Tagalog valency morphology and its neutralization

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1. Introduction

Tagalog Actor Voice (AV) verbs are most commonly formed with one of the three morphemes *mag-*, *ma-* and *<um>*:

(1) **Nag**-lakad   ang   magsasaka.
    MAG.PFV-walk NOM farmer
    'The farmer walked.'

(2) **Na**-tunaw   ang   ice cream.
    MA.PFV-melt NOM ice cream.
    'The ice cream melted.'

(3) S<**um**>ipa   ang   bata ng   bola.
    <UM.PFV>kick NOM child GEN ball
    'The child kicked a ball.'

Early work by Cruz (1975) provides a subcategorization of verbs guided by their morphological alternations. Here, we focus on the argument structural properties associated with each AV marker.

In this talk, we show that these morphemes exhibit different valency properties

- We assume that these morphemes are reflexes of Voice, the external argument introducing head (Kratzer, 1996)

- Voice comes in 3 flavours depending on whether it requires, prohibits or allows a DP to merge in its specifier (Kastner, 2019, 2020)

AV marker	Voice	DP in Spec-VoiceP	Constructions
mag-	Voice[+D]	Required	Active
ma-	Voice[−D]	Prohibited	Non-active
<um>	Voice[∅]	Unspecified	Active and non-active

Table 1: Three lexical variants of Actor Voice in Tagalog

- Valency morphology on Voice is distinct from Austronesian voice morphology on Agr (Hsieh, 2020; Chen, 2022)

- Valency distinctions most clearly exhibited in AV are often neutralized in other syntactic contexts, thus obscuring them

Outline

1. Introduction

2. Tagalog valency morphology

   (a) Uses of *ma-*

   (b) Uses of *mag-*

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3. Trivalent Voice

4. Neutralizing context: Patient Voice

5. Conclusions and outlook

2. Tagalog valency morphology

2.1 Uses of *ma-*

Unaccusative

Examples: *matunaw* 'to melt', *magising* 'to awaken', *mawala* 'to vanish/go missing'

(4) **Na**-hulog   ang   bata.
     MA.PFV-fall NOM child
     'The child fell.'

(5) **Na**-basag   ang   bintana.
     MA.PFV-shatter NOM window
     'The window broke.'

Test for unaccusativity: Modifier *mag-isa* 'alone, of its own accord' diagnoses the absence of an implicit agent (Levin and Rappaport Hovav, 1994)

(6) a. **Mag-isa**=ng **na**-basag   ang   bintana.
alone=LK   MA.PFV-shatter NOM window
'The window broke of its own accord.'   *ma-* unaccusative

b. (#**Mag-isa**=ng) b<**in**>asag-∅   ang   bintana.
alone=LK   <PFV>shatter-PV NOM window
'The window got broken (#of its own accord).'   PV lexical causative

Test for agentivity: Agent-oriented modifiers like *nang sinasadya* 'deliberately' diagnose the presence of an overt or implicit agent

(7) a. **Na**-basag   ang   bintana (#nang **sinasadya**).
MA.PFV-shatter NOM window ADV   deliberately
'The window broke (#deliberately).'   *ma-* unaccusative

b. B<**in**>asag-∅   ang   bintana nang **sinasadya**.
<PFV>shatter-PV NOM window ADV   deliberately
'The window got deliberately broken.'   PV lexical causative

2.2 Uses of *mag-*

Unergative

Examples: *maglakad* 'to walk', *magtagumpay* 'to succeed',
         mag-basketbol 'to play basketball'

(8)   Maingat na **nag**-trabaho   ang   magsasaka.
       careful   LK MAG.PFV-work NOM farmer
       'The farmer worked carefully.'

(9)   **Nag**-itim   ang guro   ngayon nang sinasadya.
       MAG.PFV-black NOM teacher today   ADV   deliberately
       'The teacher deliberately wore black today.'

Transitive

Examples: *maghugas* 'to wash', *magbitbit* 'to carry', *maglaro* 'to play'

(10) **Nag**-lu~luto   ang magsasaka ng   gulay.
       MAG-IPFV~cook NOM farmer   GEN vegetable
       'The farmer is cooking vegetables.'

Transitive (Lexical causative)

Examples: *maghanda* 'to prepare sth.', *maglabas* 'to take sth. out',
mag-uwi 'to take/bring sth. home'

(11) **Nag**-bukas   ako   ng   bintana.
      MAG.PFV-open 1SG.NOM GEN window
      'I opened a window.'

Reflexive

Examples: *maghilamos* 'to wash one's face', *magbihis* 'to dress oneself'

(12) Maingat na **nag**-ahit   ang   lalaki.
      careful   LK MAG.PFV-shave NOM man
      'The man shaved (himself) carefully.'

(13) Maingat na **nag**-kamot   ang   bata.
      careful   LK MAG.PFV-scratch NOM child
      'The child scratched (at an itch) carefully.'

Ditransitive

Examples: *maglagay* 'to put', *magbuhos* 'to pour out'

(14) **Nag**-bigay   ang guro   sa   bata ng libro.
     MAG.PFV-give NOM teacher OBL child GEN book
     'The teacher gave the child a book.'

(15) **Mag**-ta~tanim   ang mga estudyante ng gulay   sa   hardin.
     MAG-FUT~plant NOM PL   student   GEN vegetable OBL garden
     'The students planted vegetables in the garden.'

N.B.: As a rough diagnostic, we assume that stems showing a three-way alternation between *mag-* for actor pivots, *i-* for theme pivots, and *-an* for goal pivots are ditransitive.

2.3 Uses of *<um>*

Unaccusative

Examples: *sumabog* 'to explode', *lumutang* 'to float', *lumakas* 'to grow stronger'

(16) Mag-isa=ng b<**um**>agsak ang   plorera.
      alone=LK   <UM.PFV>fall NOM vase
      'The vase fell of its own accord.'

(17) Mag-isa=ng b<**um**>ukas   ang   pinto.
      alone=LK   <UM.PFV>open NOM door
      'The door opened of its own accord.'

Unergative

Examples: *tumalon* 'to jump', *umakyat* 'to go up', *umubo* 'to cough'

(18) <**Um**>iyak   ang bata nang sinasadya.
      <UM.PFV>cry NOM child ADV   deliberately
      'The child cried deliberately.'

(19) Maingat na t<**um**>akbo   ang   bata.
      careful   LK <UM.PFV>run NOM child
      'The child ran carefully.'

Transitive

Examples: *pumitas* 'to pick/pluck', *sumipa* 'to kick', *gumamit* 'to use'

(20) K<**um**>ain   ang bata ng   adobo.
      <UM.PFV>eat NOM child GEN adobo
      'The child ate adobo.'

(21) P<**um**>atay   ang magsasaka ng   butiki.
      <UM.PFV>kill NOM farmer   GEN lizard
      'The farmer killed a lizard.'

2.4 Summary

AV	UNACC	UNERG	TRANS	REFL	DITRANS
mag-		✓	✓	✓	✓
ma-	✓				
<um>	✓	✓	✓		

Table 2: Distribution of Tagalog Actor Voice markers

- *mag-* and *ma-* are in complementary distribution
  - *mag-* occurs with agentive AV predicates
  - *ma-* occurs with non-agentive AV predicates
- *<um>* overlaps in distribution with the other markers
  - *<um>* is a multi-purpose AV marker
  - *<um>* is incompatible with reflexive and ditransitive roots

3. Trivalent Voice

- Voice is the source of transitivity alternations

- Voice bears a syntactic feature [±D], which either requires or prohibits a DP from merging in its specifier, or may be unspecified (Kastner, 2019, 2020)

Type	DP in Spec-VoiceP	Semantics
Voice[+D]	Required	$\lambda x \lambda e.\text{Agent}(x,e)$
Voice[−D]	Prohibited	$\lambda P_{\langle s,t \rangle}.P$
Voice[∅]	Unspecified	Underspecified

Table 3: Three lexical variants of Voice (adapted from Kastner, 2019, 579)

- Voice[+D]: External argument introducer, available in all languages (Kratzer, 1996)

- Voice[−D]: Non-active head, available in languages with overtly marked non-active structures (Schäfer, 2008; Wood, 2015)

    – Chen (2022): Puyuma non-agentive marker *u-*

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- Some languages overtly mark all three variants of Voice, e.g. Hebrew

(22)   a. ha-ʃa'ar **niftax**
the-gate opened
'The gate opened.'   *niftax = p-t-x + niXYaZ*, Voice[$-$D]

       b. josi **patax** et ha-ʃa'ar
Yossi opened ACC the-gate
'Yossi opened the gate.'   *patax = p-t-x + XaYaZ*, Voice[∅]

(23)   a. ha-jevul **gadal** pi eser
the-crops grew times ten
'The crops grew tenfold.'   *gadal = g-d-l + XaYaZ*, Voice[∅]

       b. ha-agronomit **hegdil**-a et ha-jevul
the-agronomist increased-F.SG ACC the-crop
'The agronomist increased the crops.'
(Kastner, 2019, 579–580)   *hegdil = g-d-l + heXYiZ*, Voice[$+$D]

- Roots are lexically specified for compatible Voice types, though there may be correlations based on lexical semantics

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- Nie (2020): Tagalog also overtly marks all three variants of Voice

(24) a. **Na**-basag   ang plorera.
         MA.PFV-shatter NOM vase
         'The vase broke.'   *ma-*, Voice[−D]

      b. B<**um**>asag   ang bata ng plorera.
         <UM.PFV>shatter NOM child GEN vase
         'The child broke a vase.'   *<um>*, Voice[∅]

(25) a. B<**um**>ukas   ang pinto.
         <UM.PFV>open NOM door
         'The door opened.'   *<um>*, Voice[∅]

      b. **Nag**-bukas   ang guro   ng pinto.
         MAG.PFV-open NOM teacher GEN door
         'The teacher opened the door.'   *mag-*, Voice[+D]

- Roots are lexically specified for compatible Voice types, though there may be correlations based on lexical semantics

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- *m-* in *mag-*, *ma-* derives from AV *<um>* (Wolff, 1973; Kaufman, 2009)

    - *<um>* + *pag-* → *p<um>ag-* → *mag-*

    - *<um>* + *pa-* → *p<um>a-* → *ma-*

    - *<um>* + ∅ → *<um>*

- We see this pattern surface in the voice paradigms of some verbs

(26) *luto* 'cook'

	Agr	Voice[+D]	Root	Agr
AV	<um>	pag-	luto	
PV			lutu	-in
LV		pag-	lutu	-an
CV	i-	pag-	luto	

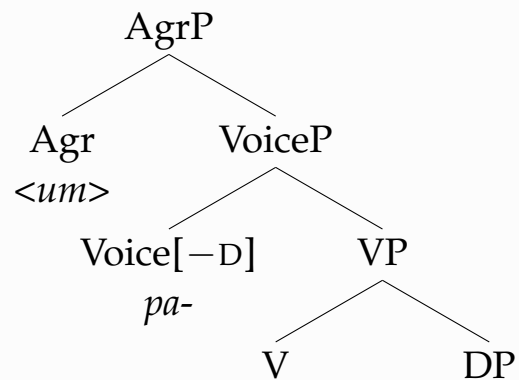- Austronesian voice marking resides on a head Agr located above Voice and below Infl (Hsieh, 2020)

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AV marker	Voice	DP in Spec-VoiceP	Constructions
<um> + *pag-*	Voice[+D]	Required	Active
<um> + *pa-*	Voice[−D]	Prohibited	Non-active
<um> + ∅	Voice[∅]	Unspecified	Active and non-active

Table 4: Three lexical variants of Voice in Tagalog

(27)   Voice[+D]: *<um>* + *pag-* → *mag-*
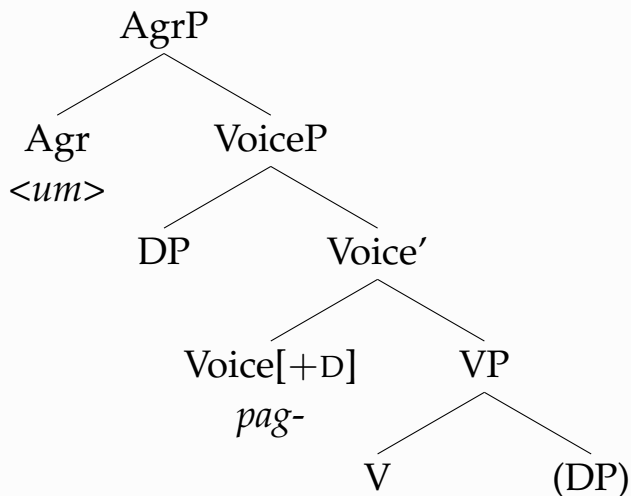
```
              AgrP
             /    \
          Agr     VoiceP
         <um>     /    \
               DP     Voice′
                      /    \
               Voice[+D]    VP
                  pag-     /  \
                          V   (DP)
```

(28)   Voice[−D]: *<um>* + *pa-* → *ma-*

```
              AgrP
             /    \
          Agr     VoiceP
         <um>     /    \
            Voice[−D]   VP
               pa-     /  \
                      V    DP
```

AV marker	Voice	DP in Spec-VoiceP	Constructions
<um> + *pag-*	Voice[+D]	Required	Active
<um> + *pa-*	Voice[−D]	Prohibited	Non-active
<um> + ∅	Voice[∅]	Unspecified	Active and non-active

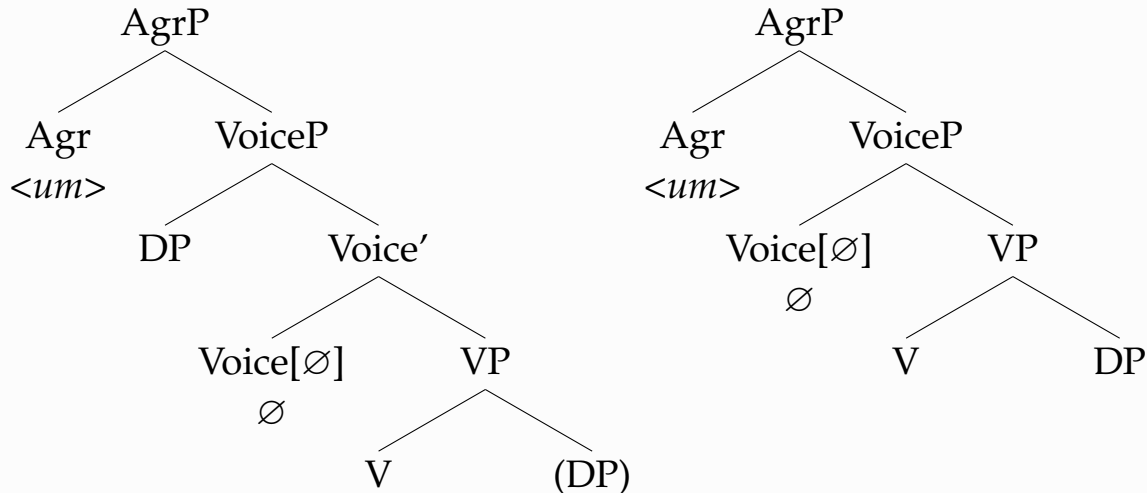Table 5: Three lexical variants of Voice in Tagalog

(29) Voice[∅]: *<um>* + ∅ → *<um>*

4. Neutralizing context: Patient Voice

- Trivalent Voice system appears transparently in the Actor Voice but is fully neutralized in the Patient Voice

(30) a. B<**um**>a~basa   ang guro   ng diyaryo.
<UM>IPFV~read NOM teacher GEN newspaper
'The teacher is reading a newspaper.'   *<um>* AV

      b. Ba~basa-**hin** ng   guro   ang diyaryo.
IPFV~read-PV GEN teacher NOM newspaper
'A teacher will read the newspaper.'   *-in* PV

(31) a. **Nag**-lu~luto   ang magsasaka ng   gulay.
MAG-IPFV~cook NOM farmer   GEN vegetable
'The farmer is cooking vegetables.'   *mag-* AV

      b. Lu~lutu-**in**   ng   magsasaka ang gulay.
IPFV~cook-PV GEN farmer   NOM vegetable
'A farmer will cook the vegetables.'   *-in* PV

Is this neutralization is purely morphological?

- We would predict PV to occur in all potentially transitive Voice contexts

Ditransitive

(32) a. Bi~bigy-**an** / *Bi~bigy-**in** ko ng kendi ang bata.
          FUT~give-LV FUT~give-PV 1SG.GEN GEN candy NOM child
          'I will give candy to the child.'

  b. **I-**bi~bigay / *Bi~bigy-**in** ko ang kendi sa bata.
          CV-FUT~give FUT~give-PV 1SG.GEN NOM candy OBL child
          'I will give the candy to the child.'

Reflexive

(33) A~ahit-**in** ang lalaki.
      FUT~shave-PV NOM man
      Non-reflexive reading: 'The man will get shaved (by someone else).'
      Reflexive reading unavailable: # 'The man will shave himself.'

AV	Voice	UNACC	UNERG	TRANS	REFL	DITRANS
mag-	[+D]		✓	✓	✓	✓
ma-	[-D]	✓				
<um>	[∅]	✓	✓	✓		

Table 6: Distribution of Tagalog Actor Voice markers

PV	Voice	UNACC	UNERG	TRANS	REFL	DITRANS
-in	[∅]			✓		

Table 7: Distribution of Tagalog Patient Voice marker

- Reflexive and ditransitive roots are incompatible with Patient Voice, which is also characteristic of Actor Voice *<um>* associated with Voice[∅]

- Patient Voice constructions involve syntactic neutralization to Voice[∅]

  – Syntactic neutralization: Only one flavour of Voice available in the syntax

- Patient Voice constructions involve syntactic neutralization to Voice[∅]

    – Voice[∅] is phonologically null

(34) *<um>* verb: *bili* 'buy'   *<um>*, Voice[∅]

	Agr	Voice	Root	Agr
AV	<um>	∅	bili	
PV		∅	bilh	-in
LV		∅	bilh	-an
CV	i-	∅	bili	

(35) *mag-* verb: *luto* 'cook'   *mag-*, Voice[+D]

	Agr	Voice	Root	Agr
AV	<um>	pag-	luto	
PV		∅	lutu	-in
LV		pag-	lutu	-an
CV	i-	pag-	luto	

- Patient Voice Agr selects for Voice[∅]

AV	Voice	UNACC	UNERG	TRANS	REFL	DITRANS
mag-	[+D]		✓	✓	✓	✓
ma-	[-D]	✓				
<um>	[∅]	✓	✓	✓		

Table 8: Distribution of Tagalog Actor Voice markers

(36)   *mag-* ditransitive: *bigay* 'give'   *mag-*, Voice[+D]

	Agr	Voice	Root	Agr
AV	<um>	pag-	bigay	
PV				
LV		(pag-)	bigy	-an
CV	i-	(pag-)	bigay	

Ditransitives lack the PV suffix *-in* due to incompatible requirements

- PV *-in* requires Voice[∅]

- Ditransitives require Voice[+D]

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5. Conclusions and outlook

AV	Voice	UNACC	UNERG	TRANS	REFL	DITRANS
mag-	[+D]		✓	✓	✓	✓
ma-	[-D]	✓				
<um>	[∅]	✓	✓	✓		

Table 9: Distribution of Tagalog Actor Voice markers

- Evidence of trivalent Voice in Tagalog

- Valency morphology on Voice is distinct from voice morphology on Agr

- Collectively, AV markers associate with a full range of constructions, not just antipassive (cf. Aldridge, 2004, 2012)

- More work needed on neutralizing contexts

  - Syntactic vs morphological neutralization
  - Other potentially neutralizing contexts: Productive *pa-* causatives, gerunds

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6. Appendix: Other uses of *ma-*

"Abilitative/Involuntary Action" (AIA) forms (Schachter and Otanes, 1972)

- Inherently transitive roots fail the *mag-isa* test ⤳ Implicit agent present

(37)   a. **Mag-isa**=ng na-**putol**   ang lubid.
              alone=LK   MA.PFV-break.off NOM rope
              'The rope snapped of its own accord.'   *ma-* unaccusative

       b. (#**Mag-isa**=ng) na-**gupit**   ang lubid.
              alone=LK   AIA.PFV-cut[PV] NOM rope
              'The rope got cut (#of its own accord).'   AIA transitive

(See also Kaufman, 2009 for discussion on different diachronic sources of *ma-*)

7. Appendix: Neutralization in the Recent perfective

- Recent perfective is formed with *ka-* and CV reduplication, with no NOM pivot or Austronesian voice morphology (Schachter and Otanes, 1972)

(38) a. Mag-isa=ng **na**-basag   ang   plorera.
            alone=LK   MA.PFV-shatter NOM vase
            'The vase broke of its own accord.'   *ma-*, Voice[−D]

    b. B<**um**>asag   ang bata ng   plorera nang sinasadya.
            <UM.PFV>shatter NOM child GEN vase   ADV   deliberately
            'The child broke a vase deliberately.'   *<um>*, Voice[∅]

(39) a. **Ka**-ba~basag   lang ng   plorera nang mag-isa.
            REC.PFV~shatter only GEN vase   ADV   alone
            'The vase just broke of its own accord.'

    b. **Ka**-ba~basag   lang ng   bata ng   plorera nang sinasadya.
            REC.PFV~shatter only GEN child GEN vase   ADV   deliberately
            'The child just broke a vase deliberately.'

Ditransitive

(40) **Ka**-bi~bigay lang ni Luz ng pera sa akin.
REC.PFV~give only GEN Luz GEN money OBL 1SG.OBL
'Luz just gave me money.'

Reflexive

(41) a. **Ka**-a~ahit lang ni Pedro.
REC.PFV~shave only GEN Pedro
'Pedro just shaved (himself).'

b. **Ka**-a~ahit lang ni Pedro kay Brian.
REC.PFV~shave only GEN Pedro OBL Brian
'Pedro just shaved Brian.'

AV	UNACC	UNERG	TRANS	REFL	DITRANS
mag-		✓	✓	✓	✓
ma-	✓				
<um>	✓	✓	✓		

Table 10: Distribution of Tagalog Actor Voice markers

	UNACC	UNERG	TRANS	REFL	DITRANS
REC.PFV	✓	✓	✓	✓	✓

Table 11: Distribution of Tagalog recent perfective

- Recent perfective has no Agr (Hsieh, 2020)

- No restrictions on the valency or lexical semantics of the verb

- Recent perfective involves morphological neutralization of trivalent Voice distinction present in the syntax

  – Morphological neutralization: All 3 flavours of Voice are available in the syntax but are rendered morphologically identical (at PF)