TAGALOG VALENCY MORPHOLOGY AND ITS NEUTRALIZATION[*]

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Abstract. Tagalog verbal morphology is famously complex, as it encodes several grammatical distinctions whose realization is conditioned on several factors, including the verbal root's lexical properties, as well as the Philippine-type voice system, which primarily encodes clause-level information about which argument is given syntactic prominence. This paper contributes to research on Tagalog verbal morphology by discussing a different morphological distinction found within the Tagalog Actor Voice that is tied to argument-structural alternations. We propose that this morphological distinction instantiates Kastner's (2020) trivalent Voice proposal, under which the external argument introducing Voice head may come in three 'flavors'. Furthermore, we discuss patterns of neutralization that obscure the realization of the distinction, adding to the relative opacity of the system.

1. Introduction

Tagalog Actor Voice (AV) verbs are most commonly formed with one of the three morphemes *mag–*, *ma–* and *<um>*, illustrated in (1); *mag–* and *ma–* surface as *nag–* and *na–*, respectively, in the perfective aspect. This three-way morphological distinction found in AV verbs has been a topic of considerable discussion in the literature on Tagalog (e.g., Pittman 1966; Cruz 1975; Rackowski 2002; Travis 2000, 2010) but remains poorly understood in its entirety.[1]

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[1] Linguistic examples in this paper follow the Leipzig Glossing Rules, with the following additional abbreviations: AV = Actor Voice, CV = Circumstantial Voice, LK = linker, LV = Locative Voice, NVOL = non-volitional, PV = Patient Voice, RPFV = recent perfective.

(1) a. *Nag*-luto   ang   manghuhula.

      MAG.PFV-cook   NOM   fortune.teller

      'The fortune teller cooked.'

   b. *Na*-tunaw   ang   ice cream.

      MA.PFV-melt   NOM   ice cream.

      'The ice cream melted.'

   c. S<*um*>ipa   ang   bata ng   bola.

      <UM.PFV>kick   NOM   child GEN   ball

      'The child kicked a ball.'

      Tagalog verb roots are lexically specified for which of the three AV morphemes they may appear with. In this paper, we show that there are argument structural generalizations associated with each of three markers, specifically with respect to the presence or absence of an external argument (EA). These can be observed with verb roots that are compatible with more than one AV marker. The root *bukas* 'open', for example, can occur with both *mag–* and *<um>*; *magbukas* has an external argument (2a) while *bumukas* does not (2b). The root *basag* 'break', meanwhile, can occur with both *ma–* and *<um>*; *mabasag* does not have an external argument (3a) while *bumasag* does (3b).

(2) a. *Nag*-bukas   ang   guro   ng   pinto.

      MAG.PFV-open   NOM   teacher   GEN   door

      'The teacher opened the door.'   *mag–*, EA

   b. B<um>ukas   ang   pinto.

      <UM.PFV>open   NOM   door

      'The door opened.'   *<um>*, no EA

(3) a. *Na*-basag   ang   plorera.

      MA.PFV-shatter   NOM   vase

      'The vase broke.'   *ma–*, no EA

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

As we will demonstrate in the paper, these alternations can be understood as follows: Tagalog verbs formed with *mag*– require external arguments, *ma*– verbs prohibit external arguments, and <*um*> verbs permit but do not require them.

The three-way morphological contrast between *mag*–, *ma*– and <*um*> is thus fundamentally a valency distinction. We argue that it instantiates Kastner's (2020) system of trivalent Voice, whereby the external argument introducing head Voice (Kratzer 1996) has three lexical variants: [+D] requires a volitional external argument in its specifier, [–D] prohibits an external argument, and [∅] is unspecified for an external argument (permitting but not requiring one). We propose that *mag*– is associated with Voice[+D], *ma*– with Voice[–D], and <*um*> with Voice[∅]; this is summarized in Table 1.

Table 1. Three lexical variants of Actor Voice in Tagalog

AV	Voice	External Argument	Volitionality
mag–	Voice[+D]	Required	Volitional
ma–	Voice[–D]	Prohibited	Non-volitional
<*um*>	Voice[∅]	Optional	(Non-)volitional

The proposed system of trivalent Voice is distinct from but interacts with the more well-studied Austronesian voice system, which we assume to be spelled out on a different functional head, Agr (following Hsieh 2020; see also Chen 2017, 2022). Indeed, clearly identifying the distinct effects of trivalent Voice and Austronesian voice can help elucidate the Tagalog verbal system as a whole. As a first illustration of how our proposal can achieve this, we discuss two cases where the valency distinctions most clearly exhibited in AV are neutralized in other contexts.

The remainder of the paper is organized as follows. In Section 2, we introduce diagnostic tests for determining the presence or absence of external arguments in Tagalog. We apply these diagnostics in Section 3 to constructions with each of the

three AV markers, showing that verbs marked with *mag–* require external arguments, *ma–* verbs prohibit external arguments, and *<um>* verbs permit them. We show that that these properties can be easily understood under Kastner's (2020) trivalent Voice proposal, in Section 4. The proposed three-way Voice contrast that appears transparently in AV constructions is obscured in other syntactic contexts, however; in Section 5, we discuss two contexts, the Recent Perfective and Patient Voice, which exhibit apparent neutralization of the trivalent Voice system. Section 6 briefly concludes.

2. Diagnosing argument structure

To begin, we introduce a few diagnostics for argument structure, specifically for the presence (whether overt or implicit) or absence of an external argument. These diagnostics allow us to distinguish unaccusative predicates from other argument structures in Tagalog, including unergatives and constructions with implicit external arguments.

First, agent-oriented modifiers such as *nang sinasadya* 'deliberately' and *maingat* 'careful(ly)' are compatible with transitive and unergative predicates (4), but not with unaccusative ones (5). We thus take such modifiers to diagnose the presence of external arguments.

(4) a. B<um>agsak ang mag-aaral *nang sinasadya*.
     <UM.PFV>fail NOM student deliberately
     'The student failed deliberately (e.g., by submitting a blank final exam).'

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

(5) a. Na-wala ang salamangkero (#*nang* sinasadya).
     MA.PFV-not.exist NOM magician deliberately
     'The magician vanished (#deliberately).'

b. (#*Maingat* na) na-hulog   ang   bata.

careful   LK MA.PFV-fall NOM child

'The child fell (#carefully).

These modifiers are also sensitive to the presence of implicit external arguments, as shown by the minimal pair in (6), which have different morphology on the verb *bukas* 'open'. While the Locative Voice verb *binuksan* in (6) does not require an overt agent, it is nevertheless compatible with *nang sinasadya* 'deliberately'. This contrasts with Actor Voice *bumukas* in (6), which is incompatible with the modifier (and in fact cannot have an overt agent expressed). Similar diagnostics include instrument phrases *gamit ang X* 'using X' and purpose clauses introduced by *para* or *upang*, see (7).

(6) a. B<in>uks-an   ang   bintana *nang sinasadya*.

<PFV>open-LV NOM window deliberately

'The window was opened deliberately.'

b. B<um>ukas   ang   bintana (#*nang sinasadya*).

<UM.PFV>open NOM window deliberately

'The window opened (#deliberately).'

(7) a. B<in>uks-an   ang   bintana {*gamit ang   susi /para   mahanginan*

<PFV>open-LV NOM window   use   NOM key for   air.out.LV

ang   kwarto}.

NOM room

'The window was opened {with the key/to air out the room}.'   Implicit EA

b. B<um>ukas   ang   bintana (#{*gamit ang   susi /para   mahanginan*

<UM.PFV>open NOM window   use   NOM key for   air.out.LV

ang   kwarto}).

NOM room

'The window opened (#{with the key/to air out the room}).'   No EA

Second, the modifier *mag-isa* 'by itself, of its own accord' (Levin & Rappaport Hovav 1994) conveys the lack of an external cause; that is, no external argument is involved. Thus *mag-isa* diagnoses the absence of an implicit external argument, as (8) and (9) show (cf. (6-7)).

(8) a. (#*Mag-isa*=ng) b<in>sag-∅   ang bintana.
     by.itself=LK   <PFV>shatter-PV NOM window
     'The window got broken (#of its own accord).'   Implicit EA

   b. *Mag-isa*=ng na-basag   ang bintana.
     by.itself=LK MA.PFV-shatter NOM window
     'The window broke of its own accord.'   No EA

(9) a. (#*Mag-isa*=ng) b<in>uks-an   ang bintana.
     by.itself=LK   <PFV>open-LV NOM window
     'The window was opened (#of its own accord).'   Implicit EA

   b. *Mag-isa*=ng b<um>ukas   ang bintana.
     by.itself=LK <UM.PFV>shatter NOM window
     'The window opened of its own accord.'   No EA

It should be noted here that like English *by itself*, *mag-isa* is ambiguous between two meanings: 'of its own accord' or 'alone/unaccompanied'. The examples above show that the 'of its own accord' reading is associated with the lack of an external argument. On the other hand, the 'alone/unaccompanied' reading is more accessible when there is an overt external argument.[2] Thus, we get contrasts like in (10) between unergative and unaccusative verbs (cf. (4), (5)).

(10) a. *Mag-isa*=ng nag-trabaho   ang magsasaka.
     by.itself=LK MAG.PFV-work NOM farmer
     'The farmer worked {unaccompanied / #of her own accord}.'   EA

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[2] The 'alone/unaccompanied' reading seems to also accessible with external arguments that are *pro*-dropped (i.e., salient in the conversational background).

b. *Mag-isa*=ng na-hulog   ang   bata.
   by.itself=LK MA.PFV-fall NOM child
   'The child fell {of its own accord / #unaccompanied}.'   No EA

Using these diagnostics for the presence or absence of an external argument, we now turn to a survey of the distribution of the different Tagalog valency morphemes that we are studying.

3. Tagalog Valency Morphology

In this section, we describe the distribution of the three morphemes of interest (i.e., *mag–*, *ma–*, and *<um>*) with respect to various kinds of argument structural configurations. We will show that the distribution of these three morphemes correlates with the presence or absence of an external argument, and with its properties.

3.1. *Uses of* mag–

First, we discuss the prefix *mag–*, which surfaces as *nag–* in the perfective and imperfective aspects. This prefix always appears on predicates with a volitional external argument. For example, many transitive predicates bear *mag–*, as (11)-(12) illustrate. Furthermore, (13) shows that the external argument of a *mag–* predicate must be animate.

(11) Transitive predicates with *mag–*
    a. *Nag*-lu~luto   ang   magsasaka ng sabaw.
       MAG-IPFV~cook NOM farmer   GEN soup
       'The farmer is cooking soup.'

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

(12) Other examples:

    a. *maghugas* 'to wash sth.'

    b. *magbitbit* 'to carry sth.'

    c. *maglaro* 'to play (a game)'

    d. *maghanda* 'to prepare (sth.)'

    e. *maglabas* 'to take sth. out'

    f. *mag-uwi* 'to take sth. home'

(13) *Nag*-sara   ang   {guro / *hangin} ng pinto.

    MAG.PFV-shut NOM teacher   wind   GEN door

    'The {teacher/wind} shut a door.'

Mag– can also mark intransitive predicates that have external arguments (i.e., unergatives), following the diagnostics from Section 2. Additionally, reflexive predicates—which are notionally transitive but only have a single overt argument— also occur with *mag–* and behave similarly with respect to the diagnostics. These are shown in (14)-(15) and (16)-(17), respectively.

(14) Unergative predicates with *mag–*

    a. Maingat na *nag*-trabaho   ang   magsasaka.

       careful LK MAG.PFV-work NOM farmer

       'The farmer worked carefully.'

    b. *Nag*-itim   ang   guro   nang sinasadya.

       MAG.PFV-black NOM teacher   deliberately

       'The teacher deliberately wore black.'

(15) Other examples:

    a. *maglakad* 'to walk'

    b. *magtagumpay* 'to succeed'

    c. *mag-basketbol* 'to play basketball'

(16) Reflexive predicates with *mag*–

    a. Maingat na   *nag*-ahit   ang   lalaki.

       careful   LK   MAG.PFV-shave NOM man

       'The man shaved (himself) carefully.'

    b. Maingat na   *nag*-kamot   ang   bata.

       careful   LK   MAG.PFV-scratch NOM child

       'The child scratched (at an itch) carefully.'

(17) Other examples:

    a. *maghilamos* 'to wash one's face'

    b. *magbihis* 'to dress oneself'

    c. *magsipilyo* 'to brush one's teeth'

Finally, ditransitive verbs also appear with *mag*–. 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. This distinguishes them from monotransitives that happen to be compatible with *–an*.

(18) Ditransitive predicates with *mag*–

    a. *Nag*-bigay   ang guro   sa bata ng libro.

       MAG.PFV-give NOM teacher   OBL child GEN book

       'The teacher gave the child a book.'

       (cf. theme pivot *ibigay*; goal pivot <u>*bigyan*</u>)

    b. Mag-ta~tanim   ang   mag-aaral ng rosas dito.

       MAG-FUT~plant NOM student   GEN rose   OBL.PROX

       'The student will plant roses here.'

       (cf. theme pivot *itanim*; goal pivot *taniman*)

(19) Other examples:

    a. *maglagay* 'to put'

    b. *magpatong* 'to put sth. on top of sth. else'

    c. *magbuhos* 'to pour out'

3.2. *Uses of* ma–

Next, we turn to *ma–* (*na–* when perfective or imperfective). We observe that *ma–* never appears on predicates with a volitional external argument. Primarily, we find this prefix on predicates that are unaccusative, as confirmed by the diagnostics from Section 2.

(20) Unaccusative predicates with *ma–*

    a. {Mag-isa=ng / *Maingat na} *na*-tunaw   ang   keso.

        by.itself=LK   careful   LK   MA.PFV-melt NOM   cheese

        'The cheese melted of its own accord.'

    b. {Mag-isa=ng / *Maingat na} *na*-basag   ang   baso.

        by.itself=LK   careful   LK   MA.PFV-shatter   NOM   glass

        'The drinking glass shattered of its own accord.'

(21) Other examples:

    a. *mahulog* 'to fall'

    b. *magising* 'to awaken'

    c. *mawala* 'to vanish/go missing'

We take this unaccusative use of *ma–* as the primary one for current purposes but note that this prefix has been observed to have several seemingly heterogeneous uses, including some apparently non-verbal ones (see, e.g., Himmelmann 2006). Most prominently, *ma–* appears in the so-called Ability/Involuntary Action verbal form, which conveys a set of meanings illustrated in (22).[3] Although the non-volitional interpretation of this form is interesting, we set aside this use of *ma–* for present purposes, as it affects properties of the predicate beyond its argument structure (e.g., event structure, modality), and it appears to cross-cut the categorization presented here.

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[3] See Schachter and Otanes 1972, §5.13; Alonso-Ovalle and Hsieh 2021 for further details.

(22) a. Naka-basag   ako   ng baso.   cf. *mabasag* in (20b)
      NVOL.AV.PFV-shatter 1SG.NOM GEN glass
      'I {accidentally broke / managed to break} a glass.'

    b. Nakakapag-trabaho ang   magsasaka.   cf. *magtrabaho* in (14a)
      NVOL.AV.IPFV-work NOM farmer
      'The farmer is able to work.'

    c. Makaka~kain   ang bata ng adobo.   cf. *kumain* in (23a)
      NVOL.AV.FUT~eat NOM child GEN adobo
      'The child will {be able / get} to eat adobo.'

There is also a small class of apparently non-unaccusative predicates that appear to bear *ma–*, such as *manood* 'to watch sth.', *makinig* 'to listen to sth.', and *maligo* 'to bathe oneself'. *Ma–* in these predicates has been analyzed as the AV form of a stem-initial *pa–*, which clearly surfaces in other contexts (e.g., PV *panoor-in* 'to watch sth.', LV *pakingg-an* 'to listen to sth.', LV *paligu-an* 'to bathe sth./sb.'; see de Guzman 1978; Himmelmann 2006, fn. 14). In contrast, we adopt a proposal from Kaufman (2009, 2012) and assume in Section 4 that *ma–* in (20)-(21) contains *ka–* rather than *pa-*.

3.3. *Uses of* <um>

Finally, we have *<um>*, which is agnostic with respect to the presence of a volitional external argument. Thus, it can appear not only on transitive predicates (23)-(24), but also on unergative (25)-(26) and unaccusative ones (27)-(28). On the other hand, we do not find *<um>* on ditransitive and reflexive predicates, despite what we might expect from its agnostic nature.

(23) Transitive predicates with *<um>*
    a. K*<um>*ain   ang bata ng adobo.
      <UM.PFV>eat NOM child GEN adobo
      'The child ate adobo.'

b. P<*um*>atay   ang   magsasaka ng   butiki.

     <UM.PFV>kill   NOM   farmer   GEN lizard

     'The farmer killed a lizard.'

(24) Other examples:

    a. *bumasa* 'to read'

    b. *pumitas* 'to pick/pluck'

    c. *sumipa* 'to kick'

    d. *gumamit* 'to use'

(25) Unergative predicates with *<um>*

    a. *<Um>*iyak   ang   bata   nang sinasadya.

      <UM.PFV>cry   NOM   child   deliberately

      'The child cried deliberately.'

    b. Maingat na   t<*um*>akbo   ang   bata.

      careful   LK   <UM.PFV>run   NOM   child

      'The child ran carefully.'

(26) Other examples:

    a. *tumalon* 'to jump'

    b. *umakyat* 'to go up'

    c. *umubo* 'to cough'

(27) Unaccusative predicates with *<um>*

    a. Mag-isa=ng   b<*um*>agsak   ang   plorera.

      by.itself=LK   <UM.PFV>fall   NOM   vase

      'The vase fell of its own accord.'

    b. Mag-isa=ng   b<*um*>ukas   ang   pinto.

      by.itself=LK   <UM.PFV>open   NOM   door

      'The door opened of its own accord.'

(28) Other examples:

a. *sumabog* 'to explode'

b. *lumutang* 'to float'

c. *lumakas* 'to grow stronger'

Aside from its distribution, *<um>* has a few other notable properties when compared with *mag–*. First, the subject of intransitive *<um>* verbs (both unergative and unaccusative) can be non-volitional. This is also true for the external argument of some transitive *<um>* verbs, as illustrated in (29). This behavior differs from *mag–* verbs, which always require volitional external arguments, as we saw in (13).

(29) a. T*<um>*usok   ang   pako ng   gulong.
      <UM.PFV>pierce   NOM nail   GEN   tire
      'The nail punctured some tires.'

b. L*<um>*apit   ang   ulap   sa araw.
      <UM.PFV>approach   NOM cloud   OBL sun
      'The cloud approached the sun.'   (Schachter & Otanes 1972:498)

Additionally, Pittman (1966) identifies a host of interpretative differences between *<um>* and *mag–* when they appear on the same or different stems. For example, some reciprocal action *mag–* stems have a non-reciprocal *<um>* counterpart (e.g., *magsama* 'to join each other' vs *sumama* 'to join sb.'). He also notes that *<um>* and *mag–* mark different semantic subclasses of verbs, such as impersonal actions (e.g., *umaraw* 'to become sunny') versus occupational actions (e.g., *magpare* 'to be a priest'). Whether we can derive all of these effects from more basic properties (such as the argument-structural ones proposed below) is left for future work.

3.4. *Summary*

The distribution of the three Actor Voice markers we examine in this section is summarized in Table 2. From this, we can clearly see that *mag–* and *ma–* are in complementary distribution: *mag–* occurs with volitional AV predicates with external arguments, while *ma–* occurs with non-volitional predicates with no external argument. Meanwhile, *<um>* overlaps in its distribution with the other markers.

Table 2. Distribution of Tagalog Actor Voice markers

AV	UNACC	UNERG	TRANS	REFL	DITRANS	Volitionality
mag–		✓	✓	✓	✓	Volitional
ma–	✓					Non-volitional
<um>	✓	✓	✓			(Non-)volitional

While the different functions of the three major Actor Voice variants have long been documented and a source of interest to researchers of Tagalog, to our knowledge no formal analysis of the three AV markers has been previously proposed. Following Nie (2020), we show that the properties of these AV variants is neatly captured in the three-way Voice system that has recently been elucidated in the literature.

4. Trivalent Voice

Since Kratzer (1996), it has been widely accepted that external arguments are introduced in the syntax not by the verb itself, but rather by the functional head Voice. A growing body of work attributes many properties of valency (semantic transitivity) to the featural properties of Voice (Alexiadou, Anagnostopoulou & Schäfer 2006, 2015; Schäfer 2008; Legate 2014; Wood 2015).

4.1. *Background*

Investigations into the verbal morphology of Hebrew (Kastner 2019, 2020) within the framework of Distributed Morphology (DM; Halle & Marantz 1993) have indicated the need for three lexical specifications of Voice. Kastner shows that Hebrew verbs in the *heXYiZ* template always have an external argument (30), while verbs in the *niXYaZ* template never have an external argument (31). He proposes that the *heXYiZ* template spells out Voice[+D], which requires a DP specifier, and the *niXYaZ* template spells out Voice[–D], which prohibits a specifier.

(30) a. ha-agronomit *hegdil*-a et ha-jevul. *hegdil = g-d-l + heXYiZ*

the-agronomist increased-F.SG ACC the-crop Voice[+D]

'The agronomist increased the crops.'

b. ha-jevul *gadal* pi eser. *gadal = g-d-l + XaYaZ*

the-crops grew times ten Voice[∅]

'The crops grew tenfold.'

(31) a. ha-a'ar *niftax*. *niftax = p-t-x + niXYaZ*

the-gate opened Voice[−D]

'The gate opened.'

b. josi *patax* et ha-a'ar. *patax = p-t-x + XaYaZ*

Yossi opened ACC the-gate Voice[∅]

'Yossi opened the gate.'

The *XaYaZ* template, by contrast, can occur with an external argument (31) or without one (30), suggesting that Voice in *XaYaZ* constructions is unspecified for external arguments. The patterns of external argument introduction in Hebrew can therefore be captured by positing three featural variants of Voice: [+D], [−D] and unspecified, which we notate as [∅].

Kastner's (2019, 2020) system of trivalent Voice has consequences for not only whether an external argument is permitted syntactically but how it is interpreted semantically. An external argument in the specifier of Voice[+D] must thematically be an agent, while an external argument in the specifier of Voice[∅] (if there is one) may receive a range of interpretations, as in Table 3.

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

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

In this expanded typology of Voice, Voice[+D] is Kratzer's (1996) classic agent-introducing head, available in all languages. The non-active Voice[–D] is found in languages with overtly marked non-active structures (Schäfer 2008; Wood 2015), and Voice[∅] reflects a kind of default voice morphology. We assume that verb roots are lexically specified for compatible Voice types, although there may be correlations based on lexical semantics. Furthermore, roots can select for one or more variants of Voice (Harley & Noyer 2000); as shown in the examples from Hebrew, roots that are compatible with more than one variant of Voice can give rise to valency alternations.

4.2. *Trivalent Voice in Tagalog*

Following Nie (2020), we propose that the three AV markers in Tagalog instantiate Kastner's three lexical variants of Voice. *Mag–* exhibits all the hallmarks of Voice[+D]: it requires an external argument and assigns it agentive/volitional semantics (32). Transitive predicates with Voice[+D] often have a causative interpretation (Kastner 2020); Travis (2000) has similarly analyzed *mag–* as a causative marker in its transitive uses. Predicates marked with *ma–*, meanwhile, prohibit external arguments (33), which is characteristic of Voice[–D]. *<Um>* verbs can occur with an external argument (33) or without (32), characteristic of Voice[∅].

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

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

(33) 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[∅]

Like Hebrew, then, Tagalog displays a three-way morphological distinction which overtly spell out the three lexical variants of Voice found cross-linguistically.

Importantly, the valency morphology associated with the featural properties of the external argument-introducing Voice head is distinct from the Philippine-type voice morphology associated with discourse prominence. While we assume that Kratzerian Voice is the source of valency alternations, we assume that a higher functional head hosts Philippine-type voice alternations; following Hsieh (2020), we call this head Agr and locate it above Voice and below Infl, as sketched in (34).

(34) [InflP [AgrP [VoiceP [VP]]]]

Based on these assumptions, the three markers under discussion actually reflect a combination of Agr (AV) and Voice (valency). It has been noted that historically, both the *mag–* and *ma–* forms derive from the combination of the AV infix *<um>* and another plosive-initial prefix (Wolff 1973; Kaufman 2009, 2012). Factoring out the AV infix from *mag–* and *<um>* gives us *pag–* and ∅– (a phonologically null morpheme) as the reflexes of Voice[+D] and Voice[∅], respectively. For Voice[–D] (*ma–*), there are two possibilities: *ka–* and *pa–*. We follow Kaufman (2012) in assuming that the prefix involved in the unaccusative use of *ma–* comes from *ka–*, which he reconstructs as having originally denoted 'have'.

(35) Development of AV markers

    a. MAG: *<um>* + *pag–* → *p<um>ag–* → *mag–*

    b. MA: *<um>* + *ka–* → *k<um>a–* → *ma–*

    c. UM: *<um>* + ∅– → *<um>*

The decomposition of AV markers given in (35) is supported by the fact that we see the plosive-initial Voice prefixes surface in other parts of the Philippine-type voice paradigms of some verbs; for example, *pag–* also appears in the infinitive Locative Voice (LV) and Circumstantial Voice (CV) forms of *magluto* 'to cook', illustrated in Table 4.

Table 4. Infinitive paradigm of *magluto* 'to cook'

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

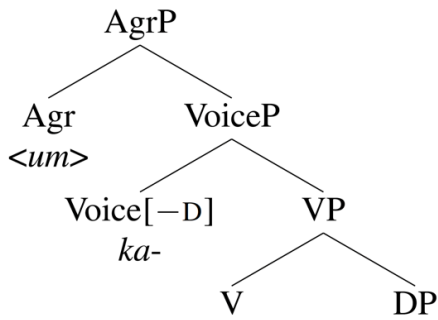We therefore propose that the AV markers under discussion decompose synchronically into Agr and Voice, mapped to the three-way Voice typology as shown in Table 5.[4]

Table 5. Three lexical variants of Voice in Tagalog

AV	Voice	Type	External Argument	Volitionality
mag–	*pag–*	Voice[+D]	Required	Volitional
ma–	*ka–*	Voice[–D]	Prohibited	Non-volitional
<um>	*∅–*	Voice[∅]	Unspecified	(Non-)volitional

The syntactic structures compatible with each Voice type are illustrated in the trees below. We assume that the Voice head is in a local selectional relationship with the verb root and is thus sensitive to its lexically specified argument structure properties. Voice[–D] appears with verb roots that do not require an external argument and results in structures with only an internal argument, sketched in (36).
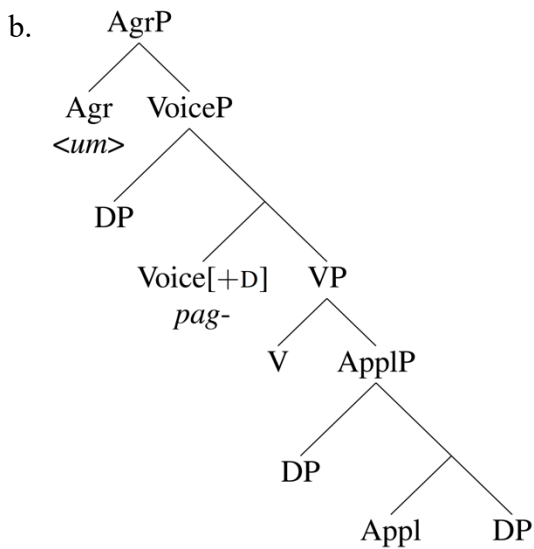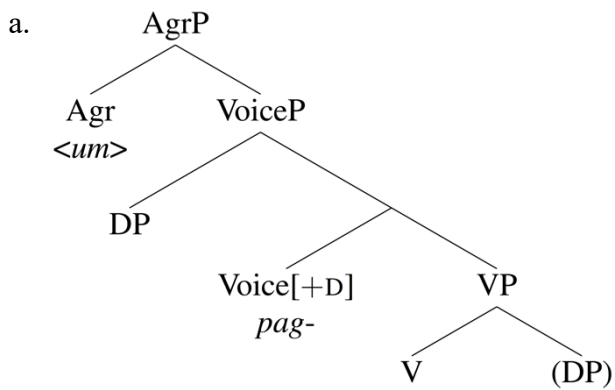
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[4] Spanning could offer an alternative approach (Svenonius 2012, 2016), whereby Agr and Voice comprise a continuous span of heads that can be spelled out by a single lexical item.

(36) Voice[–D]: *<um> + pa– → ma–*

```
          AgrP
         /    \
      Agr      VoiceP
     <um>     /     \
        Voice[−D]    VP
          ka-       /  \
                   V    DP
```
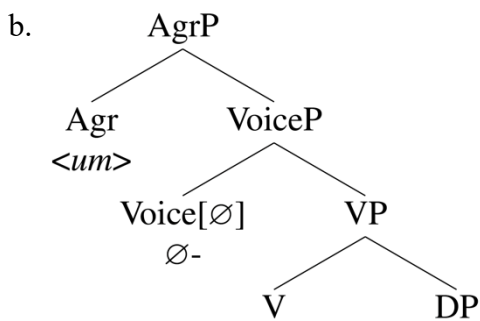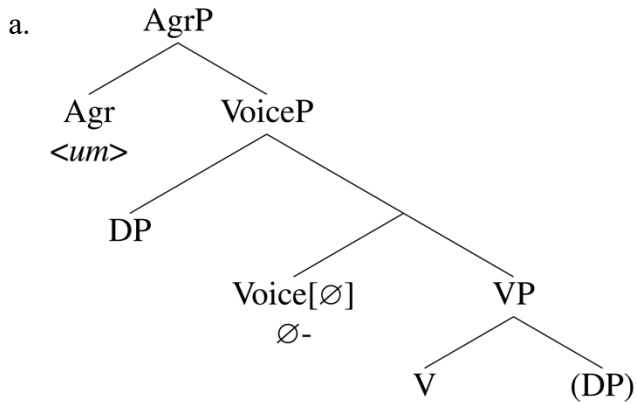
In contrast, Voice[+D] appears in active structures with an external argument (37); this includes ditransitives, which we assume are always lexically specified for an external argument (37).

(37) Voice[+D]: *<um> + pag– → mag–*

a.
```
        AgrP
       /    \
    Agr      VoiceP
   <um>     /      \
          DP        \
                  /       \
            Voice[+D]      VP
              pag-        /  \
                         V   (DP)
```

b.
```
        AgrP
       /    \
    Agr    VoiceP
   <um>    /     \
         DP       \
               /        \
         Voice[+D]       VP
            pag-        /  \
                       V   ApplP
                          /    \
                        DP      \
                              /     \
                           Appl     DP
```

Finally, Voice[∅] is compatible with verbs that have lexically specified external arguments (38) and those that do not (38).

(38) Voice[∅]: *<um>* + ∅– → *<um>*

    a.

```
                AgrP
              /      \
          Agr         VoiceP
         <um>        /       \
              DP
                  Voice[∅]        VP
                    ∅-          /    \
                               V      (DP)
```

    b.

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

5. Neutralizing contexts

The proposed three-way Voice contrast appears transparently in Actor Voice constructions but is obscured in other syntactic contexts. In this section, we highlight two neutralizing contexts, the Recent Perfective and Patient Voice. While we cannot offer a complete analysis of these constructions in this paper, we suggest that they exhibit different types of neutralization.

5.1. *Recent Perfective: Morphological neutralization*

The Recent Perfective (RPFV) is a verbal form which conveys that the event described by the verb has recently occurred. RPFV forms are marked by a prefix *ka–* + CV-reduplication; as shown in (39), this morphology appears to overwrite the valency markers observed in AV forms (cf. (1)).

(39) a. *Ka-lu~*luto lang ng magsasaka.

      RPFV~cook just GEN farmer

      'The farmer has just cooked.'

    b. *Ka-tu~*tunaw lang ng ice cream.

      RPFV~melt just GEN ice cream

      'The ice cream has just melted.'

    c. *Ka-si~*sipa lang ng bata ng bola.

      RPFV~kick just GEN child GEN ball

      'The child has just kicked a ball.'

This syncretism triggered by the RPFV is seen most strikingly on verbs such as *bukas* 'open' which exhibit argument structure alternations and have different valency markers in AV constructions. As shown in (40), verbs in these alternating structures have identical forms in the RPFV (cf. (32)).

(40) a*. Ka-bu~*bukas lang ng guro ng pinto *gamit ang susi.*

      RPFV~open only GEN teacher GEN door use NOM key

      'The teacher has just opened the door using the key.'

    b. *Ka-bu~*bukas lang ng pinto *nang mag-isa.*

      RPFV~open only GEN door by.itself

      'The door has just opened by itself.'

There appear to be no general argument structural restrictions on the types of predicates that can appear in the RPFV form; RPFV thus seems to be compatible with all three Voice types. This is supported by the examples in (40), which show that the external argument tests remain sensitive despite the surface form of the verb being the same. We suggest that this is an example of morphological neutralization, whereby a featural contrast present in the syntax (e.g., [+D], [−D] or [∅] on Voice) is neutralized in the morphology (at PF) due to morphological syncretism. This can be modelled in DM, for example, using featural underspecification or Impoverishment, which allows Voice features to be ignored or deleted in the presence of some RPFV

feature. For the RPFV, then, it is possible to maintain a three-way Voice distinction in the syntax and simply have this distinction neutralized in the morphology.

5.2. *Patient Voice: Syntactic neutralization*

The Voice distinctions found in AV are also neutralized in Patient Voice (PV). PV forms, which are marked with *–in*, occur when the patient of a transitive clause is the pivot of the clause. PV forms are thus necessarily restricted to transitive contexts and can only appear with predicates that have transitive *mag–* and *<um>* forms.

(41) 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

(42) 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~basah-*in* ng guro   ang   diyaryo.
       IPFV~read-PV GEN teacher NOM newspaper
       'A teacher will read the newspaper.'   *–in* PV

If the neutralization found in PV forms is purely morphological, like RPFV, then we would predict PV to be available in all potentially transitive Voice contexts. That is, any transitive Voice[+D] and Voice[∅] construction with a possible patient should have a PV form. As shown in Table 6, this means that PV should be available with simple transitive as well as reflexive and ditransitive predicates, if there is a patient syntactically present.

Table 6. Distribution of Tagalog Actor Voice markers

Agr	Voice	Type	UNACC	UNERG	TRANS	REFL	DITRANS
<um>	*pag–*	Voice[+D]		✓	✓	✓	✓
<um>	*ka–*	Voice[–D]	✓				
<um>	*∅–*	Voice[∅]	✓	✓	✓		

What we find, however, is that reflexive and ditransitive constructions are incompatible with PV. For reflexive verbs, the use of PV forces a non-reflexive, simple transitive reading, as shown in (43). Ditransitives, meanwhile, lack a PV form altogether (44), whether for theme pivots (by our rough definition in Section 3.1) or for other kinds of pivots. PV forms therefore only appear on simple transitive predicates, as summarized in Table 7.

(43) Reflexive

    a. 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.'

    b. A~ahit-*in*   ng lalaki.

       FUT~shave-PV GEN man

       Non-reflexive reading: 'The man$_i$ will shave him$_j$.'

       Reflexive reading unavailable: # 'The man will shave himself.'

(44) Ditransitive

    a. *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.'

    b. 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.'

Table 7. Distribution of Tagalog Patient Voice marker

Agr	Voice	Type	UNACC	UNERG	TRANS	REFL	DITRANS
–in	∅–	Voice[∅]			✓		

If PV simply involved morphological neutralization of an underlying syntactic contrast, then we would not be able to explain why PV is incompatible with ditransitive and reflexive constructions; as a point of contrast, the RPFV *can* appear on ditransitives and reflexives, as (45) shows.

(45) a. Ka-bi~bigay ko lang ng kendi sa bata.
   RPFV~give 1SG.GEN only GEN candy OBL child
   'I have just given candy to the child.'

  b. Ka-a~ahit lang ng lalaki.
   RPFV~shave only GEN man
   'The man has just shaved himself.'

We suggest instead that PV involves *syntactic* neutralization. Note that in AV, ditransitives and reflexives only appear with Voice[+D] structures and do not appear with Voice[∅], whose transitive constructions are limited to simple transitives. The distribution of PV thus parallels that of Voice[∅] in AV. We therefore propose that all PV constructions involve Voice[∅]; that is, the PV Agr head selects for Voice[∅] in the syntax.[5] PV is thus only compatible with one featural variant of Voice, resulting in a collapsing of Voice distinctions in the syntax. Constructions that require Voice[+D], such as ditransitives and reflexives, are incompatible with PV, because PV involves Voice[∅]; these conflicting requirements render these forms ineffable.

6. Conclusion and outlook

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[5] The fact that PV exhibits syntactic neutralization to Voice[∅] provides additional evidence for the presence of an unspecified variant of Voice in Tagalog (which is otherwise phonologically null; see Section 4.2).

We argued in this paper that three-way morphological distinction found in Tagalog AV instantiates Kastner's (2020) three lexical variants of the functional head Voice, each of which impose different valency requirements on the verb. This contrast made by valency morphology, hosted on Voice, is crucially distinct from Philippine-type voice, which we suggest is hosted on a higher head Agr. The valency morphology discussed here thus provides an argument in favor of an approach to Philippine-type voice that distinguishes it from valency (e.g., Chen 2017, 2022; Hsieh 2020). We suggest that Philippine-type voice is better analyzed as agreement tied to the assignment of nominative case and to movement to a syntactically prominent position, either via a process akin to object shift (Rackowski & Richards 2005) or to a dedicated A/A'-position (Erlewine, Levin & van Urk 2015; Chen 2017).

One reason why the trivalent nature of Voice in Tagalog has been previously overlooked is perhaps because the three-way morphological distinction that is so celebrated in AV is frequently neutralized in other constructions. We highlighted two neutralizing contexts, the Recent Perfective and Patient Voice, showing that they are examples of morphological and syntactic neutralization, respectively. Other potentially neutralizing contexts include gerunds and productive *pa–* causatives. Nie (2020), for instance, has suggested that *pa–* causatives must have Voice[–D] in the embedded event; this would represent another case of syntactic neutralization. Future work in this area, we hope, will deepen our understanding of the contexts that induce neutralization of valency distinctions, and how valency and 'voice' phenomena interact in the syntax of Tagalog more broadly.

References

ALEXIADOU, A., ANAGNOSTOPOULOU, E. & SCHÄFER, F. 2006. The properties of anticausatives crosslinguistically. *Phases of interpretation*. ed. M. Frascarelli, 187–212. Berlin: Mouton de Gruyter.

ALEXIADOU, A., ANAGNOSTOPOULOU, E. & SCHÄFER, F. 2015. *External arguments in transitivity alternations: A layering approach*. Oxford: Oxford University Press.

ALONSO-OVALLE, L. & HSIEH, H. 2021. Causes and expectations: On the interpretation of the Tagalog Ability/Involuntary Action form. *Journal of Semantics* 38.3:441–472.

CHEN, V. 2017. *A reexamination of the Philippine-type voice system and its implications for Austronesian primary-level subgrouping.* University of Hawai'i at Manoa. PhD diss.

CHEN, V. 2022. When Philippine-type voice meets Indo-European-type voice: Insights from Puyuma. *Journal of East Asian Linguistics* 31:517–550.

CRUZ, E. L. 1975. *A subcategorization of Tagalog verbs.* The Archive special monograph 2. eds. E. Constantino, E. L. Cruz & C. J. Paz. Quezon City: University of the Philippines.

DELL, F. 1983. An aspectual distinction in Tagalog. *Oceanic Linguistics* 22/23:175–206.

ERLEWINE, M. Y., LEVIN, T. & VAN URK, C. 2015. What makes a voice system? On the relationship between voice marking and case. *AFLA 21: The Proceedings of the 21st meeting of the Austronesian Formal Linguistics Association*. Asia-Pacific Linguistics 25. eds. A. Camp, Y. Otsuka, C. Stabile & N. Tanaka, 51–67. Canberra: Asia-Pacific Linguistics.

DE GUZMAN, V. P. 1978. *Syntactic derivation of Tagalog verbs*. Oceanic Linguistics special publications 16. Honolulu: University of Hawai'i Press.

HALLE, M. & MARANTZ, A. 1993. Distributed Morphology and the pieces of inflection. *The view from Building 20: Essays in Linguistics in honor of Sylvain Bromberger*. eds. K. L. Hale and S. J. Keyser, 111–176. Cambridge, MA: MIT Press.

HARLEY, H. & NOYER, R. 2000. Formal versus encyclopedic properties of vocabulary: Evidence from nominalisations. *The lexicon-encyclopedia interface*. ed. B. Peeters, 349–374. Leiden: Brill.

HIMMELMANN, N. 2006. How to miss a paradigm or two: Multifunctional *ma-* in Tagalog. *Catching language: The standing challenge of grammar writing*. eds. F. K. Ameka, A. Dench & N. Evans, 487–526. Berlin: De Gruyter Mouton.

HSIEH, H. 2020. Beyond nominative: *A broader view of A'-dependencies in Tagalog.* McGill University. PhD diss.

KASTNER, I. 2019. Templatic morphology as an emergent property: Roots and functional heads in Hebrew. *Natural Language & Linguistic Theory* 37:571–619.

KASTNER, I. 2020. *Voice at the interfaces: The syntax, semantics, and morphology of the Hebrew verb*. Open Generative Syntax 8. Berlin: Language Science Press.

KAUFMAN, D. 2009. *On* *pa-*, *pa<R>-* *and* *pa<N>-*. Unpublished manuscript, paper presented at the 11th International Conference on Austronesian Linguistics, Aussois, France, June 2009.

KAUFMAN, D. 2012. *Predicate classes and PAn* *ka-*. Unpublished manuscript, paper presented at the 19th meeting of the Austronesian Formal Linguistics Association, Taipei, June 2012.

KRATZER, A. 1996. Severing the External Argument from its verb. *Phrase structure and the lexicon*. ed. J. Rooryck & L. Zaring, 109–137. Dordrecht: Kluwer.

LEGATE, J. A. 2014. *Voice and v: Lessons from Acehnese*. Linguistic Inquiry monograph 69. Cambridge, MA: MIT Press.

LEVIN, B. & RAPPAPORT HOVAV, M. 1994. *Unaccusativity: At the syntax-lexical semantics interface*. Linguistic Inquiry monograph 26. Cambridge, MA: MIT press.

NIE, Y. 2020. *Licensing arguments*. New York University. PhD diss.

PITTMAN, R. 1966. Tagalog -*um*- and *mag*-: An interim report. *Papers in Philippine Linguistics* 1:9–20. Pacific Linguistics series A 8. Canberra: Australian National University.

RACKOWSKI, A. 2002. *The structure of Tagalog: Specificity, voice, and the distribution of arguments*. MIT. PhD diss.

RACKOWSKI, A. & RICHARDS, N. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36.4:565–599.

SCHACHTER, P. & OTANES, F. T. 1972. *Tagalog reference grammar*. Berkeley, CA: University of California Press.

SCHÄFER, F. 2008. *The syntax of (anti-)causatives*. Amsterdam/Philadelphia: John Benjamins.

SVENONIUS, P. 2012. *Spanning*. Unpublished manuscript, University of Tromsø, available at lingbuzz/001501.

SVENONIUS, P. 2016. Spans and words. *Morphological metatheory*. Linguistik Aktuell/Linguistics Today 229. eds. D. Siddiqi & H. Harley, 201–222. Amsterdam: John Benjamins.

TRAVIS, L. 2000. The L-syntax/S-syntax boundary: Evidence from Austronesian. *Formal issues in Austronesian linguistics*. Studies in natural language and linguistic theory 49. eds. I. Paul, V. Phillips & L. Travis, 167–194. Dordrecht: Springer.

TRAVIS, L. 2010. *Inner aspect: The articulation of VP*. Studies in natural language and linguistic theory 80. Dordrecht: Springer.

WOLFF, J. U. 1973. Verbal inflection in Proto-Austronesian. *Parangal kay Cecilio Lopez*. Philippine Journal of Linguistics special monograph 4. ed. A. Gonzalez, 71–91. Quezon City: Linguistic Society of the Philippines.

WOOD, J. 2015. *Icelandic Morphosyntax and Argument Structure*. Studies in natural language and linguistic theory 90. Dordrecht: Springer.

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