgava child two this NEG AV.RL-can AV.RL-together 'These two children could not be together.' (TBK p.66)

• This may fit into a larger East Indonesian pattern of matrix-subordinate symmetry. Compare person marking in Nualu (Central Maluku) and Tetun (East Timor):

(29) Nualu

I-anei i-anamana sou Naunue 3sG-know 3sG-speak language Nualu 'He knows how to speak Nualu.' (Bolton, 1990, p.86)

(30) Tetun

Ha'u k-akés la k-atene 1sG 1sG-talk NEG 1sG-know 'I don't know how to talk about this topic.' (van Klinken, 1999, p.205)

2.5.3 Wolio (MP, Sulawesi, Wotu-Wolio, Wolio-Kamaru)

Inner aspect: 1σ -REDUP > \emptyset ; * < in > > < in > NOMINALIZER, *i*- PATIENT VOICE Outer aspect: $* = da a > \emptyset$; * = pa > = poInnovated aspectual adverbs: = mo FOCUS/ALREADY

(31) NOMINALIZER

- a. k<in>ande <NMLZ>food 'food, meal'
- b. t<in>auraka <NMLZ>leave.behind 'heritage' (Anceaux p.30)

(32) PATIENT VOICE

kamba-kamba i-tobe-na i dala flower-PL PV-pick-3S.GEN OBL road 'flowers picked along the roadside.' (Anceaux p.41)

2.5.4 Mori Atas (MP, Sulawesi, Bungku-Tolaki, Western, Interior)

Inner aspect: 1σ -REDUP > \emptyset ; * < in > > < in > PASSIVE PARTICIPLEOuter aspect: $* = da a > \emptyset$; * = pa > = poInnovated aspectual adverbs: = mo FOCUS/ALREADY

- (33) Na-pi do-me-hawe mia ira me-'aiwa NEG-INCOMP:(3SG) 3PL-PL-arrive person 3PL.FUT PL-come 'the people who are to come have not yet arrived' Esser p.202
 - The fact that =mo and =po can cooccur with the same scope shows that =mo is not a perfect semantic analog of *=dała:
- (34) Sii=po=mo ari NEG.IMPV=INCOMP=PERF only 'just wait a little while!' (as an expression of joy) (Esser, 1927, p.210)
 - Mori is known for its unusual use of a special set of preposed pronominals to indicate future tense:

- (35) Aku-po mo-'angga 1SG.FUT-INCOMP PART:TRI-work 'I am still going to work' (Esser, 1927, p.221)
- (36) Ta t<in>ambua 3SG.FUT <PASS>banish 'he must be banished' (Esser, 1927, p.352)
- This probably resulted from 2P clisis to a future auxiliary host which was historically lost. Similar developments can be seen in Yami and Ibaloi.

2.5.5 Muna (MP, Sulawesi, Muna-Buton, Munan, Munic, Western)

Inner aspect: 1σ -REDUP > 1σ -REDUP? (non-productive); * < in > > ni- PASSIVE PARTICIPLE Outer aspect: $* = data > \emptyset$; * = pa > = hoInnovated aspectual adverbs: = mo ALREADY

- Muna has a *true* realis/irrealis distinction:
 - 1. it refers to the future, or it expresses a wish, a desire or an intention;
 - 2. it is obligatorily used in negative clauses. (Van den Berg, 1989, p.57)
- This is indicated syncretically with the person agreement prefixes:

(37)	a.	Ne-ada	b.	Nae-ada
		3sg.rl-borrow		3sg.irr-borrow
		'She borrowed.'		'She will borrow.' (Van den Berg, 1989, p.58)

2.6 Maluku-Timor

2.6.1 Taba (MP, CEMP, EMP, South Halmahera – West New Guinea subgroup)

Inner aspect: 1σ -REDUP > \emptyset ; $* < in > > \emptyset$ Outer aspect: $* = da_a > = do$; * = pa > = hu (Irregular correspondence. Expected: = ho or = ha)

- (38) Wang=si l=mul do child=PL PL=return ALREADY 'The children have returned.' (Bowden, 2001, p.103)
- (39) Makwai hu hot STILL 'He's still sick (with a fever).' (Bowden, 2001, p.103)

2.6.2 Kedang (MP, CEMP, CMP, Timor, Flores-Lembata)

Inner aspect: 1σ -REDUP > \emptyset ; * < in> > \emptyset Outer aspect: $* = da a > \emptyset$; $* = pa > \emptyset$ Innovated aspectual adverbs: $d \dot{e} q$ PERFECTIVE - ALREADY mete IMPERFECTIVE $bahe, bahe de \dot{q}$ COMPLETIVE ramaq, nau INCOMPLETIVE $d \dot{e} q$ $m \dot{e}$ INCEPTIVE mai CESSATIVE

dèqo INCHOATIVE *dèq nu* INCIPIENT

(Samely, 1991, p.89)

- Kedang has also developed a subtle aspectual distinction encoded in its agreement markers:
- (40) a. Koq senter bikil=ne 1sg.poss flashlight broken=3sg 'My flashlight is broken.'
 - b. Koq senter bikil=i 1sg.poss flashlight broken=3sg 'My flashlight got broken.' (Samely, 1991, p.73)

2.6.3 Bima (MP, CEMP, CMP, Bima-Sumba)

Inner aspect: 1σ -REDUP > \emptyset ; $* < in > > \emptyset$ Outer aspect: $* = da \cdot a > \emptyset$; * = pa > = pu? Innovated aspectual adverbs: wa'u ALREADY; mbui STILL

- (41) Andou mone ra coco mbui=pu dahu=na child male RELT chase STILL=STILL afraid=3sg 'The boy who was chased is still afraid.' (Owens, 2000, p.126)
- (42) wa'u-ra ngaha-mu-si nggomi? ALREADY-EMPH eat-2-COND 2p 'Have you already eaten?' (Owens, 2000, p.32)
 - Owens (2000, p.9) Shows a distinction between encliticization and procliticization which is reminiscent of Pamona-Kaili patterns.

"In these sentences, the correspondence of agreement encliticization to past tense orientation is near complete. So the following sentences, spoken in isolation, will be interpreted as having the past tense interpretations suggested by the English glosses:

- (43) La Halima mbali wali.na d'i rahi-na
 PN Halima return again.3 LOC husband-3
 'Halima has once again returned to her husband.'
- (44) Nahu bantu-ku Reho dub'a baju
 1P help-1 Reho wash clothes
 'I helped Reho wash the clothes.'
 - Conversely, independently elicited sentences containing agreement proclitics but without emphatic enclitics correspond to future tense orientations:
- (45) Ma.nuntu la'o la Halima naisi?2.talk with PN Halima tomorrow'Will you talk to Halima tomorrow?'
- (46) Reho na-lao lampa d'i wub'a nci'i liro
 Reho 3-go go-along LOC jungle tear sun
 'Reho will be walking in the jungle at sunset.'"

3 Convergence

(47)

3.1 Austroasiatic and West Indonesia

- General evidence for convergence: Malay vs. Rengao (Eastern Mon-Khmer, Bahnaric, North Bahnaric). All data from Gregerson (1971):
 - Unmarked verbs (subordinate and matrix):
 - RengaoMalaya. aw thay vI pih phib. aku suruh mereka tunduk beras1SG order 3.PL pound rice1SG order 3.PL pound rice'I told them to pound rice.''I told them to pound rice.'

- No morphological distinction between nominative and genitive:

(48)	Ret	ngao		Malay
	a.	koon aw	b.	anak saya
		child 1sg		child 1sg
		'My child.'		'My child.'

- 'want' > PROSPECTIVE aspect:

(49)	Rengao			Malay		
	a.	waq	mE boyh	b.	mau	hujan
IMMIN/want rain COMPL		IMMIN/want rain				
		'It's abo	put to rain.' $(p.75)$		'lt's ab	out to rain.'

- Subject = Topic:
 - (50) Rengao
 - RengaoMalaya. aw jIq badUkb. aku sakit perut1SG sick stomach1SG sick stomach'I have a stomach ache.''I have a stomach ache.'

- Outer aspect marked by optional, free-standing adverbs:

(51)	Rengao		Malay
	 a. gE qway blah loong 3sG DUR chop wood 'He is still chopping wood.' (p.73) 	b.	dia masih belah kayu 1SG COMPL chop wood 'He is still chopping wood.'
(52)	Rengao		Malay
	a. aw saaŋ am gE kapO boyh 1SG COMPL give 3SG buffalo COMPL	b.	aku sudah kasih dia kerbau 1SG COMPL give 3SG buffalo

'I have given him a buffalo already.' (p.67)

dy.' (p.67) 'I have given him a buffalo already.'

3.2 Non-Austronesian and Austronesian languages of East Nusantara

• There are several distinct typological zones in East Nusantara, some which are characterized by isolating type morphology (e.g. parts of East Timor) and some which are characterized by highly agglutinating

morphology (e.g. Alor-Pantar).

• Abui is an example of a non-Austronesian language with a highly morphologically complex TAM system. Two aktionsart distinctions are marked through verb root alternations in addition to a set of inner aspect suffixes and outer aspect adverbials:

(53)	Abt	ui
	a.	yal ayoku do, ko di moku do ha- yal
		now two PRX soon 3A kid PRX 3II.PAT-give.birth
		'in two days she will give birth to the child'
	b.	mayol do wan de-wil ha- yar-i
		woman PRX already 3I.AL-child 3II.PAT-give.birth.CPL-PFV
		'the women already gave birth to her child' (Kratochvíl, 2007, p.211)

• Some of these morphemes show extreme similarity with nearby Austronesian languages, suggesting borrowing:

(54)	Kedang (Austronesian)			
	a. Koq senter bikil= ne 1sg.poss flashlight broken=3sg 'My flashlight is broken.' p.73)	 b. Koq senter bikil=i 1SG.POSS flashlight broken=3SG 'My flashlight got broken.' (Samely, 1991, 		
(55)	Abui (Non-Austronesian)			
	a. na làk- e 1SG leave.for-IPRFV 'I'm going away'	 b. na làk-i 1SG leave.for-PRF 'I have gone away' (Kratochvíl, 2007, p.82) 		

• If non-Austronesian languages of the same type were more widespread before the entry of Austronesians into the area, the complexities found in Muna, Bimanese, Mori Atas may be explained through metatypy in their earlier history.

4 Conclusions

- We can safely reconstruct two outer aspect morphemes to Proto-Austronesian: $* = da_{a}^{\dagger}a$ ALREADY and * = pa STILL.
- In many Indonesian languages, these take over for the two major inherited inner aspect morphemes 1σ -Redup IMPERFECTIVE and * < in > PERFECTIVE/REALIS.
- We may be able to predict the lack of a finiteness distinction in most Indonesian languages. Dahl (1985, p.188): "Still, the general feeling is that the categories PAST and PFV:IPFV tend to be obligatory when they exist in a language, whereas many of the categories assumed to be less central include several clear optional cases." If these languages lack PFV:IPFV and PAST marking altogether, they are unlikely to grammaticalize outer aspect as an inflectional category.²

 $^{^{2}}$ Dahl (1985, p.185) more generally posits a strong connection between the semantics and exponence of TMA markers: "This makes it plausible to assume - as was suggested in chapter 1 - that there is indeed a close connection between the semantics of a TMA category and the ways in which it tends to be expressed. The idea - which will certainly have to be made more specific – is that only categories with a 'Boolean' semantics (as this notion was explicated in chapter 1) will be frequently expressed by inflectional categories. The obvious reason is that it is only 'Boolean' categories for which the restricted expressive power of inflectional processes is sufficient. Inflectional categories do not in general allow for iteration or alternative orders of application, phenomena that are essential for categories with an 'operator' logic."

It is interesting to note in this connection that = pa only survives as a 2P or phrasal clitic in the periphery of its geographical

- The persistence of the original inner and outer aspect morphemes in Philippine languages compounded with the gradual nature of their replacement in Indonesian languages suggests that this was due to contact with non-Austronesian languages.
- It is likely that isolating languages from Mainland SE Asia exerted their influence on all the languages of Sumatra and Borneo at an early point, leading to the morphological simplification already evident by the time of Old Malay.
- Languages of East Nusantara are more of a mixed bag but all languages South/East of Central Sulawesi appear to have lost the original aspect marking function of PAn * < in >.
- Pockets of complexity can be seen surrounding "aspectually" complex non-Austronesian languages (e.g. Abui). In particular, person and aspect syncretism and a true realis/irrealis distinction seem to be a possible feature of certain regions of East Indonesia.

4.1 Some remaining questions

• How significant are the counterexamples to the Southern syncretic person/TAM pattern? We do find similar patterns in two Northern languages, Yami and Ibaloy:

(56) Yami

a.	ko k-om-an so wakay			
	1sg.nom <av>eat obl sweet.potato</av>			
	'I am eating a sweet potato.'			
b.	k-om-an ko so wakay			
	<a>V>eat 1sg.Nom obl sweet.potato			
	'I want to eat a sweet potato.' Or "I ate a sweet potato.' (Rau	u, 2005, p.88)		

"Aspectual pronouns are proclitics that act as an auxiliary marking continuative, habitual or progressive aspect. They occur in pre-predicate position and attach to the following main verb unless second-order constituents intervene between them and the dependent verb. This is because they attract any second-order item that would otherwise be a constituent of the following verb." (Ruffolo, 2004, p.184)

(57) Ibaloi

naka=ngo man-'obda chima payew 1SG.ASP=ALSO ACTV/IPF-work LOC/DIST field 'I usually work in that field' (Ruffolo, 2004, p.184)

- How significant are the counterexamples to the TA auxiliaries in the South pattern? We do find TA auxiliaries in a few Cordilleran languages:
 - (58) Guinaang Bontok

əsá=ak adi uməy ad maynîla=s wákas FUT=NOM.1SG NEG go LCV Manila=LCV tomorrow 'I will not go to Manila tomorrow.' (Reid and Liao, 2004)

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