# Case and Nominalization in Early Austronesian

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# 1 Introduction

- One of the most intriguing aspects of PAn has garnered the least interest.
- Starosta et al.'s (1981) hypothesis that the voice markers originated from nominalizers is now largely accepted.
- But Ross (2006) makes clear that PAn case suffixes must also be reconstructed for at least pronouns and proper names (see also Blust 1977, Reid 1979:265-266)
- These case markers *\*-ən* and *\*-an* are identical in form to similar "2nd generation" voice markers/participant nominalizers.
- In this talk, I explore the syntax of case marked pronouns and posit several *tentative* hypotheses about how they may relate to the nominalizers.

# 2 Accusative and oblique case suffixes in Formosan languages

- Ross (2006:528) "PAn \*-an appears to have been a LOC suffix"
  PAn \*-an LOC: P-Atayal \*-an PS:OBL, Siraya -an PS:OBL, P-Amis \*-an LOC, PS:ACC, P-Rukai \*-anə PS-OBL, Kavalan -an LOC
- Ross (2006:535) posits that the locative pronouns were innovated independently because:

"the bases to which the reflex of \*-an is attached vary from language to language and do not correspond with one another. [...] the obvious inference is that the \*-an construction occurred in PAn, but morphologised pronouns with \*-an did not. The \*-an construction consisted of a noun suffixed with \*-an and preceded by a locative preposition."

- Pazeh, P-Atayal, Siraya, Kanakanavu, P-Rukai, P-Amis, P-Bunun, Kavalan all possess this construction. While it may not have been morphologized on pronouns, the use of *\*-an* as an oblique/locative case marker in PAn seems secure.
- Similarly, Ross (2006) reconstructs accusative pronouns, as shown in his table 1 with the comparative evidence in table 2 below.

	1s	2s	3s	11p	1ep	2р
NEUT	i-aku	iSu[qu]	s-ia	ita	i-ami	i-mu[qu], i-amu
NOM1	aku	Su[qu]	ia	(i)ta	ami	mu[qu], (amu)
NOM2	=ku,	=Su	(-ya)	=(i)ta	=mi[a],	=mu
	=[S]aku				=[S]ami	
ACC	i-ak-ən	iSu[qu]-n		ita-ən	i-ami-n	i-mu[qu]-n
gen1	=[a]ku	=Su	(-ya)	=(i)ta	=mi[a]	=mu
gen2	(=)m-aku	(=)m-iSu		(=)m-ita	((=)m-ami)	(=)m-amu
gen3	n-aku	n-iSu	nia	ni-ta	ni-am	ni-mu
_					n-ami	n-amu

Table 1: Preliminary reconstruction of PAn personal pronouns (Ross 2006:532)

		1s	2s	11P	1ep	2р
PAn	ACC	*i-ak- <b>ən</b>	*iSu[qu]-n	*ita- <b>ən</b>	*i-am- <b>ən</b>	*i-mu[qu]- <b>n</b>
Saisiyat	ACC	yak-in	?i-∫o?o- <b>n</b>			
Thao	ACC	yak-in	ihu- <b>n</b>	ita-n	[y]am <b>in</b>	
Paiwan	NOM	=[a]k <b>en</b>	=[e]sun	=[i]cen	=[a]m <b>en</b>	=[e]mu <b>n</b>
P-Bunun	ACC	*ðak <b>-un</b>	*su?u <b>-n</b>	*it <b>-un</b>	*ðam <b>-un</b>	*mu?u <b>-n</b>
PMP	PSR	*[y]ak <b>ən</b>		*[y]at <b>ən</b>	*[y]am <b>ən</b>	

 Table 2: Comparative evidence for ACC pronominals (Ross 2006:533)

# 3 The function of accusative and oblique case pronouns

- Many Austronesian languages are described as having fully transitive undergoer voice clauses with less transitive actor voice clauses.
- There also exist clauses with actor voice predicates which assign nominative case to an Agent and **accusative** case to a Patient, as in (1).
- Accusative pronouns in Thao occur as patient arguments (1), prepositional objects (2), obliques (3), comitatives (4), and predicate possessors (5).

(1) Thao

- a. Ata kurkur yakin/\*yaku! b. Ata kurkur-i yaku/\*yakin! NEG.IMP tickle.INTR.IMP 1S.OBL/1S.NOM 'Don't tickle me!' 'Don't tickle me!' (Wang 2004:232)
- (2) Thao PREPOSITIONAL OBJECT
  Cicu q<m>auriwa fizfiz lhay yakin
  3s <AV>throw banana for 1s.OBL
  'He threw a banana for me.' (Blust 2003:690, Wang 2004:127)

(3) Thao OBLIQUE
Cicu m-unay yakin
3s AV-go 1s.OBL
'He came to me.'
(Blust 2003:574, Wang 2004:191)

*Thao* COMMITATIVE Yaku mat **ihun** a-ma-parfu 1s with 2s.OBL IRR-AV-wrestle 'I will wrestle with you.' (Blust 2003:316, Wang 2004:127)

- (5) Thao PREDICATE POSSESSOR
  Inay a patashan yakin
  this LIG book 1s.OBL
  'This book is mine.' (Blust 2003:1057, Wang 2004:127)
  - Similar examples can be multiplied from languages as divergent as Bunun, Amis, Rukai and Kavalan and Truku.

(4)

(6)	Takituduh Bunun (Li 1997:465)	(7)	Amis (Li 1997:470)
	ma-ludaq ?asu ðak <b>un</b>		mi-cahiw ci raraq ci tefiq <b>-an</b>
	av-hit 2s.nom 1s.acc		Av-persecute рм Rara рм Tefiq-овь
	'You hit me.'		'Raraq persecuted Tefiq.'

- The hypothesis I would like to explore here is that the construction in (1) is a remnant of an old transitive active clause which was lost in PMP and that the accusative and oblique case markers were re-analyzed as nominalizers. But first, we must rule out several alternative analyses of case marking \*-en and \*-an.
- Wang (2004:142) argues that definite accusative objects in Thao are an artifact of elicitation, language endangerment and contact with Taiwanese:

"However (42)b-(42)d show that the theme NP of a dyadic *m*-clause in elicited data, especially in simple sentences, can be definite/individuated, such as the pronoun *yakin* 'me' in (42)b, possessive pronoun phrases *nak a dawaz* 'my net' in (42)c, and demonstrative noun phrases *inay a aniamin* 'these things' in (42)d. Therefore, it appears that speakers tend to keep the association of *m*- clauses with an indefinite theme NP in textual data, but may not necessarily keep this association in non-textual data (i.e., in spontaneous simple sentences).

Why does this happen? The fact that Thao is in danger of extinction, influenced by Taiwanese for a long time, and that many Philippine and Formosan languages still show the contrast (i.e., indefinite/definite theme NPs) between the two dyadic clauses may suggest that Thao once had the contrast, but being seriously contaminated by Taiwanese, it has started to lose this feature, especially in elicited data."

• As evidence for a constraint against specific objects, Wang shows that quantified actor voice objects, as in (8b), are rejected.

- (8) Thao QUANTIFIED PATIENTS
  - a. Azaz buna kan-in azazak all sweet.potato eat-PV child 'The children ate all the sweet potatoes.'

 b. \*Azazak k<m>an azaz buna child <Av>eat all sweet.potato (For, 'The children ate all the sweet potatoes.')

(Wang 2004:163)

(Wang 2004:145)

- But the correct generalization seems to be that quantified arguments need to be in the left periphery of the clause (as in Hungarian). As Wang notes, transitive Agents have the same restriction, as shown in (9), but this would be completely unexpected as a transitivity effect.
- (9) Thao QUANTIFIED PV AGENTS
   \*Buna k<in>an azaz azazak sweet.potato <PERF>eat all child (For, 'All of the children ate the sweet potatoes.')
  - Another possibility is that accusative marked pronouns only occurred as a *last resort* in agent extraction contexts.
  - We find a range of exceptional case effects with pronominal objects in MP languages.
  - For instance, in Duri (South Sulawesi), an absolutive case is licensed on an actor voice undergoer only when the agent is extracted, as in (10a). As seen in (10b), there can be no pronominal undergoer of an actor voice verb without such extraction.

(10)	Duri Absolutive av objects			(Kaufman 2008:23)
a.	Iko ng-kita= <b>na</b> '	b.	*Ng-kita= <b>na</b> '=ko	
	2s.free av-see=1s.abs		AV-see=1s.Abs=2s.Abs	
	' <u>You</u> saw me.'		(For, 'You saw me.')	

• Similar facts obtain in standard Indonesian. Actor voice verbs with post-verbal subjects can take noun phrase objects, but not pronominal objects. Extraction of the subject, as in (11c), however, licenses a genitive pronominal object.

(11)	Malay GENITIVE AV O	BJECTS	
a.	Me-lihat anjing dia	b. *Me-lihat <b>-mu</b> dia c.	Dia (yang) me-lihat <b>-mu</b>
	Av-see dog 3sG	AV-see-2s.gen 3sg	3sg relt AV-see-2s.gen
	'S/he saw a dog.'	(For, 'S/he saw you.')	'S/he saw you.'

• Finally, parallel evidence can be seen in Tagalog. An oblique pronominal undergoer of an actor voice verb is highly marked without extraction, as in (12b) but completely natural with agent extraction, as in (12c).

- (12) *Tagalog* Oblique AV PATIENTS
  - a. P<um>atay si Boboy ng isa <Av>kill P.NOM Boboy GEN one 'Boboy killed one.'
- b. \*?P<um>atay si Boboy **sa kanya** <AV>kill P.NOM Boboy OBL OBL.3SG (For, 'Boboy killed him.')
- c. Si Boboy ang p<um>atay **sa kanya** p.nom Boboy nom <av>kill obl obl.3sg 'It was Boboy who killed him.'
- Given the wide distribution of this phenomenon in MP languages, we want to rule out the possibility that it is agent extraction which allows definite actor voice patients.
- There is also the possibility that pronominal case correlates with SVO order, in which a topicalized subject has been reanalyzed as occupying an unmarked pre-verbal subject position (cf. Indonesian *aku me-lihat-mu*).
- But examples such as the following with post-verbal nominative/absolutive arguments suggest that we are dealing with something different in the Formosan languages.
- (13) Siraya \*PRON-an AS ARGUMENT
   ka-vana-ən-au ka k<m>iim-kamu ti Jesus-an
   AFF-know-uv-1s.GEN that <AV>seek- PM Jesus-OBL
   'I know that you are looking for Jesus...' (Adelaar 1997:386, xxviii:5)
- (14) Siraya \*PRON-an AS ARGUMENT
  d<m>audalo-a=kame tǐni-än
  <AV3>appease-SJ=1PE.NOM 3S.OBL
  'we will appease him...' (Adelaar 2011:76, xxviii:14)
  - Although Adelaar doesn't describe a case marking function for Siraya *-ən*, there is at least one example, shown in (15), that looks an excellent candidate for just such a function. Note that it is positioned outside the genitive pronominal, as might be expected for a case marker.
- (15) Siraya \*pron-en AS ARGUMENT
   M-ĭlix-a-kaw ti Ama-uhu-ən ti Ĭna-uhu-ən Av3-honor-sj-2s.nom pm father-2s.gen-pv? pm mother-2s.gen-pv?
   'Honor your Father and Mother' (Adelaar 2011:95, xv:4)
  - Note that locative *-an* is not completely restricted to pronouns and proper names in all languages. We also find examples with common nouns in Truku Sediq.
- (16) Truku Sediq CASE WITH ANIMATE NPs
  wada=na se-begay leqi-an ka patas
  PAST=3SG.ERG CV-give child-OBL ABS book
  'He gave the book to a/the child.' (Tsukida 2005:307)

• What is clear is that suffixal case marking is on the decline. Kuo (2015) notes that the older generation employs the oblique suffix on personal names as in (17a), younger speakers omit the case markers in the same context, as seen in (17b).

(17)	<i>Truku Sediq</i> Loss of oblique case		(Kuo 2015:24)		
a.	se-begay=mu keras <b>-an</b> ka pila	b.	se-begay=mu kuras ka pila		
	CV-give=1sg.erg Kulas-OBL ABS money 'I will give the money to Kulas.'		cv-give=1sg.erg Kulas Abs money		
			'I will give the money to Kulas.'		

- Huang and Tanangkingsing (2011:115) express the same skepticism as Wang regarding accusative case in Formosan languages but while the AV clause is undoubtedly less transitive both in MP (Liao 2004; Reid and Liao 2004) as well as most Formosan languages (with the exception of Rukai), there appear to be historical traces of a more transitive AV verb. The pronominal reconstructions as well as the transitive properties of embedded/dependent AV verbs (not discussed here) may be historically conservative (following the general trend of subordinate clause conservatism).
- The distribution of accusative pronouns across the Formosan languages seen earlier suggests that they are *not* a recent innovation.
- Their syntactic distribution suggests that they are a remnant of nominative-accusative syntax rather than a last resort, as in many MP languages.

# 4 Making the nominalization-case link

### 4.1 The universal predicate analysis

- If we can establish that PAn probably did have transitive actor voice clauses, how can we account for the mysterious homophony between \*-ən PATIENT NOMINALIZATION and \*-ən ACCUSATIVE CASE on the one hand and \*-an LOCATIVE NOMINALIZATION and \*-an DA-TIVE/OBLIQUE CASE on the other?
- Ross (2002) puts forth the possibility that pronouns are of a fundamentally different semantic type in Austronesian than they are in Indo-European languages.
- Rather than being individuals (type *e* in type-theoretic semantics), they are predicates.
- Ross (2002:46, emphasis mine):

"The most striking piece of evidence that most content words were predications in PAn, or perhaps at some pre-PAn stage, was mentioned in section 3.1: personal pronouns took the voice markers \*-en (or \*-n) and \*-an (or \*-nan). This suggests that, like the corresponding root in Straits Salish (Jelinek and Demers 1994:715), second person singular \*Su, for example, was a content word whose meaning might be translated as 'be you', \*i-Su a phrase meaning 'the one who is you' (\*i- being a determiner), \*Su-n a content

word meaning '[the one that] is you-ed', i.e. '[the one that] is yours', and \*Su-(n)an a content word meaning '[the place that] you are at'."

- This could garner some support from two widespread "pronominal verbs": PWMP \*aku-en 'acknowledge; receive, accept', \*maŋ-aku 'admit, confess' (Blust et al. 2010).
- But in addition to this, the semantics of \*-an and \*-en would also have to be vague: \*aku-an 'to me', but \*beRay-an \*'to a gift/giving'
- Furthermore, a form like \*Su-n cannot be fully described as '[the one that] is you-ed' if it is to subsume the plain object reading of the pronoun as in our earlier examples. In other words, if you punch me, I'm not being "me'd". If anything, I'm being "you'd"!

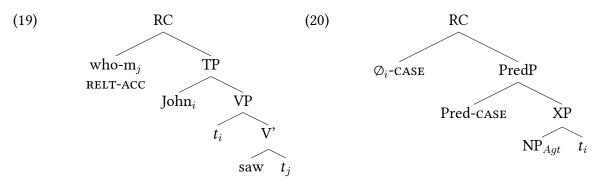
### 4.2 From nominalizer to case

- Another possibility is that the case marking functions were derived from the nominalization function, e.g. \*batu-an 'place of rocks' > batu-an 'to the rocks'.
- We could allow for nouns to be "re-nominalized" with more specific participant nominalization markers (e.g. locative, instrumental, etc.) but why would pronouns ever require nominalization?
- Even if we could the semantics right for \*aku-an as 'place of/to/from me' we are again confronted with the problem of interpreting patient nominalization on pronouns, e.g. \*aku-an.
- Because of these difficulties, we can dismiss for now the NOMINALIZER > CASE hypothesis.

### 4.3 From case to nominalizer

- We are left with CASE > NOMINALIZER, which is a priori plausible as pronouns are typically the last holdout of morphological case (Iggesen 2005).
- Starting with Blake (1906), it has also been repeatedly noted that there are typological similarities between Austronesian voice and case systems outside of Austronesian. An idea which culminated in the "case agreement" analysis of Austronesian voice system (Rackowski and Richards 2005; Richards 2000; Rackowski 2002; Pearson 2005; Chung 1998).
- While I argue against "case agreement" as a synchronic analysis (Kaufman forthcoming), the surface similarity between case and Austronesian voice is clear. The alternation in (18), where a less affected Patient is selected by the locative voice, is typical of oblique case objects in languages that distinguish accusative from partitive/oblique/dative.

- (18)Truku Sediq (Tsukida 2005:318) AFFECTEDNESS wada-mu hepuy-un ka seqemu. wada=mu hepuy-an ka seqemu. b. a. PST=1S.GEN cook-gv1 Nom corn PST=1s.gen cook-gv2 nom corn 'I cooked (all) the corn.' (affected patient) 'I cooked (some of) the corn.' (less affected patient)
  - Let us assume that PAn or proto-PAn required deverbalized predicates in relative clauses, like a great many other languages of the world.
  - At one stage, relativized predicates were deverbal, but not yet participant nominalizations.
  - The verb at this point appears to assign case to itself. Why? Compare an English-type relative in (19) with a simple structure proposed for the interstage in (20).



- In English (19), an interrogative moves from an argument position to the edge of the relative clause where it modifies a noun by apposition (Chomsky 1977).
- There is no historical evidence for wh- interrogatives in Austronesian nor can we reconstruct a dedicated relative clause marker but we can conceptualize the problem as in (20). The gap in the relative clause would have to express its case on the verb.
- The oddity of a verb assigning itself case becomes more plausible when framed in the following stages:

(21)Hvpothesized Pre-PAn clauses

-)		
a.	q <um>anup Ca babuy<b>-en</b> ka RuqaNay <vrв>hunt асс boar-асс пом man 'The man hunted the boar.'</vrв></um>	<b>Pre-PAn</b> Productive case markin
b.	babuy <b>-en</b> ka qaNup(- <b>en</b> ) na RuqaNay boar-ACC NOM hunt(-ACC) GEN man 'It was a boar that the man hunted.'	<b>Pre-PAn</b> via harmony or pronoi
c.	babuy ka qaNup <b>-en</b> na RuqaNay boar мом hunt-рат.ммLz GEN man 'It was a boar that the man hunted.'	PAn?/PNAn via economy
d.	qaNup <b>-en</b> na RuqaNay ka babuy	PNAn

boar-pat.nmlz gen man NOM boar 'The man hunted the boar.'

ng on all NPs

oun incorporation

reanalysis of nominalization as matrix pred.

- (21a) shows a canonical transitive clause with regular accusative case on the object of an active verb while (21b) shows a clefted object.
- We can assume that the constructions in (a) and (b) were contemporaneous. Relative clauses, clefts and content questions were formed from (possibly unmarked) deverbalized predicates, as in a wide range of languages, including Mantauran Rukai:
- (22)Mantauran RukaiINTERROGATIVES(Zeitoun 2007:291)a.matara-dho'a-lrao longaisolate.b.matara-pi-'olongaisolate?catch-two-1s.NOMDYN.SUBJ:buy bookcatch-how.many-2s.GENDYN.SUBJ:buy book'How many books did you buy?'
  - (23) Mantauran Rukai RELATIVES

     a-kan-ae-ni
     Velevele ma-si'i
     OBJNMZ-DYN.NFIN:eat-OBJNMZ-3S.GEN banana STAT.FIN-small
     'The banana s/he eats is small.' (Zeitoun 2007:223)
    - The (b) stage above is where case is posited to spread from the noun to the verb. There are several mechanisms by which this could have taken place. We can consider three:
      - Incorporation of a case marked resumptive pronoun
      - Feature copying
      - Direct affixation to an already "nouny" relativized predicate
    - Incorporation of a resumptive pronoun: If a case marked resumptive pronoun occupied the "gap" in the relative clause, as is possible in Hebrew among other languages, then it could be reanalyzed as part of the verb to yield a "case agreement" effect.

#### (24) *Hebrew* RESUMPTIVE PRONOUNS

- a.ha-yeled\_i  $\int e$  rai-ta **oto**\_ib.ha-yeled\_i  $\int e$  nata-ta **lo**\_i seferDEF-child COMP saw-PST.2S 3S.ACCDEF-child COMP give-PST.2S 3S.DAT book'the child whom you saw''the child whom you gave a book'(Lit. 'the child that you saw him')(Lit. 'the child that you gave to him a book')
  - (25) Hypothesized Pre-PAn babuy<sub>i</sub>-en ka qaNup  $\emptyset_i$ -en na RuqaNay boar-ACC NOM hunt pro-ACC GEN man 'It was a boar that the man hunted.'
  - In Hebrew, subordinate verbs in contexts like (24) are regular finite verbs. However, in a language that required deverbalized predicates without inflection, there would be better chances of reanalyzing the resumptive pronouns as a special relative clause agreement.
  - Another possibility is that case marking spread through some form of feature copying.

- Note that three phenomena which are clearly attested among Formosan languages involve case/voice/agreement morphology appearing where it is unexpected:
  - DETERMINER SPREAD (Rukai, Puyuma, Paiwan and others)
  - VOICE HARMONY (TSOU)
  - ANTICIPATORY PREFIXES (Siraya, Saaroa, Bunun)
  - COPY RAISING (Seediq and others)
- In DETERMINER SPREAD, every lexical word within a case marked DP is preceded by a case marker.

(26)	Budai Rukai determiner spread		Nanwang Puyuma DETERMINER SPREAD
	Aisi lu i-kai <b>ku</b> ma-culuculu <b>ku</b> a-kane-ane if that be-DEM DET NFUT-hot/red DET FUT-eat-NOMZ 'If there is hot food' (Chen 2008:270)	b.	p<ən>ukpuk=ku kana suan kana utəutəm <av>beat=1s.NOM OBL dog OBL black 'I beat the black dog.' (Wu 1997:161)</av>

- In VOICE HARMONY, adverbs and cross-clausal verbs must agree in their AV/NAV features (Chang 2009).
- (27) Tsou VOICE HARMONY
   I-ta-cu a-son-a a-uev-a p'an-i 'o teo'ua.
   NAV-3SG ADV-easy-PV ADV-first-PV feed-LV NOM chicken
   'He might possibly have fed the chicken first.' (Chang 2009:464)

#### (28) *Tsou* voice harmony

- a. Mi-'o **ahoi bonu** to cnumu. b. Os-'o **ahoz-a an-a** 'o cnumu. Av-1sG start.Av eat.Av OBL banana 'I start eating bananas.' I start eating the bananas.' (Chang 2009:467)
- In ANTICIPATORY PREFIXING, derivational prefixes are copied from a subordinate verb to a higher verb (Nojima 1996; Tsuchida 2000; Adelaar 2011).
  - (29) Tsou ANTICIPATORY PREFIXING

     Ta-'u tu-usufeungnu tu-sbuku hotaseona.
     IRR-1SG AP-early.AV cut-bamboo.shoots morning
     'I am going to pick up bamboo shoots early in the morning.' (Chang 2009:457)
     (30) Siraya ANTICIPATORY PREFIXING
    - paka-lpux-kow paka-kuptix iau-an-da AP-can-2s CAUS-purify 1s-OBL-? 'you are able to purify me.' (Adelaar 1997:389 viii:2)

(31) Bunun ANTICIPATORY PREFIXING

pit-utmag-unma-pit'ia tastu-tilasAP(cook)-carelessly-PV AV-cookone-uncooked.rice'(She) carelessly cooked a grain of rice in one piece, without breaking it apart.'(Nojima 1996:16)

- (32) Seediq COPY RAISING qeras-un=**misu** m-ita ka '**isu**. glad-Gv1=1s.GEN:2s.SBJ AV-see NOM 2s 'I am glad to see you (sg.).' (Tsukida 2005:309)
- What unites these phenomena is **spread** of grammatical features across clauses and categories, also what is required to spread case features to the relativized predicated.
- Going back to the final two stages of (21), repeated as (33) below, the case on the extracted noun is lost in stage (c) and the verbal marking remains as the only signal of the gap in the relative.
- It is at this point that the deverbalized predicate can be easily reanalyzed as a participant nominalization.
- Stage (d) in (21), shows the defining feature of Ross's 2009 Nuclear Austronesian subgroup, in which former nominalizations could function as event-denoting matrix predicates.

#### (33) Hypothesized Pre-PAn clauses

c.	babuy ka qaNup <b>-en</b> na RuqaNay	PAn?/Pre-PNAn
	boar NOM hunt-pat.nmlz gen man	via economy
	'It was a boar that the man hunted.'	
d.	qaNup <b>-en</b> na RuqaNay ka babuy	PNAn
	hunt-pat.nmlz gen man nom boar	reanalysis of nominalization as matrix pred.
	'The man hunted the boar.'	

# 5 Some problems

### 5.1 The problem of \*<*in*> NMLZ.PRF

- Why would PAn \*<*in*> NMLZ.PRF occur on just those forms that show grammaticalized case markers?
- Why would \*-*en* ACC and \*<*in*> NMLZ.PRF be in complementary distribution?
- Following the current logic, this implies that there was no accusative case in the perfective.
- Note that this is precisely the pattern we find in canonical split-ergative systems (although this prospect may open up a host of new problems).

### 5.2 Reflexes of \*-an and \*-en in Rukai, Tsou and Puyuma

- I argued that case is a logical progenitor to nominalization but have not discussed it at all for Rukai, Tsou or Puyuma, Ross's extra-NAn languages.
- Rukai *does* have oblique pronouns with reflexes of *\*-an* and Mantauran has final *-a*, which would be consistent with either *\*-an* or *\*-an(a)* (although the latter is more probable). Proto-Maga-Tona is reconstructed with a personal oblique case marker *\*-ana* and Proto-Rukai has been reconstructed with a an obique case marker of the same shape for common nouns.

OBL: PAT, pe	ripheral roles				
P-Rukai	*naku-a[nə]	*musu-a[nə], *su-a[nə]	*mita-a[nə]	*na[m]i-a[nə]	*[ni]mu-a[nə]
BLT	naku-a[nə]	musu-a[nə]	mita-a[nə]	nai-a[nə]	numi-a[nə]
Mantauran	i-a-ə	i-mia?-ə	i-mit-ə	i-nam-ə	i-nom-ə
P-MT	*naku-a	*su-a, *musu-a	*miti-a	*nami-a	*mu-a[nə]
Maga	ŋku-a	su-a	mti-a	nma-a	ти-а
Tona	[na]ko-a	moso-a	miti-a	nami-a	mo-anə

• Case marking evidence for \*-*an* is available in Rukai but not in Tsou or Puyuma. Because the function of pronominal \*-*an* is really ACCUSATIVE in Rukai (as also noted in Ross 2015), it stands to reason that \*-*an* subsumed the functions of an earlier \*-*en*. The lack of similar case marking functions in Tsou and Puyuma may be attributed to loss.

### 5.3 The disappearance of *\*-en* without a trace

- The "no loss without a trace" argument has been employed against a variety of proposals but one only need to examine Malayic, the South Sulawesi subgroup, or any number of other Indonesian subgroups to see that *\*-en* can indeed be lost without a trace.
- Interesting here is the tendency for \*-*an* to expand at the expense of \*-*en*, an extremely widespread parallel development in different MP subgroups. Compare for example Tag. *inum-in* drink-PAT.NMLZ 'a drink' with Mal. *minum-an* drink-GEN.NMLZ 'a drink'.
- Note that verbal \*-*en* merges to \*-*an* in Kavalan and to some extent in Saaroa. Functional equivalents of this merger have also happened in MP languages. It is impossible to rule out a similar merger in Rukai nominalizers.
- The "no loss without a trace" argument has also been used by Ross (2012:1269) to argue that even <u>nominalizing</u> \*-en was a back-formation from a verb form in PNAn: "Only Pazih and Paiwan reflect \*STEM-en as a nominalization (without reduplication -DK), suggesting that PNAn \*STEM-en was initially a finite verb form and that the Paiwan and Pazih nominalizations are analogical back-formations."
- But then we are in the strange position of reconstructing \*-*en* for verbal voice and pronominal case without the bridge context of nominalization.

### 5.4 *\*-an* as a general nominalizer

• Ross (2012:1268) notes the use of *-an* as a general nominalizer:

"It has been assumed (e.g. by SPR) that PAn \*-en and \*-an both formed nominalizations. There was, however, a decided mismatch between their functional loads. The PAn suffix \*-an functioned both as a locative nominalizer and as a general nominalizer, as the structures in (5) show."

meaning general nominalizer	form *STEM-an	languages in which reflected Nanwang Puyuma, Tsou, Rukai,
8		Paiwan, Thao, Pazih, Kavalan <sup>17</sup>
general perfective	* <in>-STEM-an</in>	Nanwang Puyuma, Rukai,
nominalizer		Kanakanavu, Pazih, Saisiyat,
		Mayrinax Atayal, Paiwan, Amis,
		Kavalan
general imperfective or irrealis nominalizer	*Ca-STEM-an	Nanwang Puyuma, Tsou, Paiwan, Thao <sup>18</sup>
location	*ta-STEM-an	Rukai, Tsou, Kanakanavu, Pazih, Amis
circumstance	*Sa/Si-STEM-an	Rukai, Paiwan, Thao, Kavalan
time	*ka-STEM-an	Puyuma, Rukai, Paiwan

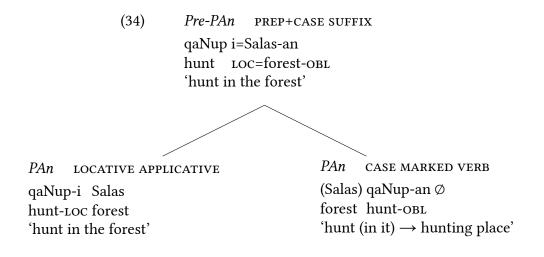
- But nowhere does \*-*an* function exclusively as a general nominalizer whereas it does function exclusively with a locative function in a number of languages (Saisiyat, Amis, and with reduplication, Pazih and Mayrinax Atayal).
- This together with the pronominal evidence suggest that the general nominalization function was secondary. Parallel developments can again be seen in MP languages, e.g. Malay event nominals *per-jalan-an* 'walking, journey' where it is doubtful if *\*-an* played a role in such event nominals in PMP.
- In a similar vein, we must explain the reconstruction of instrumental nominalization with \*Sa/Si-STEM-an (Ross 2012:1269).
- Oblique/dative case would actually be predicted if the PAn instrumental \*Si- had a lexical meaning 'use': \*Sa-qaNup-an > 'used to/for hunt(ing)', as has been argued.

# 6 Conclusion

- While it is not yet possible to offer a unifying theory for the various harmonic phenomena in Austronesian, I hope to have shown that case transfer from noun to verb in relative clauses is at least worth exploring.
- The proposal here, while necessarily speculative, offers an interesting symmetry for the

SPQR theory (Starosta et al. 1981, 1982) in which the 1st generation suffixes (PAn \*-u, \*-a, \*-i) arose through preposition capture.

• If the current proposal is correct then the 1st generation paradigm arose through preposition capture while the 2nd generation paradigm arose through suffix spread from the same argument, as shown in (34).



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