# TAGALOG VALENCY MORPHOLOGY AND ITS NEUTRALIZATION\*

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Tagalog verbal morphology is famously complex, as it encodes a number of grammatical distinctions whose realization is often conditioned on a number of factors, including the verbal root's lexical properties. The most famous and well-studied part of this system is the Philippine-type voice system, which primarily encodes clause-level information about which argument is given syntactic prominence. This paper contributes to this area of research 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  $\langle um \rangle$ , illustrated in (1). 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) 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.'

We argue that this three-way morphological contrast is fundamentally a valency distinction and instantiates Kastner's (2019; 2020) system of trivalent Voice, whereby the external argument (EA) introducing head Voice (Kratzer 1996) has three lexical variants: [+D] requires an EA in its specifier, [-D] prohibits an EA, and  $[\emptyset]$  is unspecified for an EA (permitting but not requiring one).

It is important to note that this 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; Chen 2022). Indeed, clearly identifying the 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.

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### 2. Diagnosing argument structure

To begin, we introduce a number of 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 (2), but not with unaccusative ones (3). We thus take such modifiers to diagnose the presence of external arguments.

- (2) 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.'
- (3) 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 (4), which have different morphology on the verb *bukas* 'open'. While *binuksan* in (4a) does not require an overt agent, it is nevertheless compatible with *nang sinasadya* 'deliberately'. This contrasts with *bumukas* in (4b), 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 (5).

(4) a.	B <in>uks-an</in>	ang	bintana	nang sinasadya.	
	<pfv>open-LV</pfv>	NOM	window	deliberately	
	'The window w	as ope	ned delib	erately.'	Implicit EA
b.	B <um>ukas</um>	ang	bintana	(#nang sinasadya).	
	<um.pfv>open</um.pfv>	NOM	window	deliberately	
	'The window op	pened	(#delibera	ately).'	No EA

- (5) a. B<in>uks-an ang bintana {gamit ang susi / para mahanginan ang kwarto}.
   <PFV>open-LV NOM window use NOM key for air.out.LV NOM room
   'The window was opened {using the key/to air out the room}.'
  - b. B<um>ukas ang bintana (#{*gamit ang susi / para mahanginan ang kwarto*}). <UM.PFV>open NOM window use NOM key for air.out.LV NOM room 'The window opened (#{using the key/to air out the room}).' No EA

Second, the modifier *mag-isa* 'by itself, of its own accord' (Levin and 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 (6-7) show (cf. (4-5)).

by.itself=LK <pfv>shatter-PV NOM window</pfv>	plicit EA
	nlicit EA
'The window got broken (#of its own accord).' Imp	
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
(7) a. (#Mag-isa=ng) b <in>uks-an ang bintana.</in>	
by.itself=LK <pfv>open-LV NOM window</pfv>	
'The window was opened (#of its own accord).'	plicit EA
b. Mag-isa=ng b <um>ukas ang bintana.</um>	
by.itself=LK <um.pfv>shatter NOM window</um.pfv>	
'The window opened of its own accord.'	No EA
by.itself=LK <um.pfv>shatter NOM window</um.pfv>	ΝοΕΔ

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.<sup>1</sup> Thus, we get contrasts like (8) between unergative and unaccusative verbs (cf. (2b), (3b)).

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

<sup>&</sup>lt;sup>1</sup> The 'alone/unaccompanied' reading seems to also accessible with external arguments that are *pro*-dropped (i.e., salient in the conversational background).

### 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 (9-10) illustrate. Furthermore, (11) shows that the external argument of a mag- predicate must be animate.

- (9) Transitive predicates with mag-(10)Other examples: a. *Nag*-lu~luto ang magsasaka ng sabaw. a. maghugas 'to wash sth.' b. *magbitbit* 'to carry sth.' MAG-IPFV~cook NOM farmer GEN soup c. *maglaro* 'to play (a game)' 'The farmer is cooking soup.' d. maghanda 'to prepare (sth.)' b. *Nag*-bukas ako ng bintana. e. maglabas 'to take sth. out' MAG.PFV-open 1SG.NOM GEN window f. mag-uwi 'to take sth. home' 'I opened a window.'
- (11) 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 (12-13) and (14-15), respectively.

- (12) 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.'
- (14) 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.'

- (13) Other examples:
  - a. maglakad 'to walk'
  - b. magtagumpay 'to succeed'
  - c. *mag-basketbol* 'to play basketball'
- (15) 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*.

- (16) 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 *bigyan*)
  - 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*)
- (17) 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.

- (18) Unaccusative predicates with maa. {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.
  - 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.'
- (19) 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 a number of 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 form, which conveys a set of meanings illustrated in (20).<sup>2</sup> Although the non-volitional interpretation of this form is interesting, we set aside this use of ma-for present purposes, as it affects aspects of the predicate beyond its argument structure (e.g., event structure, modality), and it appears to cross-cut the categorization presented here.

(20)a.	Naka-basag	ako	ng	baso.	cf. mabasag in (18b)
	NVOL.AV.PFV-shatter	1sg.nom	GEN	glass	
	'I {accidentally broke	/ managed	to bre	eak} a glass.'	
b.	Nakakapag-trabaho	ang mag	sasaka	ι.	cf. magtrabaho in (12a)
	NVOL.AV.IPFV-work	NOM farm	er		
	'The farmer is able to	work.'			
с.	Makaka~kain an	g bata r	ng a	dobo.	cf. kumain in (21a)
	NVOL.AV.FUT~eat NO	OM child (	GEN a	idobo	
	'The child will {be ab	le / get} to	eat ad	lobo'	

<sup>&</sup>lt;sup>2</sup> See Schachter and Otanes 1972, §5.13; Dell 1983; Alonso-Ovalle and Hsieh 2021 for further details.

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). We assume in Section 4 that *ma*- in (18-19) does indeed contain *pa*-, but determining whether these are the same type of *pa*- or different is left for future work.

3.3. Uses of *<um>* 

Finally, we have  $\langle um \rangle$ , which is agnostic with respect to the presence of a volitional external argument. Thus, it can appear not only on transitive predicates (21-22), but also on unergative (23-24) and unaccusative ones (25-26). On the other hand, we do not find  $\langle um \rangle$  on ditransitive and reflexive predicates, despite what we might expect from its agnostic nature.

- (21) 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.'
- (23) 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.'

(25) 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.'

- (22) Other examples:
  - a. bumasa 'to read'
  - b. *pumitas* 'to pick/pluck'
  - c. sumipa 'to kick'
  - d. gumamit 'to use'
- (24) Other examples:
  - a. *tumalon* 'to jump'
  - b. umakyat 'to go up'
  - c. umubo 'to cough'
- (26) Other examples:
  - a. sumabog 'to explode'
  - b. lumutang 'to float'
  - c. *lumakas* 'to grow stronger'

Aside from its distribution,  $\langle um \rangle$  has a few other notable properties when compared with *mag*-. First, the subject of intransitive  $\langle um \rangle$  verbs (both unergative and unaccusative) can be non-volitional. This is also true for the external argument of some transitive  $\langle um \rangle$  verbs. This behavior differs from *mag*- verbs, which always require volitional external arguments, as we saw in (11).

- (27)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 and 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 1. From this, we can clearly see that *mag*- and *ma*- are in complementary distribution: *mag*- occurs with volitional AV predicates, while *ma*- occurs with non-volitional ones. On the other hand, <um> overlaps in its distribution with the other markers.

AV	UNACC	UNERG	TRANS	REFL	DITRANS
mag-		✓	$\checkmark$	✓	$\checkmark$
ma-	1				
<um></um>	$\checkmark$	$\checkmark$	1		

Table 1: Distribution of Tagalog Actor Voice markers

While the different functions of the three major Actor Voice variants has 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, and Schäfer 2006, 2015; Schäfer 2008; Legate 2014; Wood 2015). Investigations into the verbal morphology of Hebrew (Kastner 2019, 2020) within the framework of Distributed Morphology (DM; Halle and 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 (28a), while verbs in the *niXYaZ* template never have an external argument (29a). 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.

(28)a.	ha-agronomit <i>hegdil</i> -a the-agronomist increased-F.SG 'The agronomist increased the ca	ACC	5	<i>hegdil</i> = <i>g</i> - <i>d</i> - <i>l</i> + <i>heXYiZ</i> , Voice[+D]
b.	ha-jevul <i>gadal</i> pi eser the-crops grew times ten 'The crops grew tenfold.'			$gadal = g \cdot d \cdot l + XaYaZ$ , Voice $[\emptyset]$
(29)a.	ha-∫a'ar <i>niftax</i> the-gate opened 'The gate opened.'			niftax = p-t-x + niXYaZ, Voice[-D]
b.	josi <i>patax</i> et ha-ſa'ar Yossi opened ACC the-gate			$patax = p-t-x + XaYaZ, Voice[\emptyset]$
	'Yossi opened the gate.'			(Kastner 2019, 579–580)

The *XaYaZ* template, by contrast, can occur with an external argument (29b) or without one (28b), 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  $[\emptyset]$ .

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[ $\varnothing$ ] (if there is one) may receive a range of interpretations.

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

Table 2: Three lexical variants of Voice (adapted from Kastner 2019, 579)

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 $[\emptyset]$  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 are able to select for one or more variants of Voice (Harley and 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.

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 (30a). 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 (31a), which is characteristic of Voice[-D]. *<um>* verbs can occur with an external argument (31b) or without (30b), characteristic of Voice[ $\emptyset$ ].

(30)a.	Nag-bukas	ang	guro	ng	pinto.	
	MAG.PFV-open	NOM	teacher	GEN	door	
	'The teacher ope	ened tl	ne door.'			<i>mag</i> -, Voice[+D]
b.	B <um>ukas</um>	ang	pinto.			
	<um.pfv>open</um.pfv>	NOM	door			
	'The door opene	ed.'				<i><um></um></i> , Voice[ $\emptyset$ ]
(31)a.	Na-basag	ang	plorera.			
	MA.PFV-shatter	NOM	vase			
	'The vase broke	.'				<i>ma</i> -, Voice[-D]
b.	B <um>asag</um>	ang	g bata	ng	plorera.	
	<um.pfv>shatte</um.pfv>	er NO	м child	GEN	vase	
	'The child broke	e a vas	e.'			<i><um></um></i> , Voice[ $\emptyset$ ]

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.

(32) [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, the labial nasal in both the *mag*and *ma*- forms indeed derives from the combination of the AV infix *<um>* and another plosiveinitial prefix (Wolff 1973; Kaufman 2009). Factoring out the AV infix, then, we are left with *pag*-, *pa*- and  $\emptyset$ - (a phonologically null morpheme) as the proper reflexes of Voice[+D], Voice[-D] and Voice[ $\emptyset$ ], respectively.<sup>3</sup>

- (33) Development of AV markers
  - a. MAG:  $<\!um\!> + pag \rightarrow p <\!um\!> ag \rightarrow mag$ -
  - b. MA:  $\langle um \rangle + pa \rightarrow p \langle um \rangle a \rightarrow ma$ -
  - c. UM:  $\langle um \rangle + \varnothing \rightarrow \langle um \rangle$

The decomposition of AV markers 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' (34).

<sup>&</sup>lt;sup>3</sup> 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.

Ingini	mjinuive paradism of magiato to cook							
	Agr	Voice[+D]	Root	Agr				
AV	< <i>um</i> >	pag-	luto					
PV			lutu	-in				
LV		pag-	lutu	-an				
CV	<i>i</i> -	pag-	luto					

(34) Infinitive paradigm of magluto 'to cook'

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 3.

Agr	Voice	Туре	DP in Spec-VoiceP	Constructions
<i><um></um></i>	pag-	Voice[+D]	Required	Active
<i><um></um></i>	pa-	Voice[-D]	Prohibited	Non-active
<i><um></um></i>	Ø-	Voice $[\emptyset]$	Unspecified	Active and non-active

The syntactic structures compatible with each Voice type are illustrated in the trees below. Voice[+D] appears in active structures with an external argument, while Voice[-D] appears in structures with only an internal argument; Voice $[\emptyset]$  is compatible with any type of argument.



(37) Voice[ $\varnothing$ ]:  $\langle um \rangle + \varnothing \rightarrow \langle um \rangle$ 





# 5. Neutralizing contexts

The proposed three-way Voice contrast appears transparently in AV constructions but is obscured in other syntactic contexts. In this section, we highlight two neutralizing contexts, the Recent Perfective and the 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 (38), this morphology appears to overwrite the valency markers observed in AV forms (cf. (1)).

- (38)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 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 (39), verbs in these alternating structures have identical forms in the RPFV (cf. 30).

- (39)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 (39), 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  $[\emptyset]$  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 the 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.

(40)a. Nag-lu~luto ang magsasaka ng gulay.	
MAG-IPFV~cook NOM farmer GEN vegetable	
'The farmer is cooking vegetables.'	<i>mag-</i> AV
b. Lu~lutu- <i>in</i> ng magsasaka ang gulay.	
IPFV~cook-PV GEN farmer NOM vegetable	
'A farmer will cook the vegetables.'	<i>-in</i> PV
(41)a. B< <i>um</i> >a~basa ang guro ng diyaryo.	
<um>IPFV~read NOM teacher GEN newspaper</um>	
'The teacher is reading a newspaper.'	<i><um></um></i> AV
b. Ba~basa- <i>hin</i> ng guro ang diyaryo.	
IPFV~read-PV GEN teacher NOM newspaper	
'A teacher will read the newspaper.'	<i>-in</i> 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[ $\varnothing$ ] construction with a possible patient should have a PV form. As shown in Table 4, this means that PV should be available with simple transitive and ditransitive predicates and perhaps also with reflexive contexts, if there is a patient syntactically present. What we find, however, is that ditransitive and reflexive constructions are incompatible with PV, as (42-43) show. PV forms therefore only appear on simple transitive predicates.

Agr	Voice	Туре	UNACC	UNERG	TRANS	REFL	DITRANS
<i><um></um></i>	pag-	Voice[+D]		1	1	1	✓
< <i>um</i> >	pa-	Voice[-D]	$\checkmark$				
< <i>um</i> >	Ø-	Voice $[\emptyset]$	$\checkmark$	1	1		

Table 4: Distribution of Tagalog Actor Voice markers

Agr	Voice	Туре	UNACC	UNERG	TRANS	REFL	DITRANS
-in	Ø-	Voice[Ø]			1		

Table 5: Distribution of Tagalog Patient Voice marker

# (42) *Ditransitive*

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.'

(43) Reflexive
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.'

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 (44) shows.

- (44)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 the PV involves *syntactic* neutralization. Note that in AV, ditransitives and reflexives only appear with Voice[+D] structures and do not appear with Voice[ $\emptyset$ ], whose transitive constructions are limited to simple transitives. The distribution of the PV thus parallels that of Voice[ $\emptyset$ ] in AV. We therefore propose that all PV constructions involve Voice[ $\emptyset$ ]; that is, the PV Agr head selects for Voice[ $\emptyset$ ] in the syntax. The 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[ $\emptyset$ ]; these conflicting requirements render these forms ineffable.

### 6. Conclusion and outlook

We argued in this paper that three-way morphological distinction found in Tagalog AV instantiates Kastner's (2019; 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 favour of an approach to Philippine-type voice that distinguishes it from valency (e.g., Chen 2017; 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 and Richards 2005) or to a dedicated A/A'-position (Erlewine et al. 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 the 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.

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