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THE EVOLUTION OF SYNTAX IN WESTERN AUSTRONESIAN

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1 Introduction

Western Austronesian languages display rich syntactic variation and typologically unusual features that have challenged core tenets of many syntactic theories (e.g., Wolff 1973; Starosta et al. 1982; Shibatani 1988; Guilfoyle et al. 1992; Ross 2002; Himmelmann 2002a; Arka 2003; Pearson 2005; Rackowski & Richards 2005; Chen & McDonnell 2019; a.o.).[1] Generally speaking, languages distributed closer to the linguistic homeland, Taiwan, exhibit agglutinative morphology and predicate-initial word order, many of which feature a four-way voice system known as *Philippine-type voice*. Consider the Tagalog examples in (1), where a four-way distinction in affixal morphology on the verb alters the choice of the syntactic pivot. Here and throughout, we refer to the four-way distinction as Actor Voice (AV) (1a), Patient Voice (PV) (1b), Locative Voice (LV) (1c), and Circumstantial Voice (CV) (1d). Two basic case markers and the marker on the syntactic pivot in each voice are simply glossed as CM1, CM2, and PIV(OT), respectively, to remain analysis neutral. Unless indicated otherwise, the data presented in this paper come from the authors' primary fieldwork.[2]

(1) Tagalog

a. B<um>ili **si** **AJ** ng adobo mula kay Lia para kay Joy.
<AV>buy **PN.PIV** **AJ** INDF.CM2 adobo from PN.CM2 Lia for PN.CM2 Joy
'AJ bought adobo from Lia for Joy.' [Actor Voice]

b. Bi-bilih-in ni AJ **ang** **adobo** mula kay Lia para kay Joy.
CONT-buy-PV PN.CM1 AJ **PIV** **adobo** from PN.CM2 Lia for PN.CM2 Joy
'AJ bought the adobo from Lia for Joy.' [Patient Voice]

c. Bi-bilih-an ni AJ ng adobo **si** **Lia** para kay Joy.
CONT-buy-LV PN.CM1 AJ INDF.CM2 adobo **PN.PIV** **Lia** for PN.CM2 Joy
'AJ bought adobo from Lia for Joy.' [Locative Voice]

d. I-bi-bili ni AJ ng adobo mula kay Lia **si** **Joy**.
CV-CONT-buy PN.CM1 AJ INDF.CM2 adobo from PN.CM2 Lia **PIV** **Joy**
'AJ bought adobo from Lia for Joy.' [Circumstantial Voice]

In instances of relativization, the extracted phrase controls the set of verbal morphology introduced previously. To relativize the initiator, theme, locative phrase, and benefactor,

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respectively, the verb must be marked with appropriate voice morphology, AV (2a), PV (2b), LV (2c), and CV (2d), to indicate the relativized phrase as the pivot.

(2) Tagalog

a. Sino ang [$_{RC}$b<um>ili ___ ng adobo mula kay
who PIV [<AV>buy ___ INDF.CM2 adobo from PN.CM2
Lia para kay Joy]?
Lia for PN.CM2 Joy]
'Who was the one that bought adobo from Lia for Joy?' [Actor Voice]

b. Ano ang [$_{RC}$bi-bilih-in ni AJ ___ mula kay
what PIV [CONT-buy-PV PN.CM1 AJ ___ from PN.CM2
Lia para kay Joy]?
Lia for PN.CM2 Joy]
'What was the thing that AJ bought from Lia for Joy?' [Patient Voice]

c. Na saan ang [$_{RC}$bi-bilih-an ni AJ ng adobo
where PIV [CONT-buy-LV PN.CM1 AJ INDF.CM2 adobo
___ para kay Joy]?
___ for PN.CM2 Joy]
'Where was the place that AJ bought adobo for Joy?' [Locative Voice]

d. Sino ang [$_{RC}$i-bi-bili ni AJ ng adobo
who PIV [CV-CONT-buy PN.CM1 AJ INDF.CM2 adobo
mula kay Lia]?
from PN.CM2 Lia]
'Who was the one that AJ bought adobo from Lia for?' [Circumstantial Voice]

While there is some variation and a few outliers (see subsequent examples), this pattern (one AV and multiple UV constructions, each with a corresponding extraction constraint) is generally stable across languages spoken in Taiwan, the Philippines, northern Borneo, and northern Sulawesi, especially in morphosyntactically conservative languages. However, the languages found in the south including Malaysia, Brunei and many parts of western and central Indonesia (Sumatra, Java, Kalimantan, Sulawesi, Bali, and Lombok) – henceforth referred to as the *western Indonesia region* – are more diverse, exhibiting a broader range of morphosyntactic patterns (see Kroeger & Riesberg forthcoming for a recent, comprehensive overview). Not only do they display different degrees of decay in verbal morphology, but they also exhibit different types of voice systems and other features of clausal syntax.

The most well-known type has been referred to as an *Indonesian-type* language, which we exemplify with data from Nasal, a language of Sumatra. This system is conventionally characterized by a two-way contrast in Actor Voice (AV) and Undergoer Voice (UV), in which the Actor and Undergoer are the respective pivots, as in (3).

(3) Nasal

a. Azma kak ny-(s)anik buak ni.
A. PFV AV-make snack that
'Azma made those snacks.' [Actor Voice]

b. Buak ni kak di-sanik Azma.
snack that PFV UV-make A.
'Azma made those snacks.' [Undergoer Voice]

Other proposed features of Indonesian-type languages include a series of pronominal clitics expressing the nonpivot actor in certain UV constructions, as in (4), as well as one or more applicative suffixes, as in (5). The UV constructions in (4) have been referred to by many names, most notably Object Voice. Applicative suffixes in these languages are generally polyfunctional (e.g., *-kun* in Nasal expresses benefactive, instrumental, causative among other functions).

(4) Nasal
   a. lahan ni kak khadu kam=suah.
      field that PFV finish 1PL.EXCL=UV.burn
      'We already burned the field.'
   b. lahan ni kak khadu mu=suah.
      field that PFV finish 2SG=UV.burn
      'You already burned the field.'
   c. lahan ni kak khadu (di-)suah=nyo.
      field that PFV finish UV-burn=3SG
      'He already burned the field.'

(5) Nasal
   a. Azma ny-(s)anik-kun Johan buak ni.
      A. AV-make-APPL J. snack that
      'Azma made Johan snacks.' [Actor Voice]
   b. Johan di-sanik-kun Azma buak ni.
      J. UV-make-APPL A. snack that
      'Azma made Johan snacks.' [Undergoer Voice]

Recent work has shown that a number of languages of the western Indonesia region do not fit neatly into either Philippine-type or Indonesian-type. Some languages, referred to as 'transitional languages' primarily spoken in parts of Borneo and Sulawesi, fall somewhere between Philippine-type and Indonesian-type (Hemmings 2015). Other languages do not resemble either type and have lost verbal voice morphology altogether. Thus, there is far greater diversity in the western Indonesia region, which we propose reflects a complex history of parallel independent developments and language contact (as suggested by Ross 2002 and developed further in Kaufman 2009). Therefore, in this chapter, we take a different approach to the typology and historical development of western Austronesian languages: We build upon Himmelmann's (2005) typological generalization of Philippine-type languages and take a diachronic look at the evolution of Austronesian syntax from the top of the Austronesian language family tree.

Using this method, we identified eight major morphosyntactic features shared across primary-order Philippine-type languages (i.e., those spoken in the Austronesian homeland, Taiwan, and Proto-Malayo-Polynesian). While it is not possible to characterize non-Philippine-type languages of the western Indonesia region in the same way, we outline recurrent patterns across them, and show that many of these patterns can be traced back to the prototypical elements of Philippine-type languages.

Before proceeding, the interrelationships of western Austronesian languages deserve a note. According to the consensus subgrouping, all Austronesian languages spoken outside Taiwan constitute a single primary branch, Malayo-Polynesian (Blust 1999) (Figure 1.1).[3] This branch is commonly assumed to represent a single migration out-of-Taiwan (Blust 1984–85; Bellwood 1984–85, 1995, 2017). The other nine branches are located in the homeland, with Rukai being the only exception as it lacks the voice system described in (1)–(2).

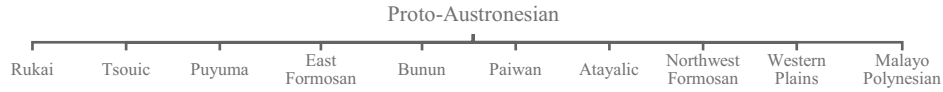

Figure 1.1 Austronesian higher-order subgrouping

Source: (adapted from Blust 2019)

The internal subgrouping of Malayo-Polynesian is more controversial, but several approaches have argued that there are many primary branches of Malayo-Polynesian (e.g., Ross 1994 proposes more than 20 primary branches, and more recently Smith 2017 proposes that there are likely no fewer than nine primary branches). Thus, our current approach, which views these changes as multiple independent developments, is consistent with recent historical accounts of Malayo-Polynesian. Furthermore, the languages of the western Indonesia region evince complex patterns of language contact (McWhorter 2011; Gil 2020), which have had a dramatic effect on the syntax of these languages. A clear example of this effect is Malagasy, which originated in southern Borneo and has retained many Philippine-type features, while other Barito languages of Borneo have lost most of these features (see Kroeger & Riesberg forthcoming for discussion).

The remainder of this chapter is organized as follows. Section 2 outlines prototypical features of Philippine-type syntax observed in the homeland. Section 3 summarizes the evolution of voice and case distinctions in western Austronesian, focusing on (i) common directionality of the decay of voice and case distinctions and (ii) recurrent voice properties in the languages of the western Indonesia region. Section 4 turns to the evolution of the pronominal clitic system, focusing on how the system has developed innovative features in lower-order Malayo-Polynesian languages. Section 5 discusses the loss of the extraction constraint illustrated in (2) in these languages. Section 6 summarizes and concludes.

2 Prototypical Philippine-type syntax

There has been a consensus in the literature that the Philippine-type four-way voice system can be traced back to Proto-Austronesian or the stage immediately after its split (Wolff 1973; Ross 2009, 2012; Aldridge 2016; Blust & Chen 2017). A comparative look at higher-order languages (i.e., those located in the linguistic homeland, Taiwan, and Proto-Malayo-Polynesian) reveals eight prototypical traits, outlined in (6a-h). More specifically, we refer to traits that can be traced back to an earlier stage and preserved in at least some languages under each branch. This, however, does not mean all (or even most) Philippine-type languages share all eight traits. Mood inflections (6c), for example, have been lost in many Malayo-Polynesian languages although reconstructable to Proto-Malayo-Polynesian (PMP) and preserved in a subset of languages spoken outside Taiwan (Lobel 2013).

(6) Austronesian syntax as observed in primary-level languages with a voice system:[4]

a. A syntactically pivotal phrase: In each finite clause, one phrase is designated the pivot and is realized in a particular morphological form and/or structural position, regardless of its original grammatical function, case, or thematic role (e.g., Shibatani 1988; Himmelmann 2002a; Rackowski 2002; Foley 2008; Erlewine et al. 2017; Chen 2017).

b. Articulated voice morphology: Transparent verbal morphology alters for the choice of the pivot, including options for taking certain non-core phrases as pivots. The voice

alternation applies to all finite constructions, including (i) causatives, (ii) ditransitives, (iii) control constructions, (iv) adverbial verb constructions, and (v) serial verb constructions (see, for example, Holmer 1999; Rackowski 2002; Chang 2009; Wu 2012; Kuo 2015; Chen & Fukuda 2017, and Chang to appear for voice alternations in (i)-(v) in different Formosan languages and Tagalog).

c. Mood inflection in voice morphology: Each of the four voices inflects for three moods: indicative, optative/hortative, and imperative/negative (Wolff 1973; Ross 2009, 2012; Blust & Chen 2017).
d. One-to-many mapping between voice and pivot selection: Voice designation is not conditioned simply by the case or thematic role of the pivot, but it reflects a complex mapping of subject to both its grammatical relations and semantic role (Holmer 1999; Rackowski 2002; Chen 2017).[5]
e. Fluid extraction restriction: extraction (relativization, including pseudo-clefting) is limited to the pivot phrase of a given clause, as seen in (2).
f. Pronominal clitics: Pronominal pivots and nonpivot subjects surface as clitics present on the highest functional head (see e.g., Billings & Kaufman 2004; Ross 2015). In a subset of languages, nonpivot objects also surface as clitics (Li 2010).
g. Marking of nonpivot phrases: Nonpivot phrases carry a fixed case-marking regardless of the voice type of the clause. In conservative languages, pivots, nonpivot subjects, nonpivot objects, and locative obliques all carry distinct markers (Ross 2006; Lobel 2013; Blust 2015).
h. Default voice marking on non-highest verbs per finite clause: In finite clauses with multiple verbs, true voice morphology surfaces on the highest verb (which may be an adverb or an auxiliary); the rest of the verbs carry default voice marking, which, depending on the language-specific marking strategy, is realized as (i) plain AV morphology, (ii) zero marking, or (iii) copy of the highest voice-marking (Chung 2004; Wurmbrand 2014; Chang 2017, to appear).[6]

While these features are in general stable across Formosan languages, much variation exists in Malayo-Polynesian. Most features extend south to the Philippines and beyond into northern Sulawesi and northern Borneo. However, they begin to break down in languages of the western Indonesia region where recurrent patterns of change are found: voice systems go from a four-way to a two-way distinction often accompanied by the development of applicative suffixes, word order changes from predicate initial to predicate medial, and the development of pronominal Actors that procliticize to verbs.

In this paper, we focus on the evolution of (a)-(g) through an examination of a list of selected languages that represent the geographic distribution and typological traits of western Austronesian languages. Sections 3, 4, and 5 summarize how these traits have evolved with three particular foci: (i) the evolution of voice, mood, and case (section 3), (ii) the evolution of the pronominal clitic series (section 4), and (iii) the evolution of the extraction constraint (section 5).

3 The evolution of western Austronesian voice and case system

The Philippine-type voice system attested in conservative languages features a four-way voice distinction attested in conservative languages features a four-way voice distinction (AV/PV/LV/CV) and three grades of mood inflections (indicative, optative/hortative, and imperative/negative), which are illustrated in Table 1.1. This pattern is commonly assumed to be

reconstructable to Proto-Austronesian (PAn) or a stage right after its split (Ross 2009, 2012; Aldridge 2016).[7]

Table 1.1 Mood inflection in early Austronesian voice paradigm

	Actor Voice	*Patient Voice*	*Locative Voice*	*Circumstantial Voice*
Indicative	*<um>	*-en	*-an	*Si-/Sa-
Optative, hortative	*-a	*-aw	*-ay	*-anay
Imperative, negative	-∅	*-u	*-i	*-an

Source: (adapted from Blust & Chen 2017)

This system comes with a four-way case system that distinguishes between (i) pivot-marking (the so-called 'nominative'), (ii) marking for nonpivot subjects (the so-called "genitive", labeled CM1 in this paper), (iii) marking for nonpivot direct objects (the so-called "oblique", labeled CM2 in this paper), and (iv) locative phrases. Each category distinguishes further for singular personal names, plural personal names, and common nouns (Ross 2006; Blust 2015). Table 1.2 illustrates the reconstructed PAn case system proposed in Blust (2015).

Table 1.2 Proto-Austronesian case system

		Pivot	*CM1*	*CM2*	*LOC*
Pan		*s	*n	*k	*d
SPN	*i	*si	*ni	(*ki)	(*di)
PPN	*a	*sa	*na	[*ka]	[*da]
CN	*u	---	*nu	*ku	---

Source: (adapted from Blust 2015)

The marking for oblique phrases deserves a note. Some Malayo-Polynesian languages have developed specific prepositions for nonpivot instruments and benefactors, while these obliques share the same marking with nonpivot objects in conservative languages.[8] The oblique status of such phrases is thus inferred only by their optionality. Compare the Paiwan and Tagalog examples (7a-b).

(7) a. Q<m>alup a caucau **tua vavuy** i gadu **tua vuluq**. [Paiwan]
<AV>hunt PIV man **CM2 pig** LOC mountain **CM2 spear**
'The man hunts wild pigs in the mountains with a spear.' (Ferrell 1969:202)

b. B<um>ili si AJ **ng** adobo **mula** kay Lia **para**
<AV>buy PN.PIV AJ **INDF.CM2** adobo from PN.CM2 Lia **for**
kay Joy [Tagalog]
PN.CM2 J.
'AJ bought adobo from Lia for Joy.'

Table 1.3 summarizes the mapping between voice, case, and thematic roles in higher-order Austronesian languages.

Table 1.3 Voice, thematic role, and case in prototypical Philippine-type languages

	AV	*PV*	*LV*	*CV*
initiator	Pivot	CM1	CM1	CM1
theme	CM2	Pivot	CM2	CM2
locative	P1	P1	Pivot	P1
instrumental/benefactor	P2/CM2	P2/CM2	P2/CM2	Pivot

In what follows, we outline four common patterns of decay of Philippine-type voice and case: loss of mood inflection (3.1), loss of voice distinctions (3.2), and loss in case distinctions (3.3).

3.1 Loss of mood inflections

While a three-way mood distinction is prototypical of Philippine-type voice and is attested across the majority of higher-order branches of Austronesian, this pattern is prone to loss. To better describe the patterns of decay, we adopt the terms Grade I, Grade II, and Grade III to refer to the set of morphology used for indicative, optative/hortative, and imperative/negative moods, respectively, in the reconstructed voice system (see Table 1.4; Ross 2012; Blust & Chen 2017).

Table 1.4 Mood distinctions in early Austronesian voice morphology

	AV	*PV*	*LV*	*CV*	
Grade I	*<um>	*-en	*-an	*Si-/Sa-	indicative
Grade II	*-a	*-aw	*-ay	*-anay	optative, hortative
Grade III	-∅	*-u	*-i	*-an	imperative, negative

3.1.1 Loss of non-indicative mood morphology

A recurrent pattern of decay is the loss of Grade II and/or Grade III morphology. This change is attested in various Malayo-Polynesian languages and some Formosan languages such as Bunun (loss of Grade II) and Amis (loss of Grade III) (de Busser 2009; Wu 2006). A direct outcome of these changes is the absence of non-indicative mood inflections. Compare the Atayal example (9a) with Amis (9b), Tagalog (9c) and Balantak (9d), where the loss of Grade III morphology has resulted in the use of indicative (Grade I) morphology in imperatives.[9]

(8) a. Niq-**i/*-un** ku sehuy! [Atayal]
eat-**PV.GRADE.III/*PV.GRADE.I** PIV taro
'Eat the taro!' (Huang 2001:64)

b. Tangtang-**en** k-una titi! [Amis]
cook-**PV.GRADE.I** PIV-that pork
'Cook the pork!'

c. Kain-**in**=mo ang adobo! [Tagalog]
eat-**PV.GRADE.I**=2SG.CM1 PIV adobo
'Eat the adobo!'

d. Amo' kaan-**on**! [Balantak]
NEG eat-**PV.GRADE.I**
'Don't eat (me)!' (van den Berg & Busenitz 2012:146)

3.1.2 Loss of indicative morphology

A second common type of decay is the loss of Grade I morphology, accompanied with the expansion of Grade II or Grade III affixes used in both indicative and non-indicative contexts. Such a development occurred in multiple Formosan languages including Tsou, Puyuma, Saaroa, and Kanakanavu (Blust & Chen 2017). We illustrate this with data in (9) from Paiwan and Puyuma.[10] As seen in (9), Grade II morphology is used in indicative clauses in Puyuma (9b) but not in Paiwan (9a), where a Grade I/Grade II distinction still remains. Whether similar changes took place in Malayo-Polynesian has received scant attention in the literature.

(9) a. Pai tja=pacun-**aw** sa tja=alak. [Paiwan]
INTJ 2PL.CM1=**see-PV.GRADE.II** this.PIV 2PL.POSS=child
'Let us take a look at this child of ours!' (optative) (Chang 2006:439)

b. Tu=trakaw-**aw** na paysu. [Puyuma]
3.CM1=steal-**PV.GRADE.II** DEF.PIV money
'S/he stole the money.'

While a three-grade mood distinction remains intact in a subset of Philippine languages such as Yami (Rau & Dong 2006), Ibayat (Yamada 2014:76–81), and Cebuano (Tanangkingsing 2009), and is partially preserved in languages including Bikol (Lobel 2013:156) and Ilokano (Rubino 1997), it has undergone extensive loss in the languages south of the Philippines as well as Modern Standard Tagalog (Lobel 2013). Both Philippine-type and non-Philippine-type languages of Sulawesi also show this sort of diminished two-way mood distinction, which is most often described as realis-irrealis (see Himmelmann 2002b for discussion of northern Sulawesi, van den Berg & Busenitz 2012 for central eastern Sulawesi, and Mead 2002 for southeastern Sulawesi).

3.2 Loss of voice distinctions

Another common type of decay is the loss of the four-way Philippine-type voice distinction. Not surprisingly, the decay occurs in all three grades of voice affixes. For non-Philippine-type languages of the western Indonesia region, the changes are diverse and, in some cases, far more drastic. In general, languages in Borneo and Sulawesi increasingly lose prototypical features of Philippine-type voice the further south a language is located (see Kroeger & Riesberg forthcoming for more details). The decay of Philippine-type voice is in many cases accompanied by the rise of applicatives, changes in word order, and a gradual shift towards analytic syntax. There are, however, exceptions for each of these features. See Kroeger and Riesberg (forthcoming) for details. Next we discuss the most common patterns of decay.

3.1.3 Loss of voice distinctions

A common decay is a PV/LV merger in Grade I (indicative) morphology, with the remaining PV or LV affix taking on both functions and allowing for either locative or theme pivots. In some languages, this merger applies only to specific verbs, while it affects the entire morphological

paradigm in others. Kavalan (East Formosan) and Bantik (Sangiric), for example, display such a merger where the reflex of PAn LV *-an allows both theme and locative pivots (Li & Tsuchida 2006; Utsumi 2021). Loss of CV is also a recurrent change attested both in Formosan and Malayo-Polynesian, especially in languages spoken outside the Philippines. See, for example, Wang (2004), Estioca (2020) and Lobel (2013) for a discussion of this change in Thao, Subanon, and various languages of Borneo.

Finally, loss of voice distinctions in non-indicative morphology is also commonly observed. A recurrent pattern is the loss of a PV/LV distinction in Grade II and/or Grade III morphology (see e.g. loss in Grade II morphology in Thao; Wang 2004). Mergers of other voice types are also attested. See, for example, Tanangkingsing (2009:257) for the loss of LV/CV distinction in Cebuano's Grade III morphology.

While we see recurrent patterns across the western Indonesia region, the diversity of voice systems makes it difficult to see any single pathway of change that captures the ways in which Philippine-type voice breaks down (cf. Wolff 1996). Rather, the voice systems in these languages display diverse patterns along a number of different dimensions, including verbal morphology, word order, additional valency-reducing voices, the realization of the nonpivot arguments, and voice morphology that also makes distinctions in aspect (e.g., perfective/imperfective) or mood (e.g., realis/irrealis).[11] While Kaufman (2009) already discusses several of these recurrent features and other changes in the languages of the western Indonesian region, we review the dimensions related to voice and nonpivot arguments, highlighting common patterns across these languages.

Non-Philippine-type languages of the western Indonesia region most commonly have a two-way alternation between AV and UV (i.e., a complete loss of non-AV voice distinctions), as seen earlier in (4). In many languages, AV is expressed by an inherited PAn AV infix or PMP AV prefix *maŋ- (see Blust 2013:371), while UV is expressed by reflex of a PV suffix or innovative forms, such as the infix *-in-*, which is a reflex of a PAn perfective aspect marker, or a prefix *di-* whose origin is unknown but may be related to the perfective infix (see van den Berg 2004). Some languages of Borneo and Sulawesi are more conservative and still distinguish a third transitive voice. For example, in addition to AV and UV, Balantak in central Sulawesi has an LV construction (van den Berg & Busenitz 2012), while Lun Bawang in Borneo (Mortensen 2021) has a distinct CV construction, exemplified in (10). In both cases, CV and LV are infrequent in discourse.[12]

(10) Lun Bawang (Mortensen 2021:111–115, glossing slightly altered)
   a. Uih ng-abet kayuh.
      1SG.PIV AV-tie log
      'I am tying a log.'
   b. Bet-in=muh kayuh inih
      tie-PV=2SG.GEN log this
      'You are tying up this log.'
   c. Abet inih ne-ping-abet=kuh kayuh ineh.
      rope this PFV-CV-tie=1SG.GEN log that
      'I used this rope to tie this log.'

Several studies have shown that the loss of voice coincides with the rise of applicative morphology, and in several cases, applicative morphemes are clearly reflexes of PMP LV or CV affixes (see Ross 2002 for discussion). In other cases, applicative suffix forms are innovative, representing the grammaticalization of erstwhile prepositions. Various others have also shown that the combination of voice and applicative allow for peripheral roles like goal, location, beneficiary, or instrument to be the pivot, just as it is in Philippine-type voice with a four-way

opposition. However, the relationship between the loss of voice and rise of applicatives is not always compensatory. For example, Balantak with its three-way voice distinction has three applictive suffixes while Lun Bawang also with a three-way voice distinction has none. This pattern in applicative morphology is indicative of larger areal patterns where languages of Sulawesi have particularly rich applicative morphology and a number of languages of central Borneo have no applicatives. Other languages of the region fall somewhere in between, typically distinguishing two applicative morphemes.

One area where the non-Philippine-type languages of the western Indonesia region vary is in the (a#)symmetry of voice marking. Some languages overtly mark both AV and UV constructions, such as Rejang, a language of southern Sumatra, in which AV is marked by *me-*/*-em-* and UV is marked by *ne-*/*-en-*.

(11) Rejang (McGinn n.d.)
a. Si k-əm-leaʔ imuo.
3SG <AV>see tiger
'He saw tigers.'
a. Imuo k-ən-leaʔ nə.
tiger <UV>see 3SG
'He saw tigers.'

However, the majority of languages of the western Indonesia region show some sort of asymmetry in overt voice marking. Most commonly, AV is overtly marked but UV is not, as the examples from West Coast Bajau in (12) demonstrate (Miller 2007). Note that it is often claimed that UV constructions are marked with a null prefix (see Arka 2009 for explicit arguments of this position in Balinese).

(12) West Coast Bajau (Miller 2007: 129)
a. Mali boi ng-opo' kayu e.
M. CMPL AV-chop wood that
'Mali chopped the wood.'
b. Boi ∅-opo' Mali kayu e.
cmpl UV-chop M. wood that
'Mali chopped the wood.'

In virtually every case, the nonpivot actor is adjacent to the verb. In West Coast Bajau, for example, such actors always follow the verb, either as an independent NP or pronominal enclitic (see Miller 2007:158). A similar pattern is found in a number of Philippine languages. However, for many languages of the western Indonesian region, nonpivot actors may also surface before the verb as proclitics or prefixes, where it is not uncommon for there to be a split based on person. This pattern is illustrated with the Gayo examples in (13), where first person nonpivot actors surface preverbally, with second and third person actors occurring postverbally.

(13) Gayo (Eades 2005: 169–170)
a. ku-ëjer tulis-baca kahè ku ko
1sg-UV.teach write-read later to 2
'I will teach reading and writing to you later.'
b. I-jerang=è buku.
UV-read=3 book
'She read a book.'

In other languages, we see an inverse pattern. In Kadorih, AV is variably marked by a prefix *N-* whereas UV is invariably marked with an infix *-Vn-* (Inagaki 2013). Such patterns resemble a number of colloquial varieties of Malay/Indonesian where the voice system shows even further decay, and voice marking appears to be optional. For example, Cole et al. (2008) show how a range of Jambi Malay dialects differ in how they mark AV constructions. In some, AV must be prefixed, but in others it is optional, as in the Mudung Darat dialect in (14).

(14) Mudung Darat (Cole et al. 2008:1537–1538)
   a. Mariana neŋoʔ pilem ktun
      M. AV.look film cartoon
      'Mariana watches a cartoon movie.'
   b. Mariana teŋoʔ pilem ktun
      M. look film cartoon
      'Mariana watches a cartoon movie.'

This optionality also correlates with the loss of the unmarked UV constructions (4) that are prevalent in these languages (what Cole et al. refer to as Object Voice).

Finally, some languages have lost dedicated voice morphology but maintain an opposition between undergoer-oriented and actor-oriented constructions. This is true of several dialects of Sasak (Shibatani 2008) as well as Tukang Besi (except in its relative clauses, see following section for details; Donohue 2002). In Ampenan Sasak (see Khairunnisa 2022), these non-demoting alternations are not marked by verbal morphology but by several other properties, such as word order and properties of the actor. In regards to the prior, pivot arguments are flexible and can occur before or after the predicate. In regards to the latter, in undergoer-oriented constructions the actor argument is obligatorily realized as a clitic with an optional coreferential argument marked by *siq* 'by' whereas in actor-oriented constructions it is optionally realized as a clitic with an optional unmarked coreferential argument. These properties are apparent in the examples in (15).

(15) Ampenan Sasak (Khairunnisa in prep)
   a. Herjan$_i$ wah=ne$_i$ sorong sampan
      H. PFV=3 push boat
      'Herjan pushed a boat.' (Actor-oriented)
   b. wah=ne$_i$ sorong sampan no siq Herjan$_i$.
      PFV=3 push boat that by H.
      'Herjan pushed the boat.' (Undergoer-oriented)

3.1.4 Loss of voice distinction in root environments

A special phenomenon attested in a number of geographically diverse Austronesian languages is the loss of Philippine-type voice morphology in root clauses, with the same morphology preserved in certain subordinate environments such as relative clauses and the presupposed clause of pseudo clefts (Chung 1994; Donohue 1999; Donohue & Maclachlan 1999). This innovation is illustrated with data from two Malayo-Polynesian languages, Chamorro (16) and Tukang Besi (17). In both languages, voice morphology is lost in root clauses, but is maintained in relative clauses. Compare root clauses in (16a) and (17a) to corresponding relative clauses in (16b) and (17b), where the same verb is marked with a reflex of Philippine-type AV (<*um*>).

(16) Chamorro (Chung 1994:1, glosses ours)

a. h<um>ällum si Maria [na **ha-pänak** si Juan i pätgun].
AGR.assume PN Maria [COMP **AGR-spank** PN Juan the child]
'Maria assumes that Juan spanked the child.'

b. Hayi h<in>aomña si Maria [RC p**<um>**änak ____ i pätgun]?
who <PV>assume PN Maria [**<AV>spank** ____ the child]
'Who does Maria assume spanked the child?'

(17) Tukang Besi (Donohue 1999)

a. **No-balu** te loka na wawine.
3.RLS-buy CORE banana NOM woman
'The woman bought some bananas.'

b. Te emai na [RC **b<um>alu** te loka]?
CORE who NOM [**<AV>buy** core banana]
'Who bought the bananas?'

This pattern potentially reflects an evolutionary pathway from Philippine-type to non-Philippine-type syntax, which features the complete loss of voice morphology. See C. Chen (2005) for a similar observation in the Formosan language Rukai.

3.3 Loss of case distinctions

There are several recurrent patterns of decay in western Austronesian case systems: (i) the loss of a CM1/CM2 (so-called genitive/oblique) distinction, (ii) the loss of pivot-marking, (iii) the loss of case distinctions between common nouns and personal names, and (iv) the loss of case altogether. See Lobel (2013) for a comprehensive comparison of the case systems of various Philippine-type languages.

A common decay in the PAn case system is the syncretism of case marking for nonpivot actors and themes. In many languages, the change began with common nouns and then proceeded to decay in personal nouns and finally in pronouns. This development is attested in various Philippine-type languages and at both language and dialect levels. Consider the examples from Puyuma and Tagalog. Examples in (18b) illustrate the loss of CM1/CM2 distinction in Nanwang Puyuma, whereby nonpivot actors (18b) share the same case-marking with nonpivot themes (18c); examples in (19) demonstrate a similar change in common nouns in Tagalog. Notice that this distinction is still preserved in personal names, as it is in Katipul Puyuma (18a) (Teng 2009).

(18) Puyuma

a. Tu=kezeng-aw (pro) **ni** Senayan. [Katipul Puyuma]
3.CM1-pull-PV (3SG.PIV) **PN.CM1** S.
'Senayan pulled him.' (Teng 2009:832)

b. Tu=kezeng-aw (pro) **kan** Senayan. [Nanwang Puyuma]
3.CM1-pull-PV (3SG.PIV) **PN.CM1** S.
'Senayan pulled him.' (Teng 2009:832)

c. Me-na'u=ku **kan** Senayan. [Nanwang Puyuma]
AV-see=1sg.piv **PN.CM2** S.
'I saw Senayan.'

(19) Tagalog

a. Bi-bilih-in **ni** **Ivan** ang kendi.
CONT-buy-PV **PN.CM1** **Ivan** PIV candy
'Ivan/the woman will buy the candy.'

a. Bi-bilih-in **ng** **babae** ang kendi.[13]
CONT-buy-PV **CM1** **woman** PIV candy
'The/a woman will buy the candy.' (*ng* as the case-marking for nonpivot agents)

b. B<um>ili ang babae **ng** **kendi**.
<AV>buy PIV woman **INDF.CM2** **candy**
'The woman bought the candy.' (*ng* as the case-marking for nonpivot themes)

One other recurrent decay in Malayo-Polynesian is the loss of overt morphological marking for the pivot phrase, where pivothood is indicated by word order (e.g., clause-final). Consider (20)-(21): pivothood is marked both by word order and overt and obligatory pivot-marking in the Formosan language Atayal, while it is indicated only by word order in Malagasy. This is found in almost every non-Philippine-type language of the western Indonesia region as well as Chamorro.

(20) Atayal (Huang 2001:64)
Na-niq-un=mu **ku** **siyam**.
RED-eat-PV.IND=1SG.CM1 **PIV** **pork**
'I will eat the pork.'

(21) Malagasy (Pearson 2005:390)
Novonoin' ny mpamboly tamin' ny antsy **ny** **akoho**.
PST.PV.kill DET farmer PST.with DET knife **DET** **chicken**
'The farmer killed the chicken with the knife.'

It is also common for the three-way case inflection distinguishing between singular personal name, plural personal name, and common nouns to be lost. Such changes are commonly observed in Formosan and observed also in a subset of Malayo-Polynesian languages. See Blust (2015) for an overview. In Bonggi (a Philippine-type language of northern Borneo), for example, common nouns do not receive case-marking and personal nouns distinguish only pivot from nonpivot marking, as in (22).

(22) Bonggi (Boutin 2002:214)
Si Mual <in>ng-bori siidn ny ama? di ny Umal
PN.NOM M. <RLS>AV-give money PN father to.DAT PN U.
'Mual gave father's money to Umal.'

Finally, a major feature of the non-Philippine-type languages of the western Indonesia region is the complete loss of overt case-marking. This development is often accompanied by the shift to SVO word order. One apparent exception is Tukang Besi, which still exhibits a two-way case distinction (Donohue 1999). However, this two-way contrast appears to be marked with innovative case markers and not retentions.

4 Evolution of clitic mobility

As noted in (6), one other key feature of Philippine-type syntax is the use of pronominal series that index the person and number features of pivots and nonpivot subjects (i.e., CM1-marked phrases, the so-called genitives), as in (23).[14]

(23) Kavalan (Yeh & Huang 2009)
Pa-paz-an=**na**=ti=**iku** matiw sa Taipak k<m>ilim tu kaput.
CAUS-often-PV=**3.CM1**=PFV=**1SG.PIV** AV.go LOC Taipei <AV>look.for CM2 friend
'He often lets me go to Taipei to look for friends.'

These pronominal series are conventionally analyzed as clitic pronouns, varying across languages in their realization as proclitics or enclitics and the presence or absence of clitic doubling (Billings & Kaufman 2004; Ross 2015). In some languages, the two series surface as a single portmanteau clitic attached to verbs, as in (24a-b).

(24) a. Seli=**ne** nitang tau ing bale. [Kapampangan]
buy.PV=**3SG.PIV+3SG.CM1** that.CM1-LK man PIV house
'That man bought the house.' (Kitano 2008:90)
b. Gisu=**saku** biq-un lala patas. [Seediq]
PRG=**GEN/CM1.2SG+PIV.1SG** give-PV many book
'You are giving me many books.' (Tsukida 2015:303)

In higher-order Philippine-type languages, these pronominal series obligatorily surface on the highest verbal head per finite clause. This process has traditionally been referred to as 'clitic climbing' (although not necessarily involving an instance of climbing). (See Billings & Kaufman 2004; Ross 2015 for an overview and Kaufman (2009) and Li (2010) for a detailed look at Tagalog and Bunun.) The host of the clitic can be a negator, an auxiliary, an adverb, or a lexical verb.[15] Consider the examples from Seediq and Kapampangan in (25).

(25) a. Wada=**ku=na** bbe-un**(=*ku=na)** na Pawan ka yaku.
PST=**1SG.PIV=3SG.CM1** hit-PV**(*=3SG.CM1)** CM1 P. PIV 1SG
'Pawan hit me.' [Seediq]
b. E=**ya** masanting**(*=ya)** ing igu.
NEG=**3SG.PIV** AV.pretty**(*=3SG.PIV)** PIV rattan.basket
'The rattan basket is not pretty.' (Gonzalez 1981:161) [Kapampangan]

Unlike this strict pattern, clitic mobility is an area of considerable diversity in the non-Philippine-type languages of the western Indonesia region. In many of these languages, not only has clitic mobility been lost, but also clitic series are limited to nonpivot actors in UV constructions. That is, clitics that lack mobility must be adjacent to the verb, as either a proclitic or an enclitic, as we saw in (3) previously. This is considered a prototypical feature of so-called Indonesian-type languages. However, in some non-Philippine-type languages of Borneo and Sulawesi, we see a split pattern: pronominal clitic pivots in intransitive and AV constructions appear to be second position clitics, while nonpivot actor arguments in UV constructions must be adjacent to the verb (see Kaufman 2008 for discussion of clitic patterns in South Sulawesi). Consider the cases in Kadorih in (26): In (a) and (b) the clitic attaches to a negator and sentence adverb, respectively, and in (c) it encliticizes to the verb. In Embaloh, a Tamanic

language of west Kalimantan that has been described as possessing an ergative-absolutive system, absolutive pronouns are mobile while ergative pronouns must be prefixed to the verb (Adelaar 1995).

(26) Kadorih (Inagaki 2013)
a. ahku eam=ku ngoni-u.
1SG NEG=1SG.A bring-3P
'I will not bring it.' (50)
a. noin=ku nguan eku aro bara emu=tuh eku=tuh.
later=1SG.A make mine much from yours=DEM mine=DEM
'Later, I will maximize mine (=my gathering) more than yours, mine.' (53)
a. kolop duo=dih ohpah p<an>ahpui=ku.
tortoise two=ANAPH run.out <UV>burn=1SG
'The two tortoises, I had finished roasting them.' (60)

Perhaps the most striking case is found in Sasak, where voice morphology is at best limited in some dialects and all but lost in others (as in the case of Ampenan Sasak discussed in the section 3.2). Despite such an advanced decay of the voice system, Sasak maintains second position clitics in intransitive as well as actor- and undergoer-oriented transitive constructions. These clitics always express the actor and can attach to the verb (27a), aspectual markers (27b), and other adverbs (27c).

(27) Ampenan Sask (Khairunnisa 2022)
a. Herjan sorong=ku.
H. push=1 SG
'I push Herjan.'
b. wah=ku sorong=mèq
PFV=1SG push=2SG.M
'I pushed you.'
c. maéh póq=ku gitaq-an,
PART then=1SG see-CAUS
'Come, then I showed (her).'

5 Evolution of extraction asymmetry

We turn now to one other core feature of Philippine-type voice, which constrains the verbal morphology used in relative clauses (2). While this constraint remains stable in the majority of western Austronesian languages, two types of changes have also been observed.

5.1 Flexibility in nonpivot agent extraction

Recent work has reported loosening of the 'pivot-only' constraint in some varieties of Manila Tagalog (Tanaka 2016; Bondoc 2018; Guevara 2020) and Cebuano (Bondoc 2018), where nonpivot agents may extract from PV-marked relative clauses, resulting in a mismatch between voice and case. Consider the following examples from three Philippine languages. Example (28a) shows the 'pivot-only' constraint remains intact in Blaan, while (28b-c) demonstrate the loss of the same constraint in Tagalog and Cebuano, where nonpivot agents may relativize.

(28) a. *lagi i [t<n>agah ___ i nalaf] [Blaan]
man LK [<PV.PFV>cook ___ PIVOT fish]
(intended: 'the man who cooked fish')

b. lalaki na [ni-luto ___ ang kanin] [Tagalog]
man LK [PV.PFV-cook ___ PIVOT rice]
'the man who cooked rice.'

c. lalaki nga [gi-luto ___ ang kan-on sa kulon] [Cebuano]
man LK [PV.PFV-cook ___ PIVOT rice LOC pot]
'the man who cooked rice in the pot.' (Bondoc 2018:20, 26)

5.2 Flexibility in nonpivot themes extraction

Across the non-Philippine-type languages of the western Indonesia region, pivot-only extraction constraints are common, but there are at least two exceptions for nonpivot undergoers. In some Malay/Indonesian dialects, it is possible to extract nonpivot undergoer arguments in relative clauses (see e.g., Cole & Hermon 2005; Tjung 2006). This is only possible when the verb is bare; if there is an overt AV affix, extraction is not possible. A second exception is Besemah, a Malayic language of Sumatra, where it is possible for undergoers in AV constructions to be extracted, even when it has an AV prefix, as in (29) (see McDonnell 2016).

(29) Besemah (McDonnell 2016:171)
teghung [mang Sarkani m-beli __tu] la di-gulai-ka=nye
eggplant uncle S. AV-buy that PFV UV-cook-APPL=3
'She cooked the eggplant that uncle Sarkani bought.'

Note, additionally, that while the majority of relative clauses in western Austronesian languages are introduced with a linker or relativizer, Besemah differs from these languages in allowing the relativizer to be optional. Such flexibility may suggest that these constructions are not true relative clauses (see McDonnell 2020 for an alternative analysis of this construction).

6 Conclusion

Although much recent work has reported various typological discrepancies among western Austronesian languages, a survey of major patterns of changes remains lacking. In this paper, we have outlined some evolutionary pathways of the key morphosyntactic features observed in this region. Particular attention was paid to the evolution of the western Austronesian voice systems in space and time, including the change in voice distinctions, mood inflections, and the case system, as well as two other typological traits associated with this voice system: the pronominal clitic system and a 'subject-only'-like extraction constraint. Two important generalizations from this survey are (a) the types of changes in both Philippine-type and non-Philippine-type languages are not as distinct as commonly assumed, and (b) non-Philippine-type languages of the western Indonesian region do not form a coherent group but show recurrent patterns that appear to be the result of independent parallel innovations and language contact. Despite this, these languages still display core features of Philippine-type syntax. Future investigation on major directionality in the change of western Austronesian syntax would shed more light on the degree of variation and uniformity in the syntax of these languages.

Notes

1 Authors are listed in reverse alphabetical order. McDonnell was primarily responsible for the languages of western Indonesia region, and Chen was primarily responsible for the analysis of Philippine-type languages. Each author equally contributed to the writing of the chapter. Both authors would like to thank Daniel Kaufman for helpful comments and feedback. All errors are our own. McDonnell would like to acknowledge Johan Safri, Wawan Sahrozi, and Anton Supriyadi, all of whom are collaborating on the documentation and description of Nasal. He is also grateful to his research counterpart in Indonesia, Yanti (Atma Jaya Catholic University of Indonesia), and to the Ministry of Research and Technology in Indonesia for allowing him to conduct research on Nasal. Discussion of the Nasal data is based upon work supported by the National Science Foundation under Grant BCS-1911641. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation. Chen would like to thank Atrung Kagi, Dakis Paiwan, Ivan Bondoc, and Kristina Gallego for sharing their language. Part of the Formosan data presented in this paper is based upon fieldwork supported by the Royal Society of New Zealand under a Marsden Grant #MFP-20-VUW-021. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the Royal Society of New Zealand.

2 The Nasal examples come from McDonnell's field notes, while all others come from Chen's field notes on Tagalog and Formosan languages. Abbreviations in this chapter are as follows: 1: first person; 2: second person; 3: third person; A: actor in a transitive clause; ANAPH: anaphora; APPL: applicative; AV: actor voice; CAUS: causative; CM: case marker; CMPL: completive; COMP: complementizer; CONT: continuative; DEF: definite; GEN: genitive; INDF: indefinite; IPFV: imperfective; INTJ: interjection; LOC: locative; LK: linker; M: masculine; NOM: nominative; P: undergoer in a transitive clause; PART: particle; PFV: perfective; PL: plural; PN: personal name marker; pro: null pronoun; PV: patient voice; PST: past; SG: singular; UV: undergoer voice.

3 A recent subgrouping proposal suggests that Malayo-Polynesian and East Formosan are two secondary subgroups under a larger primary branch. In this view, the Austronesian family consists of only nine primary branches, all of which are located in the homeland. See Chen et al. (to appear) for details.

4 The eight traits outlined here expand on Erlewine et al.'s (2017) definition of Austronesian-type voice and Himmelmann's (2005) generalization of three common typological traits of Philippine-type languages As mentioned earlier, we aim to examine the evolution of Austronesian syntax from "the top of the tree".

5 For example, PV morphology may target pivots that are (i) theme in simple transitives, (ii) causee in causatives, (iii) recipient in DOCs, or (iv) controllee in control constructions. CV morphology may target pivots that are core arguments low on the relational hierarchy (e.g., theme in causatives, ditransitive, or control constructions) or non-locative obliques. See Rackowski (2002) and Chen (2017) for a focused discussion for Tagalog and Formosan languages.

6 This generalization applies to Philippine-type languages spoken in the Austronesian homeland, Taiwan. Many Philippine languages have developed innovative voice-marking patterns in infinitives (see, e.g., Shibatani 1988; Landau 2013). We do not address them here as these patterns are attested only in a single branch (Malayo-Polynesian) and are very likely to be secondary developments.

7 This paradigm presents the Philippine-type voice system reconstructable to the earliest common ancestor of Philippine-type languages. This is argued to be Proto-Austronesian in Blust and Chen (2017) and Proto-Nuclear Austronesian in Ross (2009, 2012). See Chen (2017) for a review of these two approaches.

8 This pattern is seen in both Formosan and conservative Philippine languages. See, for example, homophonous object-instrument marking in Cebuano (Tanangkingsing 2009) and Subanon (Estioca 2020). On the other hand, more innovative Formosan languages like Thao (Wang 2004:127–128) have also developed specific prepositions for introducing non-core obliques.

9 A colleague reports that Grade III morphology *-i* is still used in southern Tagalog (Gallego pers. comm.). Lobel (2013:53) reports the same observation.

10 Blust and Chen (2017) and Chen (2017) present specific arguments that the absence of Grade I morphology in these languages' root clauses was an outcome of extensive loss. See, however, Ross (2009, 2012) and Aldridge (2016) for an alternative view.

11 In some of these languages there are other valency changing voice constructions, most commonly a passive, which may be expressed by the same form as the UV prefix, a separate prefix, or even a

separate word in a periphrastic passive. Less commonly, these languages have a separate antipassive construction. See Kroeger and Riesberg (forthcoming) for a detailed discussion of these patterns.

12 Mortensen (2021) refers to this third voice as Instrumental Voice, which is analogous to our CV. Note, however, that this voice prefix is innovative in Lun Bawang and not a reflex of the PAn CV prefix *Si/*Sa-.

13 Given the syncretism discussed here, we gloss *ng* as CM1 when it marks nonpivot agents and the same marking as INDF.CM2 when it marks nonpivot themes throughout this paper. The fact that *ng* does not entail indefiniteness in the former use but is associated with indefiniteness as a theme-marker (see, e.g., Collins 2017) potentially suggests that the two uses of this form do not derive from a single source.

14 A (nonpivot) object series is less common but attested in Formosan. See Li (2019) for data from Bunun.

15 However, variation exists in whether it can appear on negators and higher functional head. See relevant data in Yeh and Huang (2009).

References

Adelaar, K. Alexander. 1995. Problems of definiteness and ergativity in Embaloh. *Oceanic Linguistics* 34(2): 375–409.

Aldridge, Edith. 2016. Ergativity from subjunctive in Austronesian languages. *Language and Linguistics* 17(1): 27–62.

Arka, I. Wayan. 2003. Voice systems in the Austronesian languages of Nusantara: Typology, symmetricality and undergoer orientation. *Linguistik Indonesia* 21(1): 113–139.

Arka, I. Wayan. 2009. On the zero (voice) prefix and bare verbs in Austronesian languages of Nusa Tenggara, Indonesia. In Bethwyn Evans (ed.), *In Discovering History Through Language: Papers in Honour of Malcolm Ross*, 247–270. Canberra: Pacific Linguistics.

Bellwood, Peter. 1984–85. A hypothesis for Austronesian origins. *Asian Perspectives* 26: 107–117.

Bellwood, Peter. 1995. Austronesian prehistory in Southeast Asia: Homeland, expansion and transformation. In Peter Bellwood et al. (eds.), *The Austronesians*, 96–106. Canberra: The Department of Anthropology, Research School of Pacific and Asian Studies, The Australian National University.

Bellwood, Peter. 2017. *First Islanders: Prehistory and Human Migration in Island Southeast Asia*. Hoboken: John Wiley & Sons.

Berg, René van den, and Robert L. Busenitz. 2012. *A Grammar of Balantak, a Language of Eastern Sulawesi* (SIL E-Books 40). SIL.

Billings, Loren, and Daniel Kaufman. 2004. Towards a typology of Austronesian pronominal clisis. *ZAS Papers in Linguistics* 34: 15–29.

Blust, Robert. 1984–85. The Austronesian homeland: A linguistic perspective. *Asian Perspectives* 26: 45–67.

Blust, Robert. 1999. Subgrouping, circularity and extinction: Some issues in Austronesian comparative linguistics. In Elizabeth Zeitoun and Paul Jen-kuei Li (eds.), *Selected Papers from the Eighth International Conference on Austronesian Linguistics*, 31–94. Taipei: Institute of Linguistics, Academia Sinica.

Blust, Robert. 2013[2009]. *The Austronesian Languages* (2nd ed.). Canberra: Pacific Linguistics.

Blust, Robert. 2015. The case-markers of Proto-Austronesian. *Oceanic Linguistics* 54(2): 436–491.

Blust, Robert. 2019. The Austronesian homeland and dispersal. *Annual Review of Linguistics* 5: 417–434.

Blust, Robert, and Victoria Chen. 2017. The pitfalls of negative evidence: 'Ergative Austronesian', 'Nuclear Austronesian' and their progeny. *Language and Linguistics* 18(4): 577–621.

Bondoc, Ivan. 2018. Revisiting relativization asymmetries in Philippine-type symmetrical voice languages. *Working Paper in Linguistics* 49(3). University of Hawai'i at Mānoa.

Boutin, Michael E. 2002. Nominative and genitive case alternations in Bonggi. In Fay Wouk and Malcolm Ross (eds.), *The History and Typology of Western Austronesian Voice Systems*, 209–240. Canberra: Pacific Linguistics.

Chang, Anna Hsiou-chuan. 2006. *A Reference Grammar of Paiwan*. PhD dissertation, Australian National University.

Chang, Henry Yung-li. 2009. Adverbial verbs and adverbial compounds in Tsou: A syntactic analysis. *Oceanic Linguistics* 48(2): 439–476.

Chang, Henry Yung-li. 2017. The AV-only restriction and locality in Formosan languages. *Tsing Hua Journal of Chinese Studies* 47(2): 231–254.
Chang, Henry Yung-li. To appear. SVCs and other complex constructions in Formosan languages. In P. Li et al. (eds.), *Handbook of Formosan Languages*. Boston, MA: Brill.
Chen, Cheng-fu. 2005. Object voice and nominalization in Rukai. In J. Heinz and D. Ntelitheos (eds.), *Proceedings of the Twelfth Annual Conference of the Austronesian Formal Linguistics Association (AFLA XII): 35-47*. http://phonetics.linguistics.ucla.edu/wpl/issues/wpl12/wpl12.htm
Chen, Victoria. 2017. *A Reexamination of the Philippine-type Voice System and Its Implications for Austronesian Primary-level Subgrouping*. PhD dissertation, University of Hawai'i at Manoa.
Chen, Victoria, and Shin Fukuda. 2017. Re-labeling "Ergative": Evidence from Formosan. In *Proceedings of the 23rd Austronesian Formal Linguistic Association (AFLA 23)*, 50–65. Canberra: Asia-Pacific Linguistics.
Chen, Victoria, Jonathan Kuo, Kristina Galego, and Isaac Stead. To appear. Is Malayo-Polynesian a primary branch of Austronesian? A review from morphosyntax. *Diachronica*.
Chen, Victoria, and Bradley McDonnell. 2019. Western Austronesian voice. *Annual Review of Linguistics* 5: 173–195.
Chung, Sandra. 1994. Wh-agreement and "referentiality" in Chamorro. *Linguistic Inquiry* 25(1): 1–44.
Chung, Sandra. 2004. Restructuring and verb-initial order in Chamorro. *Syntax* 7: 199–233.
Cole, Peter, and Gabriella Hermon. 2005. Subject and non-subject relativization in Indonesian. *Journal of East Asian Linguistics* 14(1): 59–88.
Cole, Peter, Gabriella Hermon, and Yanti. 2008. Voice in Malay/Indonesian. *Lingua* 118(10): 1500–1553. https://doi.org/10.1016/j.lingua.2007.08.008.
Collins, James. 2017. *Structure Sensitive Interpretation: A Case Study in Tagalog*. PhD dissertation, Stanford University.
De Busser, Rik. 2009. *Towards a Grammar of Takivatan: Selected Topics*. PhD dissertation, La Trobe University.
Donohue, Mark. 1999. *A Grammar of Tukang Besi.* Amsterdam: Mouton de Gruyter.
Donohue, Mark. 2002. Voice in Tukang Besi and the Austronesian focus system. In Fay Wouk and Malcolm Ross (eds.), *The History and Typology of Western Austronesian Voice Systems*, 81–100. Canberra: Pacific Linguistics.
Donohue, Mark, and Anna Maclachlan. 1999. What agreement in Chamorro? In C. Smallwood and C. Kitto (eds.), *Proceedings of AFLA VI*, 121–132. Toronto: Working Papers in Linguistics University of Toronto.
Eades, Domenyk. 2005. *A Grammar of Gayo: A Language of Aceh, Sumatra* (Pacific Linguistics). Vol. 567. Canberra: Research School of Pacific and Asian Studies, Australian National University.
Erlewine, Michael, Theodore Levin, and Coppe van Urk. 2017. Ergativity and Austronesian-type voice systems. In Jessica Coon, Diane Massam, and Lisa Travis (eds.), *Oxford Handbook of Ergativity*, 373–396. Oxford: Oxford University Press.
Estioca, Sharon. 2020. *A Grammar of Western Subanon*. PhD dissertation: University of Hawai'i at Mānoa.
Ferrell, Raleigh. 1969. *Taiwan Aboriginal Groups: Problems in Cultural and Linguistic Classification. Institute of Ethnology, Academia Sinica, Monograph No. 17*. Taipei: Academia Sinica.
Foley, William. 2008. The place of Philippine languages in a typology of voice systems. In P. Austin and S. Musgrave (eds.), *Voice and Grammatical Relations in Austronesian Languages*, 22–44. Stanford: CSLI Publications.
Gil, David. 2020. Dual heritage: The story of Riau Indonesian and its relatives. In David Gil and Antoinette Schapper (eds.), *Typological Studies in Language*, vol. 129, 119–212. Amsterdam: John Benjamins Publishing Company. https://doi.org/10.1075/tsl.129.03gil.
Gonzalez, Andrew. 1981. *Pampangan: Towards a Meaning-based Description*. PhD dissertation, The Australian National University.
Guevara, Jed Sam Pizarro. 2020. *When Human Universal Meets Language Specific*. PhD dissertation, University of California, Santa Cruz.
Guilfoyle, Eithne, Henrietta Hung, and Lisa Travis. 1992. Spec of IP and Spec of VP: Two subjects in Austronesian languages. *Natural Language and Linguistic Theory* 10: 375–414.
Hemmings, Charlotte. 2015. Kelabit voice: Philippine-type, Indonesian-type or something a bit different? *Transactions of the Philological Society* 113(3): 383–405. https://doi.org/10.1111/1467-968X.12071.
Himmelmann, Nikolaus. 2002a. Voice in Western Austronesian: An update. In F. Wouk and M. Ross (eds.), *The History and Typology of Western Austronesian Voice Systems*, 7–15. Canberra: Pacific Linguistics.

Himmelmann, Nikolaus. 2002b. Voice in two northern Sulawesi languages. In Fay Wouk and Malcolm Ross (eds.), *The History and Typology of Western Austronesian Voice Systems*, 123–142. Canberra: Pacific Linguistics.

Himmelmann, Nikolaus P. 2005. The Austronesian languages of Asia and Madagascar: Typological characteristics. In K. Alexander Adelaar & Nikolaus P. Himmelmann (eds.), *The Austronesian Languages of Asia and Madagascar* (Routledge Family Language Series), 110–181. New York: Routledge.

Holmer, Arthur. 1999. Structural implications of the function of Instrument Focus in Seediq. In P. Li and E. Zeitoun (eds.), *Selected Papers from 8ICAL*, 423–454. Taipei: Institute of Linguistics, Academia Sinica.

Huang, Lillian Mei-jin. 2001. Focus system of Mayrinax Atayal: A syntactic, semantic and pragmatic perspective. *Journal of Taiwan Normal University: Humanities & Social Science* 46: 51–69.

Inagaki, Kazuya. 2013. Argument encoding and voice in Kadorih of Central Kalimantan. In Alexander Adelaar (ed.), *Voice variation in Austronesian languages of Indonesia*, NUSA 54. 47–65. http://hdl.handle.net/10108/71805.

Kaufman, Daniel. 2008. South Sulawesi pronominal clitics: Form, function and position. *Studies in Philippine Languages and Cultures* 17: 13–65.

Kaufman, Daniel. 2009. Austronesian typology and the nominalist hypothesis. In Alexander Adelaar and Andrew Pawley (eds.), *Austronesian Historical Linguistics and Culture History: A Festschrift for Robert Blust*, 179–226. Canberra: ANU Press.

Khairunnisa. In prep. *Diathesis, grammatical relations, and clitics in Ampenan Sasak*. PhD dissertation, University of Hawai‘i at Mānoa.

Kitano, Hiroaki. 2008. Transitivity and pronominal clitic order in Kapampangan. *Studies in Philippine Languages and Cultures* 17: 88–97.

Kroeger, Paul, and Sonja Riesberg. forthcoming. Voice and transitivity. In Alexander Adelaar and Antoinette Schapper (eds.), *The Oxford Guide to the Malayo-Polynesian Languages of South East Asia*. Oxford and New York: Oxford University Press.

Kuo, Cheng-chuen. 2015. *Argument alternation and argument structure in symmetrical voice languages: A case study of transfer verbs in Amis, Puyuma, and Seediq*. PhD dissertation, University of Hawai‘i at Manoa.

Landau, Idan. 2013. *Control in generative grammar: A research companion*. New York: Cambridge University Press.

Li, Li-ying. 2010. *Clitics in Nantou Isbukun Bunun (Austronesian)*. Master’s thesis, National Chi Nan University.

Li, Li-ying. 2019. Verb-adjacent clitic climbing and restructuring in Isbukun Bunun. *Oceanic Linguistics* 56(1): 1–21.

Li, Paul Jen-kuei, and Shigeru Tsuchida. 2006. *Kavalan Dictionary.* Taipei: Institute of Linguistics, Academia Sinica.

Lobel, Jason. 2013. *Philippine and North Bornean Languages: Issues in Description, Subgrouping, and Reconstruction*. PhD dissertation, University of Hawai’i of Mānoa.

McDonnell, Bradley. 2016. *Symmetrical Voice Constructions in Besemah: A Usage-based Approach*. Dissertation, University of California, Santa Barbara.

McDonnell, Bradley. 2020. The pragmatics of “light nouns” in Besemah. In Tsuyoshi Ono and Sandra A. Thompson (eds.), *The ‘Noun Phrase’ Across Languages: An Emergent Unit in Interaction* (Typological Studies in Language 128), 237–270. Amsterdam: John Benjamins Publishing Company. https://benjamins.com/catalog/tsl.128.10mcd.

McGinn, Richard. n.d. *The Rejang Language*. Unpublished Manuscript.

McWhorter, John H. 2011. *Linguistic Simplicity and Complexity: Why Do Languages Undress*? Berlin, New York: De Gruyter Mouton. https://doi.org/10.1515/9781934078402.

Mead, David. 2002. Proto Celebic focus revisited. In Fay Wouk and Malcolm Ross (eds.), *The History and Typology of Western Austronesian Voice Systems*, 143–177. Canberra: Pacific Linguistics.

Miller, Mark. 2007. *A Grammar of West Coast Bajau*. Arlington: The University of Texas at Arlington PhD Dissertation.

Mortensen, Christian. 2021. *The Kemaloh Lun Bawang Language of Borneo*. Honolulu: University of Hawai‘i at Mānoa PhD Dissertation.

Pearson, Matthew. 2005. The Malagasy subject/topic as an A’-element. *Natural Language & Linguistic Theory* 23: 381–457.

Rackowski, Andrea. 2002. *The structure of tagalog: Specificity, voice, and the distribution of arguments*. Cambridge: Massachusetts Institute of Technology PhD Dissertation.

Rackowski, Andrea, and Norvin Richards. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36(4): 565–599.

Rau, Victoria, and Maa-neu Dong. 2006. *Yami Texts with Reference Grammar and Dictionary*. Taipei: Academia Sinica.

Ross, Malcolm. 1994. Some current issues in Austronesian linguistics. In Darrell T. Tryon (ed.), *Comparative Austronesian Dictionary*, 45–120. Berlin: Mouton de Gruyter.

Ross, Malcolm. 2002. The history of western Austronesian voice and voice-marking. In Fay Wouk and Malcolm Ross (eds.), *The History and Typology of Western Austronesian Voice Systems*, 17–62. Canberra: Pacific Linguistics.

Ross, Malcolm. 2006. Reconstructing the case-marking and personal pronoun systems of Proto Austronesian. In H. Chang, L. Huang, and D. Ho (eds.), *Streams Converging Into an Ocean: Festschrift in Honor of Professor Paul Jen-kuei Li on His 70th Birthday*, 521–563. Taipei: Institute of Linguistics, Academia Sinica.

Ross, Malcolm. 2009. Proto Austronesian verbal morphology: A reappraisal. In K. Alexander Adelaar and Andrew Pawley (eds.), *Austronesian Historical Linguistics and Culture History: A Festschrift for Robert Blust*, 295–326. Canberra: Pacific Linguistics.

Ross, Malcolm. 2012. In Defense of Nuclear Austronesian (and Against Tsouic). *Language and Linguistics* 13(6): 1253–1330.

Ross, Malcolm. 2015. The argument indexing of early Austronesian verbs. In Dag T.T. Haug (ed.), Historical Linguistics 2013: Selected Papers from the 21st International Conference on Historical Linguistics, Oslo, 5–9 August 2013. Vol. 334, 257–280. Amsterdam: John Benjamins Publishing Company.

Rubino, Carl Ralph Galvez. 1997. *A Reference Grammar of Ilocano*. PhD dissertation. University of California, Santa Barbara.

Shibatani, Masayoshi. 1988. Voice in Philippine languages. In M. Shibatani (ed.), *Passive and Voice*, 85–142. Amsterdam: John Benjamins.

Shibatani, Masayoshi. 2008. Relativization in Sasak and Sumbawa, Eastern Indonesia. *Language and Linguistics* 9(4): 865–916.

Smith, Alexander. 2017. The Western Malayo-Polynesian problem. *Oceanic Linguistics* 56(2): 435–490.

Starosta, Stanley, Andrew Pawley, and Lawrence Reid. 1982. The evolution of focus in Austronesian. In A. Halim, L. Carrington, and S. Wurm (eds.), *Papers from the Third International Conference on Austronesian Linguistics*, Vol. 2, 145–170. Canberra: Pacific Linguistics. Reprinted in E. Zeitoun, (ed.) 2009. *Formosan Linguistics: Stanley Starosta's Contribution*s, 297–328.

Tanaka, Nozomi. 2016. *An Asymmetry in the Acquisition of Tagalog Relative Clauses*. PhD dissertation, University of Hawaii at Manoa.

Tanangkingsing, Michael. 2009. *A Functional Reference Grammar on Cebuano*. PhD dissertation, National Taiwan University.

Teng, Stacy Fang-ching. 2009. Case Syncretism in Puyuma. *Language and Linguistics* 10(4): 819–844.

Tjung, Yassir. 2006. *The formation of relative clauses in Jakarta Indonesian: A subject-object asymmetry*. Newark: University of Delaware PhD Dissertation.

Tsukida, Noami. 2015. Ditransitive alignment and causative in Seediq. In E. Zeitoun, S. Teng, and J. Wu (eds.), *New advances in Formosan linguistics*, 223–251. Canberra: Asia Pacific Linguistics.

Utsumi, Atsuko. 2021. Transitional Features between Philippine-type and Indonesian-type languages. *Talk Presented at the 15th International Conference on Austronesian Linguistics (ICAL-15)*. Olomouc: June 28–July 1.

van den Berg, René. 2004. Some notes on the origin of Malay di-. *Bijdragen tot de taal-, land- en volkenkunde / Journal of the Humanities and Social Sciences of Southeast Asia* 160(4): 532–554. https://doi.org/10.1163/22134379-90003722.

Wang, Shan-shan. 2004. *An Ergative View of Thao Syntax*. PhD dissertation, University of Hawai'i at Manoa.

Wolff, John U. 1973. Verbal inflection in Proto-Austronesian. In A. Gonzalez (ed.), *Parangal Kay Cecilio Lopez: Essays in Honor of Cecilio Lopez on His Seventy-fifth Birthday*, 71–91. Special Monograph Issue no. 4. Quezon City: Linguistic Society of the Philippines.

Wolff, John U. 1996. The development of the passive verb with pronominal prefix in Western Austronesian languages. In *Reconstruction, Classification, Description: Festschrift in Honor of Isidore Dyen*, 15–40. Hamburg: Abera Verlag.

Wu, Chun-ming. 2012. *The Syntax of Linking Constructions in Mayrinax Atayal and Sinvaudjan Paiwan*. PhD dissertation, National Tsing-hua University.
Wu, Jing-lan. 2006. *Verb Classification, Case Marking and Grammatical Relations in Amis*. PhD dissertation, State University of New York at Buffalo.
Wurmbrand, Susi. 2014. Restructuring across the world. In L. Veselovská and M. Janebová (eds.), *Complex Visibles Out There. Proceedings of the Olomouc Linguistics Colloquium 2014: Language Use and Linguistic Structure*, 275–294. Olomouc: Palacký University.
Yamada, Yukihiro. 2014. *A Grammar of the Itbayat Language of the Philippines*. Himeji, Japan.
Yeh, Maya Yuting Yeh, and Shuanfan Huang. 2009. A study of triple verb serialization in four Formosan languages. *Oceanic Linguistics* 48(1): 78–110.