

## On *\*pa-*, *\*pa<R>-* and *\*pa<η>-*

### 1.0 Intro

Ross 2002: Three morphological innovations in PMP -

<i>*paη-</i>	<i>*paR-</i>	<i>*paka-</i>
DISTRIBUTIVE	DURATIVE, RECIPROCAL	APTATIVE, POTENTIAL

“The Proto Malayo-Polynesian verbal system, however, underwent innovations that introduced complexities absent from Formosan systems. Among other things, Proto Malayo-Polynesian added the derivational prefixes *\*paη-* ‘distributive’, *\*paR-* ‘durative, reciprocal’ and *\*paka-* ‘aptative, potential’.”

Two questions:

- (i) Were these prefixes innovated *ex nihilo*? If not, what were their components?
- (ii) Could these components have been productive in PMP?

Here, I will argue three related points in trying to answer the above:

- (i) There existed an outer and inner causative in PAN, both of the form *pa-*. While the outer causative was a *bona fide* causative, the inner causative appears to have functioned more as a verbalizer for a particular set of roots (cf. Wolff, this session).
- (ii) The three prefixes above were morphologically complex (cf. Dempwolff 1934-38, Brandsetter 1916, Blust 2003a *inter alia*) but *\*<η>* and *\*<R>* fused with *\*pa-* due to a universal tendency to externalize infixes. On the other hand, *\*pa-* and *\*ka-* fused because of the stochastic-paradigmatic issues discussed by Blust (2003a:470).  

<i>*p&lt;aη&gt;a-</i>	<i>*p&lt;aR&gt;a-</i>	<i>*pa-ka-</i>
<PL>CAUS	<MID>CAUS	CAUS-HAVE-

(see Kaufman to appear for PAN *\*ka* as HAVE)
- (iii) The fusion of *\*pa-* with *\*<R>* and *\*<η>* also resolved an uncomfortable morphological ambiguity in PAN: the actor voice of the stative was identical to one of the dynamic actor voice paradigms (Ross 1995:740-741).

If correct, this allows us to make a welcome (but hitherto highly elusive) generalization over the PAN morphological inventory: At some point in reconstructable history, all *\*p-* initial prefixes contained a CAUSATIVE component and all corresponding *\*m-* initial prefixes contained both CAUSATIVE and ACTOR VOICE components.

## 2.0 Inner and outer causatives

The inner causative resembled Dowty's DO/MAKE – more basic than causative (This is the *\*pa-* found in PMP *\*paR-* and *\*paŋ-*)

Wolff (this session) on PAN *pa-*

“The most important and most productive affix, both in Paz and in the Philippine languages, is the reflex of the morpheme that I consider to be an affix with no function other than to derive a verb.”

*\*pa-* is more like a verbalizer than a causative - obligatory for certain verbs:

<b>PUYUMA</b>	<i>maatəl ku ɖa kabuŋ</i>	
	p<um>a-atəl=ku	ɖa=kabuŋ
	<AV>CAUS-throw=1S.NOM	OBL=hat
	‘I threw away a hat’	(Tan 1997:45)
<b>MAYRINAX</b>	<i>maqabuβiŋ</i>	<i>maqunas</i>
<b>ATAYAL</b>	p<um>a-qaβuβiŋ	p<um>a-qunas
	<AV>CAUS-hat	<AV>CAUS-song
	‘put on a hat’	‘sing’ (Huang 2000:379)

Inner *\*pa-* frozen with certain lexemes by PMP, e.g. ‘to bathe’:

<b>INATI</b>	pa-ridos	(with characteristic <i>*R&gt;d</i> from PAN <i>*diRus</i> )
	CAUS-bathe	
	‘to bathe’	(Pennoyer 1986-87)

This was due to a semantic distinction holding in PAN roots - some PAN roots were patient-oriented while others were event-oriented (cf. Himmelmann 2008, Kaufman 2009 for Tagalog). Patient-oriented roots required *pa-* to function as event-denoting predicates.

(But reconstruction of the classes is far from clear; e.g. Paiwan *t<em>ulu* ‘to teach’, formed from a root which requires *\*paR-* in Philippine languages to form ‘teach’)

Because of a phonological reduction which seems to have already occurred by PAN, both, *\*p<um>a-* <AV>CAUS and *\*k<um>a-* <AV>HAVE surfaced as *\*ma-*.

This situation is still reflected in Amis, among many other Formosan languages:

<b>AMIS</b> (Wu 2005)	
<i>ma-palu</i>	<i>ma-tayal</i>
k<um>a-palu	p<um>a-tayal
<AV>HAVE-beat	<AV>CAUS-work
‘to be beaten’	‘to work’

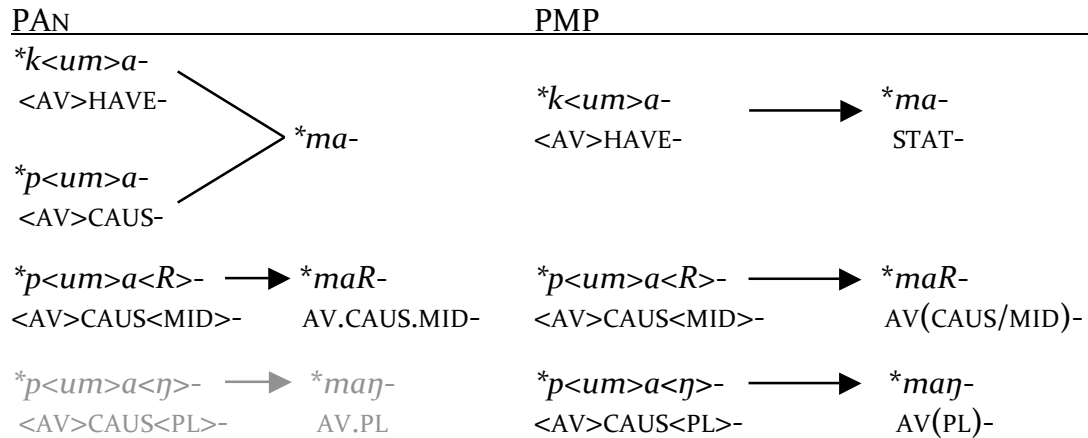
Note, that this was only a feature of the dynamic verbs. Inherently stative verbs required *\*ka* in the “active” as well.

**BUDAI RUKAI** (Chen 1999:46)

*macwake ku kisi*  
 k<um>a-cwake ku=kisi  
 <AV>HAVE-break DET=bowl  
 ‘The bowl is broken’

*pakacwake ku kisi ka lasu*  
 pa-ka-cwake ku=kisi ka=lasu  
 CAUS-HAVE-break DET=bowl DET=man  
 ‘The man broke the bowl’

A morphological ambiguity between ACTIVE and PASSIVE/STATIVE is highly marked and thus various strategies for maintaining contrast in the actor voice were recruited. PMP’s strategy was to recruit two morphemes which had already been in the PAN inventory \*<R> MID and \*<η> PL and to stretch their function to cover all cases of \*p<um>a- <AV>CAUS.



**2.1 The causative conundrum**

(i) *p-* prefixes are causative while their *m-* correspondents are not (Blust 1999b, 2003b)

<b>PAZEH</b>	<i>ma-dawan</i> ‘to bathe (oneself)’	<i>pa-dawan</i> ‘to bathe (someone else)’
<b>EASTERN KADAZAN</b>	<i>mag-anak</i> ‘to give birth’	<i>pag-anak-on</i> ‘to make give birth’ (Hurlbut 1988:52)

In other words, *pa-* was not necessary in the non-Actor Voices. Cf. MP:

“From available Philippine data, it seems probable that no PV or LV forms incorporating \**paR-* occurred. Instead the primary root was used.” (Ross 2002:50)

The patient orientation of the root would be naturally compatible with the non-Actor Voices, but not the Actor Voice:

Non-Actor Voices with PAN * <i>beRay</i> ‘~gift’ (Patient oriented)		
Locative Voice	* <i>beRay-an</i>	‘gift recipient’
Conveyance Voice	* <i>Si-beRay</i>	‘centrifugal gift’

Actor Voice with PAN \*beRay ‘~gift’ (Patient oriented)

Actor Voice	*b<um>eRay	‘BE a gift’
Actor Voice + CAUS	*pa-beRay	‘MAKE a gift of’

\*pa- thus behaved much like a light verb with patient-oriented roots. Light verbs create objects but typically disallow diathesis:

<u>Active</u>	<u>Passive</u>
John troubled Mary	Mary was troubled by John
John <b>made</b> trouble for Mary	*?Trouble was <b>made</b> for Mary by John
John <b>took</b> a shower	*?A shower was <b>taken</b> by John
John and Mary never <b>made</b> love	*?Love was never <b>made</b> by John and Mary

*John wa murabito ni ookami ga kuru to keikoku o shi-ta*  
J. TOP villagers to wolf NOM come COMP warning ACC do-PAST  
‘John warned the villagers that a wolf would come’ (Isoda 1991)

\**Keikoku ga John niyotte murabito ni ookami ga kuru to s-are-ta*  
warning NOM J. by villagers to wolf NOM come COMP do-PASS-PAST  
(For, ‘The warning was made by John that the wolf would come’, (Isoda 1991))

The light verb status of *pa-* also explains another one of its common uses across Philippine and Formosan languages: deictic/directional predicates –

TAGALOG	BIKOL	TAUSUG
<i>pa-rito</i>	<i>pa-digde</i>	<i>pa-kari</i>
CAUS-here	CAUS-here	CAUS-here
‘to come here’	‘ ’	‘ ’ cf. English ‘I <b>made</b> it here.’

With event-denoting roots, \*pa- behaved much like a real causative:

<u>PAN *kaen ‘~eating’ (Event oriented)</u>	
*kain-an	‘eating place’
*Si-kaen	‘eating benefactee/instrument’
*k<um>aen	‘BE eating’
*pa-kaen	‘MAKE eating’

### 3.0 Reconstructing the infixes \*<(a)R> and \*<(a)η>

“The formative *r-*, which can also unite with the formative *a-* to form *ar-*, and with the *ma-* for form *mar-*. Here, too, as between *r-* and *mar-* we have the same relation as in the case of *ng-* and *mang-*. The *r-* just like the *ng-*, was originally an article in Old Jav. it is an unemphatic pronoun of the third person.”  
– Brandsetter (1916:172)

### 3.1 PAN \*⟨(a)R⟩ as middle voice

There existed a “lexical” \*⟨aR⟩ infix denoting sounds (Li, this session) but this is difficult to connect to the derivational \*⟨(a)R⟩ found with prefixes.

As shown by Zeitoun (2002) (see also, Liao 2004), the latter appears reconstructable to PAN with a reciprocal and reflexive meaning. I attribute a more general function to \*⟨(a)R⟩:

**MIDDLE VOICE** = SELF-ORIENTED (REFLEXIVE, RECIPROCAL, *inter alia*)

“The implications of the middle (when it is in opposition with the active) are that the ‘action’ or ‘state’ affects the subject of the verb or his interests”  
(Lyons 1968:373)

SANSKRIT	<i>Devadattaḥ kaṭam karoti</i> Devadatta:NOM mat:ACC makes:SG:ACT ‘Devadatta makes a mat’	
	<i>Devadattaḥ kaṭam karute</i> Devadatta:NOM mat:ACC makes:SG:MID ‘Devadatta makes (himself) a mat’ (Klaiman 1991:24)	
FULA	<i>‘o born-ii mo ṅgapalewol</i> he dress-past:ACT him gown ‘He dressed him in a gown’	
	<i>‘o born-ake ṅgapalewol</i> he dress-past:MID gown ‘He put on a gown’ (Klaiman 1991:26)	
	<i>femmb-o</i> shave-MID ‘get oneself shaved’	<i>femmb-it-o</i> shave-REFL-MID ‘shave oneself’ (Klaiman 1991:30)
CLASSICAL GREEK	<i>hair-ō moiran</i> take:1SG-ACT share ‘I take a share’	<i>hair-oumai moiran</i> take-1SG.MID share ‘I take for my own benefit a share’
	<i>lou-omai</i> wash-1SG.MID ‘I wash myself’ (Barber 1975 via Klaiman 1991:28)	<i>lou-ometha</i> wash-1PL.MID ‘we wash each other’

**SOUTHERN PAIWAN**  
**PAN \*R > r**

*mar'atjeŋeLay ti kivi 'ati kapi*  
 p<um>a<R>-‘a-tjeŋeLay ti kivi ‘ati kapi  
 <AV>CAUS<MID>-PL-love NOM Kivi and Kapi  
 ‘Kivi and Kapi love each other’ (Zeitoun 2002)

*marpakan ti kivi ‘ate kapi*  
 p<um>a<R>-kan ti kivi ‘ati kapi  
 <AV>CAUS<MID>-eat NOM Kivi and Kapi  
 ‘Kivi and Kapi feed each other.’

*mare-*                      *maru-*  
 p<um><aR>e-              p<um><aR>u-  
 RECIPROCAL              SIMILARITY              (Early & Whitehorn 2003)

**NANWANG**  
**PUYUMA**  
**PAN \*R > r**

*marə-kataguin i Ukak aw i Pilay*  
 p<um>a<R>ə-kataguin i=Ukak aw i=Pilay  
 <AV>CAUS<MID>-spouse NOM=Ukak and NOM=Pilay  
 ‘Ukak and Pilay got married’ (Teng 1997:117)

*aDi ta par-ka-inaba’*  
 aDi=ta pa<R>-ka-inaba’  
 NEG=1P.NOM CAUS<MID>-HAVE-good  
 ‘We won’t reconcile’ (Ross 2008)

<b>PAIWAN &amp; PUYUMA</b>	<u>Stative</u>	<u>Dynamic</u>
	<i>mar-</i> p<um>a<R>- <AV>CAUS<MID>-	<i>marpa-</i> p<um>a<R>-pa- <AV>CAUS<MID>-CAUS

(Zeitoun 2002)

**RUKAI**  
**PAN \*R > ?**

*maʔa-tina analo*  
 p<um>a<R>-tina analo  
 <AV>CAUS<MID>-mother that:PL  
 ‘They are mother and daughter.’ (Zeitoun 2002, 2007)

**PAZEH**  
**PAN \*R > x,h**

*maa-kizip dadowa*  
 p<um>a<R>-kizip dadowa  
 <AV>CAUS<MID>-pinch two (Zeitoun 2002, Blust 1999b)  
 ‘The two (of them) pinched each other’

**AMIS** **PAN \*R > l**

<i>mala-kaka-ay</i> p<um><aR>-kaka-ay <AV>CAUS<MID>-brother-? ‘reciprocal brother relationship’ (Zeitoun 2002)	<i>mala-metmet cangra tu kamay</i> p<um><aR>-metmet cangra tu=kamay <AV>CAUS<MID>-shake 3P.NOM ACC=hand ‘They shook hands.’ (Wu 2000:51 via Sung 2006)
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<b>SIRAYA</b> PAN *R > x,h	<i>päx-dimdim</i> pa<R>-dimdim CAUS<MID>-think 'think'	<i>päx-k'bu</i> pa<R>-k'bu CAUS<MID>-worry 'worry about' (Adelaar 2004:356)
	<i>käwx-bulas</i> ka<R>-bulas 'become sad'	<i>ma-vulas</i> k<um>a-bulas 'sad' (Adelaar 2004:356)
<b>PAZEH</b> PAN *R > x,h,Ø	<i>maxakekela</i> p<um><aR>a-dimdim <AV><MID>CAUS-think 'to think' (Li & Tsuchida 2001, Wolff, this session)	
	<i>maka-tulala</i> p<um>a-ka-tulala <AV>CAUS-HAVE-blossom 'to be full of blossoms'	<i>maxa-tulala</i> p<um><aR>-tulala <AV>CAUS<MID>-blossom 'to bloom, to blossom'
	<i>maxu-papah</i> p<um><aR>u-papah <AV><MID>CAUS:MOT-argue 'to argue, disagree over s.t.'	<i>maxa-damu/daxaŋ/laja</i> p<um><aR>a-damu/daxaŋ/laja <AV><MID>CAUS-blood/sweat/pus 'to bleed/sweat/suppurate'
	<i>paxa-riak</i> p<aR>a-riak <MID>CAUS-good 'behave good towards others' (Blust 1999b)	
<b>THAO</b> PAN *R > lh	<i>malha-qitan</i> p<um><aR>a-qitan <AV><MID>CAUS-good 'behave properly' (Blust 2003a)	
<b>BUNUN</b> PAN *R > l	<i>mal-tala?</i> p<um><aR>-tala? <AV><MID>CAUS-wait 'to wait' (Jeng 1977:243) (cf. Arabic reflexive <i>istanna</i> 'wait')	
<b>SEEDIQ</b> PAN *R > g	<i>tege-li?iŋ</i> t<aR>a-li?iŋ <MID>?-hide 'to hide oneself'	<i>l&lt;em&gt;i?iŋ</i> l<em>i?iŋ <AV>hide 'to hide s.t.' (Tsukida 2005:323)

The *ge* in *tege-* is described by Tsukida (2005) as optional but I take it to be a retention of the full form. The morphological reduction has progressed further in the reciprocals where \**aR*> appears to have been lost altogether, cf. *duŋus* ‘spouse’; *meke-duŋus* ‘husband and wife’ (Tsukida 2005:322).

Blust (2003a:472) PAN \**taR*- ‘prefix of spontaneous or accidental action’

<b>PAZEH</b>	<i>taxa-uta</i>	<i>taxa-pi-hilud</i>	<i>taxa-kawas</i>
	t<aR>a-uta	t<aR>a-p-i-hilud	t<aR>a-kawas
	<MID>NVOL-vomit	<MID>NVOL-CAUS-LOC-urine	<MID>NVOL-speak
	‘to feel like vomiting’	‘to feel like urinating’	‘to feel like speaking’
			(Blust 1999b:350)

<b>AKLANON</b>	<i>na-tag-pa:naw</i>	<i>na-tag-ihī?</i>
	k<um><in>a-ta<R>-panaw	k<um><in>a-ta<R>-ihī?
	<AV><BEG>HAVE-NVOL<MID>-go	<AV><BEG>HAVE-NVOL<MID>-urine
	‘to feel like going’	‘to feel like urinating’ (Zorc 2005)

\**taR*- Independent of the voice system:

<i>tag-?ihī?-un</i>
ta<R>-ihī?-en
NVOL<MID>-urine-PV
‘to feel like urinating’

Zeitoun (2002) reconstructs two PAN reciprocals -

**Stative** PAN \**maR*-, *paR*- > PMP \**maR*- ~ *paR*-

**Dynamic** PAN \**Ca*-, *ma-Ca* (?)

As is very often the case in Austronesian, we can reconstruct other morphemes whose functions overlap: another PAN reciprocal \**si*- is evidenced by Kavalan \**si(N)*- and many MP languages (Central Philippine, South Sulawesi, Batanic).

### 3.2 PAN \*<(a)ŋ> as PLURAL OBJECT/PLURACTIONAL?

“...traces of nasal substitution and of the prefixes \**maN*- and \**paN*- do appear in some Formosan and OC languages, and this suggest that their appearance as productive features in WMP languages is a retention from PAN.” (Blust 1999a)

PUYUMA *maŋayaw* ‘to hunt heads’

“Such examples of apparently fossilized NS in languages that have no active counterpart are rare, and generally difficult to interpret. Is Puyuma \**maŋayaw* ‘go headhunting’ the lone survivor of a once active process of NS in Formosan languages (hence in PAN)? Or did speakers of PMP reanalyze a structurally atypical base \**maŋayaw* as containing a shorter base \**kayaw* and an active verb prefix? [...] For the present, then, it seems safest to follow Dahl (1976) in concluding that NS probably was a PMP innovation...” (Blust 2004)



Wolff (2006): PAN \**taRa* ‘wait’ > ATAYAL *mnaga*  
 PAN \**taqu* ‘know’ > PUYUMA *manaqu* (‘see’)  
 PAN \**tukub* ‘cover’ > KAVALAN *mnukub*

PAZEH *mana-dixipu* (*mana-rima* ‘to wash the hands’,  
 PAN \* $\eta$  > n p<um><a $\eta$ >a-dixipu *mana-titu* ‘to have puppies’)  
 CAUS<AV><PL>-dixipu  
 ‘to wash the face’ (Blust 1999b)

THAO *kim-bukay* *kim-bunaz* *kin-fatu*  
 ki< $\eta$ >-bukay ki< $\eta$ >-bunaz ki< $\eta$ >-fatu  
 (Blust 2003b) GET<PL>-flower GET<PL>-sand GET<PL>-sand  
 ‘to gather flowers’ ‘to gather sand’ ‘to gather stones’

PAIWAN *man-* with numerals ‘x number of people’

#### 4.0 The role of \*<(a)R> and \*<(a) $\eta$ > in PMP

**Hypothesis:** \*<(a)R> and \*<(a) $\eta$ > functioned to differentiate dynamic *ma-* (\*p<um>a-) from stative *ma-* (\*k<um>a-). This explains the complementary distribution between active \**ma-* (Formosan) and ubiquitous \**maR-/ma $\eta$ -* (Malayo-Polynesian)

#### 4.1 The function of \*p<um>aR- in PMP

Similar to many Formosan languages, Tagalog also requires *pa(g)-* for a certain class of actor voice forms.

TAGALOG *bumigay* *mag-bigay*  
 Entity-oriented: b<um>igay p<um>a<R>-bigay  
 <AV>give <AV>CAUS<MID>-give  
 ‘to give out’ ‘to give s.t.’  
 (i.e. as in a collapsing ceiling)

Event-oriented: *umalis* *mag-alis*  
 <um>alis p<um>a<R>-alis  
 <AV>leave <AV>CAUS<MID>-leave  
 ‘to leave’ ‘to remove’

**Tentative claim:** Non-causative *pag-* in Tagalog (i.e. *mag-bigay*) corresponds to obligatory *pa-* verbs in Formosan languages.

Note that Philippine forms reflecting \**maR-* show both reflexive and causative features:

Table 1. -um- vs. mag- on identical stems (Pittman 1966)

1.1	Non-reflexive	1.2	<b>Reflexive</b>
2.1	Non-causative	2.2	<b>Causative</b>
4.1	Non-dual and non-reciprocal	4.2	<b>Dual or Reciprocal</b>
10.1	Impulsive	10.2	<b>Deliberate</b>
<b>OLD BIKOL</b>	<i>bumakal</i> b<um>akal <AV>buy 'to buy'	<i>magbakal</i> p<um>a<R>-bakal <AV>CAUS<MID>-buy 'to sell' (Lobel 2004)	
<b>MODERN BIKOL</b>	<i>magbakal</i> p<um>a<R>-bakal <AV>CAUS<MID>-buy 'to buy'	<i>magpabakal</i> p<um>a<R>-pa-bakal <AV>CAUS<MID>-CAUS-buy 'to sell' (Lobel 2004)	
<b>IVATAN</b> PAn *R > y (Hidalgo & Hidalgo 1971)	<i>mandiman</i> p<um>a<ŋ>-diman <AV>CAUS<PL>-kill 'to kill s.o.'	<i>maydiman</i> p<um>a<R>-diman <AV>CAUS<MID>-kill 'to kill each other'	
	<i>manweswes</i> p<um>a<ŋ>-weswes <AV>CAUS<PL>-turn 'to turn s.t.'	<i>mayweswes</i> p<um>a<R>-weswes <AV>CAUS<MID>-turn 'to turn oneself'	
<b>IBALOY</b> *R > l (>n) (Ruffalo 2004:225)	<i>manʔaʔmes</i> p<um>a<ŋ>-emes CAUS<AV><PL>-bathe 'to bathe s.o.'	<i>manʔaʔmes</i> p<um>a<R>-emes CAUS<AV><MID>-bathe 'to bathe oneself'	
<b>TAGALOG</b>	<i>mag-paka-matay</i> p<um>a-R-pa-ka-matay <AV>CAUS-MID-CAUS-HAVE-dead 'to cause self to have death'	<b>ILOKANO</b>	<i>ag-paka-lukmeg</i> p<um>a-R-pa-ka-lukmeg <AV>CAUS-MID-CAUS-HAVE-fat 'to cause self to have fat'

Idiosyncratic uses: 'the whole duration' –

<b>PAIWAN</b>	<i>rh&lt;em&gt;a-jama/qadau/qezemetj/serem</i> <um>Ra-jama/qadau/qezemetj/serem <AV>MID-morning/day/night/evening 'The whole morning/day/night/evening' (Egli 1990:93)
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**TAGALOG**      *mag-damag/hapon*  
 p<um>a<R>-damag/hapon  
 <AV>CAUS<MID>-night/day  
 ‘The whole night/day’

#### 4.2 Was \*(<a>R) still productive in PMP?

If productive, we expect to find reflexes of \*<R> in contexts besides \*paR-<R> never appears to be productive in roots: It is an outer affix, but we do find reflexes of all three expected combinations: \*ka<R>-, \*ta<R>-, \*paki<R>-

<b>BIKOL</b>	<i>kag-balay</i> ka<R>-balay HAVE<MID>-house ‘owner of the house’	<b>CEBUANO</b>	<i>makig-away</i> p<um>a-ki<R>-away <AV>CAUS-SOC<MID>-fight ‘to fight with each other’
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#### 4.3 The function of \*p<um>aŋ- in PMP

**IVATAN**      When <um> alternates with *mang-* then <um> forms intransitives, and *mang-* forms transitives. *May-* almost always forms intransitives (reciprocals/reflexives). (Hidalgo & Hidalgo 1971)

<b>TAGALOG</b>	<i>matákot</i> k<um>a-takot <AV>HAVE-fear ‘to be scared/have fear’	<i>manákot</i> p<um>a<ŋ>-tákot <AV>CAUS<PL>-fear ‘to frighten’	<b>**mag-tákot</b> p<um>a<R>-tákot <AV>CAUS<MID>-fear
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In Mamuju (SSul), *maŋ-* is an “intransitivizer” which is only permitted for bivalent, not monovalent verbs, i.e. it requires an (indefinite) object. True intransitives are formed with *ma-*, *mo-* (<\*maR-), *me-*.

<b>MAMUJU</b>	<i>mo-laŋi</i> p<um>a<R>-laŋi <AV>CAUS<MID>-swim  * <i>maŋ-laŋi</i>	<i>mu-dende</i> <um>dende <AV>run  * <i>maŋ-dende</i>
<i>cf.</i>	<i>maŋ-kita</i> ‘to see s.t.’	<i>maŋ-kande</i> ‘to eat s.t.’

#### 4.3.1 Was \*paŋ- a dedicated instrumental nominalizer by PMP?

<b>ILOKANO</b>	<i>panait</i> <i>paka-surat</i> <i>pag-wasay</i> <i>pag-punas</i>	‘to use for sewing (thread)’ ‘something with which one is able to write’ ‘to use as an axe’ ‘to use to wipe’
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This suggests that \**paŋ-* became an instrumental nominalizer due to instruments being identified by their frequent use. The voice morpheme which donated the actual instrumental semantics (PAN \**Si-*) still shows up in tensed predicates:

**TAGALOG**

<i>panulat</i>	<i>Bolpen=mo</i>	<i>ang=i-p&lt;in&gt;anulat=ko</i>
pa<ŋ>-sulat	bolpen=mo	ang=Si-p<in>a<ŋ>-sulat
CAUS<PL>-write	ballpen=2S.GEN	NOM=CV-<BEG>CAUS<PL>-write
'writing implement'		'Your pen is what I used in order to write'

Originally, instrumentals could have been formed out of a wider range of stems, as still seen in Cordilleran languages, among others, suggesting the following change:

<b>PMP</b>	* <i>i-pa&lt;ŋ&gt;-</i> >	* <i>paŋ-</i>	PLURACTIONAL INSTRUMENTAL
	* <i>i-pa&lt;R&gt;-</i> >	* <i>paR-</i>	CAUSATIVE/MIDDLE INSTRUMENTAL
	* <i>i-pa-ka-</i> >	* <i>paka</i>	ABILITATIVE INSTRUMENTAL

4.4 Was \*<(a)ŋ> still productive in PMP?

(i) **PMP/PPh \*<aŋ> ADJECTIVAL PLURALIZER**

<b>KAPAMPANGAN</b>	<i>ma-lagu</i> k<um>a-lagu <AV>HAVE-beauty 'beautiful'	<i>maŋa-lagu</i> k<um><aŋ>a-lagu <AV><PL>HAVE-beauty 'beautiful (pl.)'
<b>IVATAN</b>	<i>ma-vid</i> 'beautiful'	<i>maŋa-vid</i> 'beautiful (pl.)'
<b>BOLAANG- MONGONDOW</b> (Usup et. al. 1981:32)	<i>mo-lantud</i> 'tall'	<i>moŋo-lantud</i> 'tall (pl.)'
<b>MARANAO</b>	<i>ma-taid</i> k<um>a-taid <AV>HAVE-beauty 'beautiful'	<i>maŋa-tataid</i> k<um><aŋ>a-ta-taid <AV><PL>HAVE-PL~beauty 'beautiful (pl.)'

(ii) **PMP/PPh \*<aŋ> VERBAL PLURALIZER**

<b>OLD TAGALOG</b>	<i>ma-túlog</i> 'to sleep'	<i>maŋa-túlog</i> 'to sleep (pl.)'
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<i>mag-áral</i>	<i>maṅag-áral</i>
p<um>a<R>-áral	p<um><aṅ>a<R>-áral
<AV>CAUS<MID>-study	<AV><PL>CAUS<MID>-study
'to study'	'to study (pl.)'

*magkan-darapa?*  
p<um>a<R>-ka<ṅ>-da~rapa?  
<AV>CAUS<MID>-HAVE<PL>-EMPH~fall  
'to stumble repeatedly and fall'

(iii) PMP \*m<aṅ>a ARGUMENT PLURALIZER

<b>TAGALOG</b>	<i>maṅa baba?e</i>	<b>WOLIO</b>	<i>maṅa bawine</i>
	PL woman		PL woman
	'women'		'women' (Anceaux 1952)

Do only \*maṅ- and \*paṅ- trigger Nasal Substitution alternations?  
If so, this suggests a separate (longer?) history for \*maṅ- and \*paṅ- in relation to \*kaṅ-, \*taṅ- etc.

5.0 A brief note on PMP \*paka- ABIL

PAN \*pa-ka- as CAUSATIVE + STATIVE (Himmelman and Wolff 1999, Huang 2000, Zeitoun and Huang 2000, Blust 1999b, Blust 2003a and referenes therein). PMP's third morphological innovation from above: *paka-* APTATIVE, POTENTIAL

**PAN** *p<um>a-ka-dateng*  
<AV>CAUS-HAVE-arrive  
'to have arrived.'

HAVE > accomplishment > ability	( ? > non-intentional)
PAN/PMP	PAN?/PMP PAN??/PMP

Cf. the similar grammaticalization of HAVE in Romance, Germanic, and countless other language families. (The polysemy between ability and non-intentional action is also evinced by the Salish "out-of-control" morpheme.)

**PAIWAN** *Lakua ini pa-ka-katsu*  
but NEG CAUS-HAVE-carry  
'But he couldn't carry (them)' (Early and Whitehorn 2003:40)

## 6.0 Conclusion

PAN \**pa-* was both a bona-fide (or “outer”) causative as well as an actor-voice predicate formant (or “inner causative”).

PAN \**<(a)R>* may best be understood as a marker of MIDDLE “voice”, encompassing reciprocals, reflexives and other activities with effected subjects.

The infixes \**<(a)R>* and \**<(a)ŋ>* were employed in PMP to differentiate PAN dynamic \**ma-* (\**p<um>a-*) from PAN stative \**ma-* (\**k<um>a-*).

PMP \**maR-* thus had both causative and reflexive/reciprocal ingredients explaining its seemingly incompatible causative and reflexive/reciprocals semantics.

Two questions: (i) Null exponence for Actor Voice with outer causative in PAN?

### COTABATO MANOBO

i-pe-tadtad=ku	keniko sa=babuy	pe-tadtad-en=ku	kuna babuy
CV-CAUS-cut.up=1S.GEN	2S.OBL NOM=pig	CAUS-cut.up-PV=1S.GEN	2S.NOM pig
‘I will get you to cut up the pig’		‘I will get you to cut up the pig’	

pe-tadtad=a	keniko babuy	“The actor-case-focusing infix <i>-um-</i> , which is a regular feature of the case constellation of verbs of simple batteries, is not a feature of causative batteries.” (Kerr 1965)
CAUS-cut.up=1S.NOM	2S.OBL pig	
‘I will get you to cut up the pig’		

(ii) Could dynamic Actor Voice \**ma-* have survived more widely in PMP?

<b>ARTA</b>	<i>ma-ratán</i>	<i>ma-mula</i>
(Reid 1989)	<i>p&lt;um&gt;a-ratán</i>	<i>p&lt;um&gt;a-mula</i>
	<AV>CAUS-buy	<AV>CAUS-plant
	‘to buy’	‘to plant’

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