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Voice and Transitivity

- PRE-PRINT VERSION -

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47.1 Introduction

This chapter explores the remarkable variety of voice systems attested -among the Malayo-Polynesian languages of Southeast Asia. We understand the term VOICE to refer to a productive alternation that changes the identity of the grammatical subject but does not, in general, change the basic meaning of the clause, including the number and semantic roles of the arguments. A very similar definition is adopted by Shibatani (1988: 3): “Voice is ... a mechanism that selects a grammatically prominent syntactic constituent — subject — from the underlying semantic functions (... thematic roles) of a clause.”¹

Identifying the semantic role of each argument (who did what to whom?) is critical for accurate communication of the speaker’s intended meaning. Cross-linguistically three basic coding devices are available for indicating the role of each argument: case marking, agreement, and word order. However, apart from the semantically restricted case marking of oblique arguments in some languages, these three devices generally encode not semantic role but grammatical relation. Semantic roles are indicated indirectly, by way of the association (or “linking”) of semantic roles to grammatical relations. Voice, as Shibatani states, determines the semantic role associated with one particular grammatical relation, namely the subject.²

Partial correlations are also well documented between grammatical relations and discourse functions, in particular the wide-spread correlation between subject and topic. However, these correlations exhibit more language-specific variation than is commonly realized. This is true in particular for a number of Malayo-Polynesian languages of Southeast Asia, in which agents are highly topical even though they are frequently not selected as subject. In this chapter we focus on grammatical and morphological aspects of Western Austronesian voice systems and, to a lesser extent, applicativization. The interaction of voice and applicativization with the coding devices mentioned above (case marking, agreement, and word order) is an important part of this study.

The most common voice pattern cross-linguistically is the active-passive alternation, followed by the ergative-antipassive alternation.³ Both of these alternations involve the selection of a new subject via the demotion of the basic or underlying subject (agent in the case of the passive, patient in the case of the antipassive). Both passive and antipassive are thus detransitivizing operations, because they reduce the number of core arguments in a basic transitive clause from two to one, changing transitive clauses into intransitive clauses.

Voice is a topic of recurring and on-going controversy in Austronesian linguistics, because a substantial number of Western Austronesian languages exhibit voice alternations

¹ This definition is fairly restrictive as compared to that of Kulikov (2010), who (like a number of other authors) uses the term “voice” to include any change in the mapping from semantic roles to grammatical relations.

² Applicative constructions may determine the semantic role of another grammatical relation, namely the primary object.

³ There is some disagreement as to whether the antipassive counts as a voice alternation under our definition, because the identifying the grammatical subject in ergative languages remains controversial. We follow Doron (2015) in assuming that for at least some ergative languages, the antipassive promotes the agent to surface subject position.

which are not easily analysed as either passive or antipassive. In many of these languages there is little evidence of syntactic demotion or detransitivization; rather, the voice alternation seems to license two (or more) syntactically transitive clause patterns. A voice system of this type can be referred to as non-demoting or SYMMETRICAL.⁴

The concept of non-demoting voice alternations has proved challenging for both formal syntactic theories and typological-descriptive frameworks (see Chen and McDonnell 2019 for a recent overview and for arguments against a valency-changing approach to western Austronesian voice). Our goal in this chapter is not to develop a new analysis for such languages, but rather (i) to describe a representative sample of the Western and Central Malayo-Polynesian voice systems, and (ii) summarize the major analytic approaches that have been proposed for these systems. The crucial empirical questions to be answered will be: (i) What is the grammatical subject for a particular clause type? and (ii) How do we distinguish core arguments from obliques?

The latter question, which is critical to the identification of non-demoting voice alternations, leads us to address certain issues related to syntactic valency, or transitivity. We define a syntactically transitive clause as one that contains two or more CORE (non-oblique) arguments. A significant number of Malayo-Polynesian languages have applicative affixes which increase syntactic transitivity by introducing a new primary object. The existence of applicative affixes is a key diagnostic in the traditional distinction between “Indonesian-type” languages (in which applicatives are distinct from, and co-occur with, voice-marking affixes) vs. “Philippine-type” languages (in which a putative distinction between applicatives and voice-markers remains controversial; see discussion in §47.2.2.3).

The remainder of this chapter is organized as follows. Section 47.2 provides an overview of some foundational issues. We begin by discussing the distinction just mentioned, between “Philippine-type” vs. “Indonesian-type” languages. We then consider in more detail what a symmetrical voice alternation looks like, and what evidence is required to support such an analysis. A defining property of a symmetrical system is that it includes at least two equally basic transitive voices. As noted in the preceding paragraph, we adopt a strictly syntactic definition of transitivity: a clause is transitive if it contains two or more core arguments, and the distinction between core vs. oblique arguments is based on syntactic properties. We then discuss the interaction of applicative affixes, which serve to increase the transitivity of a clause, with voice systems.

Section 47.3 discusses the typologically unique Philippine-type voice pattern and presents a summary of the various analyses that have been proposed to account for its special properties. Section 47.4 discusses the voice systems of two large, central Indonesian islands: Borneo and Sulawesi. In both islands we find Philippine-type systems in the far north and something closer to an “Indonesian-type” in the south, with transitional patterns in between.

Section 47.5 discusses a similar cline along the east-west axis, from the core “Indonesian-type” languages of western Indonesia to the languages of eastern Indonesia where voice is severely reduced or even non-existent. Section 47.6 discusses the voice systems of two languages of Micronesia, Chamorro and Palauan, which preserve some features of Western Malayo-Polynesian voice.

47.2 Typology of Malayo-Polynesian voice systems

47.2.1 Traditional classification

Himmelman (2002a: 8) notes that “it is common in the literature to assume a fairly rough and hardly ever explicitly discussed division of western Austronesian languages into the

⁴ Foley was the first to argue that symmetrical voice languages constitute “a distinct syntactic type” (2008: 42) in addition to accusative and ergative systems (cf. also Foley 1998; Himmelman 2005a).

following two types: Philippine type languages and the rest (occasionally also called Indonesian-type languages).” He describes the most commonly cited criteria for distinguishing these two types as follows (footnotes omitted):

[T]he presence of both pronominal prefixes and applicative suffixes is held to be the crucial characteristic that distinguishes Philippine-type languages from Indonesian-type languages. And while it appears to be true that none of the generally recognised Philippine-type languages exhibits both these features, it is not true that the languages of western Indonesia all exhibit both of them. Thus, for example, there are no pronominal prefixes or proclitics in Balinese...” (Himmelman 2002b: 139)

In later work, Himmelman (2005a: 113) offers the following criteria for identifying Philippine-type languages. On the basis of these criteria, he excludes Malagasy, Chamorro, and a number of other languages which various other authors had previously identified as Philippine-type languages:

Philippine-type languages are symmetrical voice languages which have:

- a) at least two formally and semantically different undergoer voices...;
- b) at least one non-local [i.e. non-locative, PK&SR] phrase marking clitic for nominal expressions...;
- c) pronominal second position clitics.

As detailed descriptions of more languages have become available, it is increasingly clear that many of the Malayo-Polynesian languages of Southeast Asia do not fit particularly well into either of these two classes. For the purposes of the current chapter our primary interest is with the classification of voice systems, rather than languages, but the two issues are closely related. The widely-shared notion of a Philippine-type voice system is useful, if viewed as a prototype concept, even though the exact boundaries of this class are disputed and somewhat vague. The most common basis for identifying a voice system as belonging to this class is the presence of multiple (at least three, but usually four or more) contrastive voice categories. However, the term “Philippine-type” usually also implies something about the special, non-demoting nature of the voice alternation, often indicated (especially in earlier work) by the use of the term “focus” rather than voice (see §47.3.1 below). There is general agreement that such voice systems are found not only in the Philippines but also in certain languages of northeastern Borneo and northern Sulawesi, as well as some Formosan languages.

It is much harder to define an Indonesian-type voice system, for the same reasons that it is difficult to define an Indonesian-type language. As Himmelman (2005a) points out, the presence of applicative suffixes is widely assumed as a defining feature of this class. A number of authors (e.g. Wolff 1996) have observed that Indonesian-type applicative suffixes provide information similar to that provided by Philippine-type voice affixes. This observation has led some authors, e.g. Pawley and Reid (1979) and Starosta, Pawley and Reid (1982), to refer to the Indonesian-type system as “object-focus”, and to the Philippine-type system as “subject-focus”.

Another common assumption has been that Indonesian-type voice systems involve just two distinctive voice categories, in contrast to the richer Philippine-type inventories. However, it appears that languages with a two-way voice contrast plus applicative suffixes are not as common in Western Austronesian as is often assumed. Toba Batak (Schachter 1984), Madurese (Davies 2010), and Sundanese (Kurniawan 2013) seem to be well-documented examples, but a number of other western Indonesian languages actually have three distinct voices, as discussed in the following section. Many languages of central Borneo have a two-way voice contrast but no applicatives. Many eastern Indonesian languages do not

have any voice morphology (Arka & Wouk 2014); some of these have a passive construction marked by word order alone, while others have no voice alternations at all.

While these labels are useful for certain purposes, the simple two-way classification of languages as either Philippine-type or Indonesian-type ignores the striking degree of diversity which is found among western Austronesian voice systems. As we show in the rest of this chapter, the range of voice patterns attested within this single language family is unusually rich and varied. Additional variations will undoubtedly be discovered as more research is devoted to thus far undocumented languages of the region.

47.2.2 Symmetrical voice

As stated above, symmetrical voice alternations involve alternations in the choice of grammatical subject without demoting either the actor or the undergoer to oblique status, producing an opposition between two (or more) transitive clause types. One of the clearest and best-documented examples of symmetrical voice comes from Balinese, as described by Wechsler and Arka (1998) and Arka (2003a). These authors demonstrate that Balinese distinguishes three voice categories: undergoer voice (UV), marked by \emptyset - (see discussion immediately below); actor voice (AV) marked by *N*-; and a true passive construction.

(1) Balinese (high register)

a. *Bawi-ne punika \emptyset -tumbas tiang.*
 pig-DEF that UV-buy 1SG
 ‘I bought the pig.’

b. *Tiang numbas bawi-ne punika.*
 1SG AV:buy pig-DEF that
 ‘I bought the pig.’

c. *Buku-ne ka-ambil (antuk i guru).*
 book-DEF PASS-take by ART teacher

‘The book has been taken (by the teacher).’ (Wechsler & Arka 1998: 388, 429)

A number of authors (e.g., Foley 1998; Himmelmann 2005a; Riesberg 2014) have adopted the position that in a symmetrical voice system, the verb is morphologically marked in all voices, i.e., that there is no unmarked voice category. Under this view, it is not clear that Balinese should be considered a symmetrical voice language, since UV seems to be unmarked. However, Arka (2003a; 2009b) argues that the UV form is zero-marked, and not just a bare stem:

A zero prefix has no phonological material but is considered present on the basis of functional and paradigmatic opposition in a particular grammatical system... The bare form *palu* [(2)b] is used to express the undergoer voice (UV) in Balinese. It can be analysed as having a zero prefix, represented by \emptyset -, on the basis of systematic formal opposition with the other forms in [(2)]. (Arka 2009b: 247)

(2) Balinese

a. *m-(p)alu* (<N-*palu*) ‘AV-collide’

b. *\emptyset -palu* ‘UV-collide’

c. *ka-palu* ‘PASS-collide’

d. *ma-palu* ‘MID-collide’ (Arka 2009b: 247)

The distinction between unmarked vs. zero-marked forms is controversial but not crucial to the central concerns of this chapter. For current purposes, to distinguish symmetrical vs. asymmetrical voice alternations, we will depend primarily on the syntactic properties of the arguments in the different voice constructions. An alternation will be considered to be

symmetrical if the relevant voice categories are all syntactically transitive, but select different arguments as grammatical subject.

In Balinese, the agent is the subject of an AV clause, while the patient is the subject in UV and passive clauses. Evidence for this identification is based on the subjecthood properties listed in (3). Evidence for the claim that both AV and UV are fully transitive comes from the fact that UV actors and AV undergoers share certain properties, listed in (4), which distinguish adjuncts and oblique arguments from core arguments.

(3) Subject properties in Balinese:

- a. Only subjects can precede the verb in canonical, pragmatically unmarked word-order; all other arguments follow the verb.
- b. Only subjects can be relativized using the gap strategy (although possessors of subjects can also be relativized using a resumptive pronoun strategy).
- c. Only subjects can be raised in either the Raising to Subject or Raising to Object constructions.
- d. Only subjects can be “controllees”, i.e., targets of “Equi-NP deletion”.
- e. Among the core (NP) arguments, only subjects can be extraposed to sentence-final position.
- f. Only subjects can occur in the initial focus position marked with *anak*.
- g. Wh- fronting applies only to question words that are subjects; non-subject question words remain *in situ*.

(4) Core-argument properties in Balinese:

- a. Core arguments are expressed as NPs, while oblique arguments are expressed as PPs.
- b. “Floating quantifiers” can only be launched by core arguments.
- c. Core arguments and possessors of core arguments can be topicalized, but obliques and possessors of obliques cannot. (The resumptive pronoun is obligatory when possessors are topicalized.)
- d. Core arguments (but not oblique arguments) can be modified by certain predicative adjuncts, often referred to as “depictive secondary predicates”.⁵
- e. The addressee/agent of an imperative clause must be a core argument. A passive verb may not function as an imperative, unlike Malay/Indonesian where the passive is often used in polite or softened imperatives.

Recent work on Malay/Indonesian syntax (Guilfoyle, Hung & Travis 1992; Arka & Manning 1998/2008; Musgrave 2001; Arka 2003a, 2009b; Cole, Hermon & Yanti 2008) has argued for the same three voice categories as Balinese: a symmetrical alternation between AV and UV, plus a true passive. Similar analyses have been proposed for Acehnese (Legate 2012; 2014) and various Sama-Bajaw languages (Miller 2007; James 2017). Examples from West Coast Bajau are presented in (5):

(5) West Coast Bajau

- a. *iyang=ku masang suu? e kaang*
mother=1SG.GEN AV:turn.on light DEM later
'my mother turned on the light' [AV]

⁵ Depictives, like resultatives, are secondary predicates. They differ from resultatives, in that they denote a state of affairs that holds at the same time as the event denoted by the main predicate. Resultatives, on the other hand, denote a consequence or a result of the event denoted by the main predicate. See (14) for an example of a depictive secondary predicate in Tagalog.

- b. *sapi e pan sembali emma?=ni no*
 cow DEM TOP UV:slaughter father=3SG.GEN FOC
 ‘his father slaughtered the cow’ [UV]
- c. *belunang e pan b<in>uka no ole? anak=ni sioko*
 door DEM TOP <PASS>open FOC PREP child=3SG.GEN oldest
 ‘the door was opened by the oldest child’ [passive] (Miller 2007: 154, 158, 168)

In Totoli (Central Sulawesi) we find another example of symmetrical alternation between actor voice and undergoer voice, but the system is different from Balinese, Indonesian, and West Coast Bajau in two significant ways. First, Totoli has no passive. Second, the voice system is not only *syntactically* symmetrical (valence-preserving), but also *morphologically* symmetrical, since the verb in both constructions carries overt voice marking. The subjecthood of the argument in preverbal position⁶ is confirmed by a number of syntactic properties similar to those listed in (3). The core argument status of AV undergoer and UV actor are demonstrated by the lack of any preposition or special case marking; their fixed, post-verbal position; and their ability to launch floating quantifiers.

(6) Totoli

- a. *I Budi nanako' buki' ana.*⁷
 i Budi **noN**-tako' buki' ana
 HON Budi AV.REAL-climb mountain MED
 ‘Budi climbed that mountain.’
- b. *Buki' ana nitako' i Budi.*
 buki' ana **ni**-tako' i Budi
 mountain MED UV.REAL-climb HON Budi
 ‘Budi climbed that mountain.’

Of course, more familiar, asymmetrical voice systems are also found in Western Malayo-Polynesian languages. Kurniawan (2013) presents a detailed analysis of Sundanese, which he describes as having a simple active-passive voice alternation. He notes, however, that the agentive PP of the Sundanese passive is different in certain respects from its counterpart in English and other European languages. For example, in Sundanese the agentive PP can serve as the antecedent for a reflexive pronoun that functions as the subject of the passive, something that is impossible in English.

Adelaar (1995e) describes an ergative-antipassive alternation in Embaloh, a Tamanic language of north-central Borneo.⁸ In basic verbal clauses, both intransitive subjects (S) and transitive patients or undergoers (P) agree with the absolutive suffix on the verb (cf. (7)a, b). The actor argument (A) in a transitive clause agrees with an ergative prefix (cf. (7)b). Embaloh also has an antipassive construction (cf. (7)c), in which the verb carries special voice morphology (in this case the antipassive prefix *maN-*), the undergoer is demoted to oblique status and marked by a preposition or omitted, and the actor agrees with the absolutive suffix.⁹

⁶ As in many other Austronesian languages, the position of the subject argument is somewhat flexible. It can either occur in sentence initial position, as in (6), or follow the verb-non-subject complex.

⁷ The base form for ‘climb’ and ‘mountain’ is *takol* and *bukil*, but word-final laterals after vowels are regularly replaced by vowel lengthening in Totoli (i.e. *takol* is [tako:]). Elided laterals are indicated by an apostrophe <> in the practical orthography used here. See Himmelmann (1991a) and Bracks (2020) for more on Totoli phonology.

⁸ He also argues that the Tamanic languages are genetically most closely related to Bugis and other languages of southern Sulawesi.

⁹ The antipassive can also take a non-specific undergoer NP.

(7) Embaloh

a. *a-nanjis-ak*

INTR-cry-1SG.ABS

‘I cry.’

- b. *ai si naʔan ku-tiŋkam-ko bea balik ia ʔi-pa-tabeʔ-i-ko*
how not 1SG.ERG-catch-2SG.ABS in.fact then as ERG-CAUS-*tabeʔ*-TR-2SG.ABS
‘Why shouldn’t I catch you, after all your mother brought you into a state of *tabeʔ*!’¹⁰

- c. *da-iko indiʔ baru takir-a unti kurabo suar-u-ʔan,*
EMPH-you.SG this only measure-3SG.GEN banana *kurabo* fang-2SG.GEN-DEF

toʔ manikam-ko namin loʔ-kuʔ!

intend maN:catch-2SG.ABS already PREP-1SG.GEN

‘You on the other hand, with your fangs no bigger than *kurabo* bananas,
you do want to catch me!’ (Adelaar 1995e: 389, 390)

As discussed in §47.4.2 below, antipassive constructions are also reported in a number of Sulawesi languages, including Mori Bawah (Mead 2005), Bugis (Laskowske 2016), Uma (Martens 1988a,d) and Mamuju (Kaufman 2017). However, in at least some of these languages the antipassive is part of a voice system that also includes a symmetrical AV-UV alternation.

47.2.3 Transitivity

As noted in the introduction to this chapter, the question of transitivity is important in two respects when dealing with voice in Malayo-Polynesian languages. First, the question of whether an alternation is to be considered symmetrical or not will depend on whether it involves an opposition between two (or more) transitive clause types. Second, in many Austronesian languages, applicative marking is closely intertwined with voice marking, and distinguishing the two is sometimes not an easy task. We will discuss these two issues in turn.

47.2.3.1 Core arguments vs. obliques

The labels CORE, NON-CORE, and OBLIQUE have been used in slightly different ways in different syntactic frameworks. We follow Musgrave (2001), Arka and Manning (2008), and Arka (2009a; 2017) in distinguishing between CORE ARGUMENTS, OBLIQUE ARGUMENTS, and ADJUNCTS.

Arguments (whether core or oblique) are selected by the verb and assigned a semantic role specified by the verb’s argument structure. They are often (but not always) obligatory. Adjuncts are not selected, and hence are (almost) always optional. Oblique arguments and adjuncts are typically marked by adpositions or semantically restricted case marking, whereas core arguments typically require neither of these. Core arguments are also distinguished from oblique arguments and adjuncts by their syntactic properties. However, the specific properties which are relevant for making this distinction vary from one language to another. We have already mentioned some of the properties that distinguish core arguments from obliques in Balinese (see ex. (4)). Musgrave (2001), Arka and Manning (1998/2008), and Arka (2009a; 2017) discuss similar core argument diagnostics for Indonesian. In a number of languages, however, it has proven difficult to identify such diagnostics, and the core vs. non-core

¹⁰ *tabeʔ* translates as ‘be susceptible to misfortune because of an offence one made against customary law’ (Adelaar, p.c.).

distinction has been based primarily on coding properties, such as word order, verb agreement, case marking, and prepositional marking (or its absence).¹¹

47.2.3.2 Applicatives and voice

As noted above, many “Indonesian-type” languages have applicative affixes, whereas such affixes are (apparently) not found in languages of the Philippine type. These valency-increasing affixes are typically distinct from the voice morphology, and can occur in all voices (actor voice, undergoer voice, and passive) to promote a non-core argument to core status. In (standard) Indonesian, there are two such applicative markers which usually derive transitive verbs from transitive or intransitive bases. The suffix *-kan* marks the primary object as a beneficiary, instrument, causee (as illustrated in (8)b), object of perception, etc., while the suffix *-i* marks the primary object as goal or location, as illustrated in (8)c; it may also have an iterative meaning (Ewing 2005c: 352f).

(8) Indonesian

- a. *Buku saya jatuh.*
book 1SG fall
‘My book fell.’
- b. *Dia men-jatuh-kan buku saya.*
3SG AV-drop-kan book 1SG
‘He dropped my book.’
- c. *Dia men-jatuh-i buku saya.*
3SG AV-drop-i book 1SG
‘He fell on my book.’ (Dardjowidjojo 1971)

It has often been observed that voice morphology in Philippine-type languages can have semantic functions which are very similar to those of applicatives in other languages. In fact, the distinction between applicative morphology and voice morphology in WMP languages has been challenged by a number of authors who have argued for a unified analysis of the Philippine-type and Indonesian-type voice systems. Davies (2005; 2010), for example, argues that the Madurese suffixes *-agi* and *-e*, which are cognate to Indonesian *-kan* and *-i* respectively, could be analysed as part of a Philippine-type voice system. The suffix *-e* usually adds directional and locative elements as core arguments, while *-agi* applies benefactives, causatives, instruments, and ‘subject matter of communication’. Davies notes that these are precisely the semantic roles for which Philippine-type languages have distinct voices. So one might view examples like (9)d, in which the goal argument (‘mother’) is selected as subject, as the analogue of locative/dative voice in Cebuano or Tagalog. The difference is that in Cebuano or Tagalog, locative voice marking involves only a single affix, whereas in Madurese or Indonesian it is marked by a combination of affixes.

(9) Madurese

- a. *embuk ngerem paket ka ibu?*
elder.sister AV:send package to mother
‘Big sister sent a package to mother.’

¹¹ Arka (2017) demonstrates that some core arguments may satisfy only a subset of the diagnostic criteria for a particular language, and suggests that the core-oblique distinction should be viewed as gradient rather categorical. We cannot discuss this proposal in the current chapter, but it is important to remember that the core-oblique distinction is often not a trivial matter.

- b. *paket rowa e-kerem ka ebu? bi? embuk*
 package that UV-send to mother by elder.sister
 ‘That package was sent to mother by big sister.’
- c. *embuk ngerem-e ebu? paket*
 older.sister AV:send-LOC mother package
 ‘Elder sister sent mother a package.’
- d. *ebu? e-kerem-e paket bi? embuk*
 mother UV-send-LOC package by elder.sister
 ‘Mother was sent a package by big sister.’ (Davies 2010: 283f)

Naylor (1978) also proposes an analysis of the Indonesian applicatives in terms of a Philippine-type “focus” system. Conversely, a number of authors have argued that some Philippine-type voice markers should be analysed as applicatives. Under the ergative analysis discussed in §47.3.4 below, UV is treated as the unmarked transitive ergative construction, AV as an antipassive, and the other voice markers (instrumental, benefactive, locative, etc.) as applicative affixes (Payne 1982; Gerdtts 1988; De Guzman 1988; Blake 1988; Aldridge 2004, 2012). Arka and Ross (2005: 8–9) point out that this view suggests a way to unify the analysis of Philippine-type and Indonesian-type voice systems, namely:

to treat both Indonesian- and Philippine-type languages as having a single undergoer/actor voice alternation (with undergoer as the default voice in many languages) enriched by applicative morphology which allows a location, instrument, or beneficiary noun phrase to be promoted to undergoer. The applicative morphemes would be the Madurese suffixes *e* and *agi* and their equivalents in other Indonesian-type languages, and the locative and instrument/beneficiary voice morphology of Philippine-type languages.

However, Arka and Ross go on to point out a fairly serious problem for this kind of proposal:

Madurese (or any other Indonesian-type languages such as Indonesian, Javanese and Balinese) has three actor voice forms, one unsuffixed and two suffixed respectively with *e* and *agi*, whereas Puyuma and Tagalog have only one.

In other words, voice prefixes and applicative suffixes in Madurese and Indonesian co-occur productively in all possible combinations, and in a semantically and syntactically transparent system. The contrast between the putative locative voice form *e-kerem-e* in (9)d the AV form *ngerem-e* in (9)c is entirely analogous to the contrast between the undergoer voice form *e-kerem* in (9)b the AV form *ngerem* in (9)a. Similarly, for each putative benefactive voice form *e-ROOT-agi* there is a corresponding AV form *N-ROOT-agi*. Subject selection is entirely determined by the prefixes, while object selection is entirely determined by the suffixes.

Now it is true that many Philippine-type languages have voice categories marked by a combination of affixes. It is also true that for certain roots there may be more than one AV form, e.g. the *mag-* vs. *-um-* forms in Tagalog. However, neither of these patterns is as productive, transparent, or semantically regular as the Madurese and Indonesian system.

The apparent intertwining of voice and applicative functions is even more severe in languages like Totoli, where, at least on the formal level, the same set of formatives are used for these two functions (see Table 47.1). Without going into detail of the analysis, Table 47.1 illustrates that in Totoli, the suffixes *-i* and *-an* are part of the applicative paradigm, but they also occur in ‘plain’, non-applicative voice forms (UV2), in both realis and non-realism mood.

Likewise, bare (i.e. non-suffixed) forms can be found in both functions, non-applicative undergoer voice (UV1) and applicative undergoer voice.

	NON-REALIS	REALIS
AV	<i>moN-</i>	<i>noN-</i>
UV1	\emptyset	<i>ni- -\emptyset</i>
UV2	<i>-i</i>	<i>ni- -an</i>
AV.APPL1	<i>moN- -an</i>	<i>noN- -an</i>
AV.APPL2	<i>moN- -i</i>	<i>noN- -i</i>
UV.APPL1	<i>(po-) -an</i> <i>poN- -an</i>	<i>ni- -\emptyset</i> <i>ni-poN- -\emptyset</i>
UV.APPL2	<i>-i</i>	<i>ni- -an</i>

Table 47.1: Voice and applicative morphology in Totoli

Himmelman and Riesberg (2013) argue that in Totoli there is good evidence to keep the two paradigms apart, the main argument being that an applicative undergoer voice form, which links the applied argument directly to subject function, always stands in paradigmatic opposition to an actor voice form that also takes applicative marking, just as plain undergoer voice forms stand in opposition to plain actor voice forms (cf. also Riesberg et al., 2021). Consider the Totoli data in (10).¹²

(10) Totoli

- a. *i Rinto manaip taipang*
 HON Rinto AV:peel mango
 ‘Rinto peels a mango’
- b. *taipang ko-doong taip i Rinto*
 mango POT-want peel:UV1 HON Rinto
 ‘Rinto will peel a mango’
- c. *i Rinto manaip-an aku taipang*
 HON Rinto AV:peel-APPL1 1SG mango
 ‘Rinto peels a mango for me’
- d. *aku ko-doong panaip-an Rinto taipang*
 1SG POT-want SF:peel-APPL1 Rinto mango
 ‘Rinto will peel a mango for me’ (Himmelman & Riesberg 2013: 414, 413)

47.3 Voice in “Philippine-type” languages

Philippine languages exhibit a distinctive type of voice system which is also found in languages of northern Sulawesi and northeastern Borneo. Because similar systems are attested in various Formosan languages, a Philippine-type voice inventory is reconstructed for Proto-Austronesian which includes four basic voice markers (**<um>*, **-ən*, **-an*, **Si-*; Wolff 1973; Ross 2002b). However, the syntactic and typological character of the Philippine-type system remains a highly controversial issue. At the heart of the controversy is the identification of the grammatical subject in a transitive clause.

¹² See Himmelman and Riesberg (2013: 421) for a proposed list of diagnostics to distinguish between the symmetrical voice and applicative alternations.

We begin by illustrating the basic pattern of case marking and voice alternations, using Tagalog data. Tagalog has three distinctive case categories, with the case markers also reflecting a distinction between proper names and other NPs as shown in Table 47.2. Each verbal clause must contain one and only one nominative argument, and the semantic role of the nominative element is reflected by the voice marker on the verb. All other NP constituents of the clause get genitive or dative case, depending on their semantic role (and sometimes animacy and/or definiteness).

	NOM	GEN	DAT/LOC
Common noun markers:	<i>ang</i>	<i>ng</i>	<i>sa</i>
Personal name markers:	<i>si</i>	<i>ni</i>	<i>kay</i>

Table 47.2: Case markers in Tagalog

The examples in (11) illustrate how the choice of voice marker on the verb reflects the semantic role of the nominative argument in each clause:

(11) Tagalog

- a. *B<um>ili ang=lalake ng=isda sa=tindahan.*
 <AV.PFV>buy NOM=man GEN=fish DAT=store
 ‘The man bought fish at the store.’
- b. *B-in-ili-Ø ng=lalake ang=isda sa=tindahan.*
 <PFV>buy-PV GEN=man NOM=fish DAT=store
 ‘The man bought the fish at the store.’
- c. *B<in>ilh-an ng=lalake ng=isda ang=tindahan.*
 <PFV>buy-DV GEN=man GEN=fish NOM=store
 ‘The man bought fish at the store.’
- d. *Ip<in>am-(b)ili ng=lalake ng=isda ang=pera.*
 IV<PFV>buy GEN=man GEN=fish NOM=money
 ‘The man bought fish with the money.’
- e. *I-b-in-ili ng=lalake ng=isda ang=bata.*
 BEN<PFV>buy GEN=man GEN=fish NOM=child
 ‘The man bought fish for the child.’ (Foley & Van Valin 1984: 135)

Early treatments of Tagalog grammar, including Bloomfield (1917), Blake (1925), Lopez (1937; 1965), and Aspillera (1969), identified the nominative argument as the subject, treating the non-active voices as passive constructions. Bloomfield, for example, refers to undergoer voice as the “direct passive”, instrumental voice as the “instrumental passive”, and dative/locative voice as the “local passive”. Bell’s (1976) analysis of Cebuano within the Relational Grammar framework is similar.

Under this analysis, Philippine-type voice systems exhibit a number of typologically unusual features, including the following:

(12) Features of Philippine-type languages (*ang*-phrase = subject)

- a. multiple voice categories (four or more);
- b. preference for patients, rather than agents, to be selected as subject of transitive clauses;
- c. symmetrical (i.e., non-demoting) voice alternations;
- d. direct promotion of oblique arguments to subject, sometimes described as the merger of subject selection with applicativization in a single paradigm;

- e. requirement (or strong preference) that subject NPs must be definite;
- f. extraction limited to subjects only;
- g. long-distance extraction possible only out of sentential subjects;
- h. voice alternations do not affect the potential binding relationship between a reflexive pronoun and its antecedent.

These features, especially the non-demotion of the actor when some other argument is selected as the nominative NP, have led many authors to challenge the assumption that the nominative argument of a clause is its subject. Most of the alternative proposals over the past 60 years can be grouped into two broad classes: (a) the nominative argument is a topic, or something similar to a topic; (b) the nominative argument is the absolutive argument in an ergative system. Both kinds of analyses assume that the actor is always the subject, regardless of case and voice marking. We present here a brief overview of these competing analyses.

47.3.1 “Topic” and “Focus”

In the mid-20th century, a number of Philippine specialists became dissatisfied with the Bloomfieldian approach, apparently beginning with members of the Summer Institute of Linguistics. McKaughan (1958; 1962) proposed that NP markers corresponding to Tagalog *ang* mark not the subject of the clause but the TOPIC. At about the same time, various SIL linguists began to use the term FOCUS to refer to the voice-marking affixation on the verb (e.g. Thomas 1958; Dean 1958).¹³ These terminological innovations reflected an intuition that the non-active voices in Philippine languages should not be classified as passives, because passive constructions in English and most other European languages are pragmatically marked, and disfavoured in various ways (e.g. text frequency). In most European languages the preferred subject of a basic transitive clause corresponds to the actor, whereas in Philippine-type languages it is typically the undergoer (unless the undergoer is non-specific). This “topic & focus” analysis marked a turning point in Philippine linguistics, and proved to be quite influential in wider Austronesian studies as well.

McKaughan’s (1958) analysis implies that the voice system does not produce any change in grammatical relations: the actor is always the grammatical subject, and the undergoer is always the grammatical object. The function of the voice-marking affix is to indicate the syntactic relation of the topic, while the syntactic relation of the other NP arguments is indicated by their case markers. This is essentially the view of the Tagalog voice system found in the work of Wolfenden (1961), Schachter and Otnes (1972), Carrier-Duncan (1985), and many others.

In the 1950s the terms TOPIC and FOCUS apparently had no fixed meaning in general linguistics. However, with the explosion of work on Information Structure in the 1970s and 80s, the non-standard use of these terms within Austronesian (and in particular Philippine) linguistics became a source of endless confusion. While the old topic and focus terminology continues to be used in some work on Philippine and Formosan languages, several other terms have been proposed in recent decades to replace “topic”: PIVOT (Foley & Van Valin 1984), TRIGGER (Wouk 1984; Fox 1984: 68), and PRIVILEGED SYNTACTIC ARGUMENT (PSA; Van Valin & LaPolla 1997), among others. These terms are intended to reflect the fact that the nominative argument plays a uniquely active role in the syntax of the clause, while remaining agnostic concerning the identity or existence of a grammatical subject in these languages.

¹³ See Blust (2002c), Quakenbush (2003), Ross and Teng (2005) for further discussion of the origins of this term.

47.3.2 Identifying the Subject: actor, nominative argument, both, or “none of the above”?

Schachter (1976; 1977; 1996) argued that no argument of a basic transitive clause in Tagalog can be uniquely identified as the grammatical subject. He pointed out that when the nominative argument is not the actor, the characteristic properties associated with subjects cross-linguistically are divided between the actor and the nominative argument. The split as he described it is shown in Table 47.3:

Nominative argument	Actor
a. Obligatory element of every clause	a. Reflexive binding
b. Launches floating quantifiers	b. Equi (= control) target
c. Relativization	c. Imperative addressee
	d. Relevance to word order (Kapampangan, Cebuano)

Table 47.3: Split of properties in nominative and actor arguments in Tagalog

Kroeger (1993a, chapter 2) identified a number of additional subjecthood properties associated with the nominative argument in Tagalog, including raising (13), modification by depictive secondary predicates (14), and conjunction reduction (not illustrated here).

(13) Tagalog

- a. *Inasah-an ko ang=pambansang.awit na [awit-in ni=Linda __NOM].*
 expect-DV 1SG.GEN NOM=national.anthem COMP sing-PV GEN=Linda
 ‘I expected the national anthem to be sung by Linda.’
- b. **Inasah-an ko si=Linda na [awit-in ang=pambansang.awit __GEN].*
 expect-DV 1SG.GEN NOM=Linda COMP sing-PV NOM=national.anthem
 (intended: ‘I expected Linda to sing the national anthem.’) (Kroeger 1993a, chpt 2)

(14) Tagalog

- a. *Naghain na lasing si=Maria ng=isda.*
 AV.PFV:serve LNK drunk NOM=Maria GEN=fish
 ‘Maria served the fish drunk.’ (Maria was drunk.)
- b. *Inihain na hilaw ni=Maria ang=isda.*
 IV.PFV:serve LNK raw GEN=Maria NOM=fish
 ‘Maria served the fish raw.’ (The fish was raw.)
- c. #*Inihain na lasing ni=Maria ang=isda.*
 IV.PFV:serve LNK drunk GEN=Maria NOM=fish
 ‘Maria served the fish drunk.’ (can only mean that the fish was drunk.) (Kroeger 1993a, chapter 2)

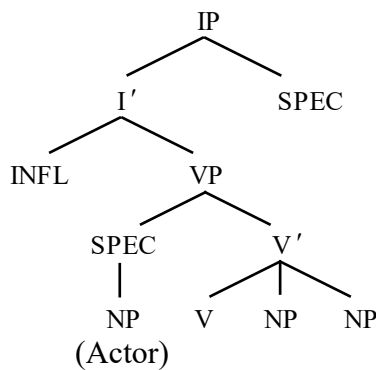
Moreover, as noted by Dell (1981) and Schachter (1985a: 458), the Equi target (or controllee, often referred to as PRO) in a transitive complement clause is not always the actor. With some control predicates (e.g. *himukin* ‘persuade’ and *magpilit* ‘insist on’), the controllee may be either the actor (regardless of case marking) or the nominative argument. And when the embedded verb is marked for potentive (=non-volitive) mood, the controllee must be the nominative argument (Kroeger 1993a: 95ff). These control facts are important because there is a strong cross-linguistic tendency for the controllee in control complements to be restricted to subject position.

Based on these observations, Kroeger argues that:

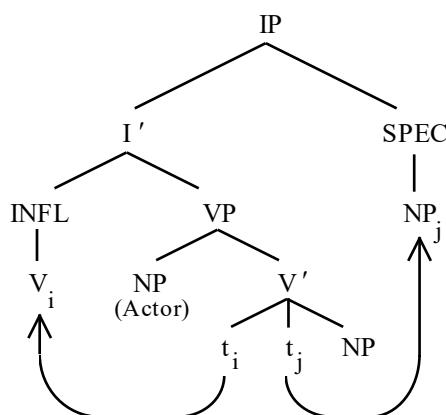
... the syntactic evidence for subjecthood in Tagalog is less equivocal than most linguists, following Schachter, have assumed. Evidence for the grammatical subjecthood of non-nominative Actors is weaker than has been claimed, in light of the observation that neither reflexive binding nor Equi-deletion are exclusively properties of Actors. Conversely, the evidence for analyzing the nominative argument as a grammatical subject is even stronger than Schachter implied... (Kroeger 1993a: 54–55)

Guilfoyle, Hung and Travis (1989; 1992), working within the Principles and Parameters framework, argued that some Western Austronesian languages have two structural subject positions, one for the actor and the other for the nominative argument. (They discussed four languages: Malagasy, Tagalog, Cebuano, and Indonesian; we focus here on their analysis of Tagalog.) Under their proposal, actors are base-generated in an “internal subject” position (specifier of VP), as shown in (15). The voice affix on the verb changes the verb’s syntactic properties (technically formulated in terms of Case assignment) in such a way that one particular argument is forced to move up to the “external subject” position, as shown in (16). The argument in this position gets marked with nominative case.

(15) **D-structure**



(16) **S-structure**



Subjecthood properties like raising, extraction, and quantifier float are associated with the “external subject” position, and thus with the nominative argument. But because the actor is

not demoted or otherwise affected when some other argument is selected as subject, it retains its core argument status in the syntax, as reflected in constraints on reflexive binding and control complements.

Guilfoyle, Hung and Travis' proposal appears to be the first formal syntactic analysis of non-demoting voice alternations. Their proposal has been extremely influential in subsequent work on the formal syntax of Western Austronesian languages.

47.3.3 Nominative as Topic-like argument

Guilfoyle, Hung and Travis treat Philippine-type voice alternations as changes in the assignment of grammatical relations, specifically the subject relation. An alternative formal approach makes use of similar structures, but treats “pivot”-selection as something more like topicalization, which does not involve a change of grammatical relations. In other words, the nominative argument occupies a position of syntactic and pragmatic prominence, but is not the grammatical subject.

In support of this approach, Richards (2000) and Pearson (2005) point out that the grammatical properties of “pivots” in Philippine-type languages are similar in many ways to those associated with the pre-verbal element in verb-second languages such as German and Icelandic.¹⁴ The similarities include constraints on extraction (e.g. relativization and Wh-fronting), zero anaphora, lack of relevance for reflexive binding, and a specificity requirement. Moreover, the pre-verbal constituent in German may be either a topic or a focused element, and the same is true for Tagalog pivots (Kroeger 1993a, chapter 3).

Under this type of analysis, as in McKaughan (1958) and much subsequent work, the actor is always the structural subject of the clause. As for the function of the voice morphology itself, Rackowski and Richards (2005) analyse it as a kind of Case agreement. Pearson (2001; 2005) and Chen (2017) suggest that Philippine-type “voice” marking is actually a kind of Wh-agreement, as described for Chamorro by Chung (1982; 1994; 1998).

One empirical challenge for this approach comes from word order. While the clause-final location of pivots in Malagasy is consistent with their occupying the kind of structural position this hypothesis requires, Richards (2000) notes that this is not the case in Tagalog. He suggests that the movement of pivots in Tagalog is covert, i.e., does not affect the visible syntax, in contrast to V2 languages like Icelandic where it is overt.

This challenge is more acute in other Philippine languages. Sells (2000) states that Tagalog is not a typical Philippine language in terms of word order: “By far the most common (and often quite rigid) requirements for the ordering of constituents within the clause most commonly put the subject effectively in THIRD position” (Sells 2000: 124). “Third position” refers to the requirement or strong preference for non-actor pivots to be the third constituent of the clause, following the verb and actor NP and preceding all other arguments (see also Riesberg et al. 2019). Sells states that this “nominative-third” (N3) order is the fundamental order in Pangasinan (Mulder & Schwartz 1981), Cebuano (Bell 1979[1976]), Kalagan (Collins 1970; Travis 1991), Dibabawon (Forster 1964), Isnag (Barlaan 1986), and Balangao (Shetler 1976). The same is true for Limos Kalinga (Ferreirinho 1993; Travis 2010).

Of course, N3 order can be handled in various ways. For example, Travis (2010) proposes that a non-actor pivot occupies the structural position of the “highest object” within the clause. But whatever view of the N3 pattern is adopted, accounting for it under the type of analysis discussed in this section adds another layer of complexity to an already fairly abstract proposal.

¹⁴ Erlewine et al. (2017) make similar arguments in support of this type of analysis by comparing Austronesian voice with Dinka, a V2 language of eastern Africa.

Another sort of challenge for this analysis comes from the pattern of control mentioned in §47.3.2, in which the controllee (or Equi target) must be nominative but need not be the actor. This pattern is possible with some Tagalog control predicates, such as *pilit* ‘insist on’ and *himok* ‘persuade’ (Ramos 1971: 132; Kroeger 1993a: 101). It is obligatory in some other languages. One such language is Kimaragang Dusun, a Philippine-type language of northeastern Borneo. As the following examples illustrate, the controllee can be a nominative patient (17)a, (18)a but not a non-nominative actor (17)b, (18)b.

- (17) Kimaragang
- a. *Suu-on ku [it=tanak ku]_i [gambar-on ___i dit=tawkey].*
 order-UV 1SG.GEN NOM=child 1SG.GEN picture-UV GEN=merchant
 ‘I will tell my son to have his picture taken by the merchant.’
- b. **Suu-on ku [it=tawkey]_i [gambar-on ___i it=tanak ku].*
 order-UV 1SG.GEN NOM=merchant picture-UV NOM=child 1SG.GEN
 (intended: ‘I will tell the merchant to take my son’s picture.’)
- c. *Suu-on ku [it=tawkey]_i [mangagambar ___i dit=tanak ku].*
 order-UV 1SG.GEN NOM=merchant AV.TR:picture ACC=child 1SG.GEN
 ‘I will tell the merchant to take my son’s picture.’ (P. Kroeger, field notes)
- (18) a. *Amu ko-bulun [it=tanak ku]_i [suntik-an ___i dit=dorisa].*
 not POT-dare NOM=child 1SG.GEN inject-DV GEN=dresser
 ‘My child does not dare to be injected by the dresser.’
- b. **Amu ko-bulun [it=tanak ku]_i [patay-on ___i it=wulanut].*
 not POT-dare NOM=child 1SG.GEN kill-UV NOM=snake
 (intended: ‘My child does not dare to kill the snake.’)
- c. *Amu ko-bulun [it=tanak ku]_i [m-poN-patay ___i dit=wulanut].*
 not POT-dare NOM=child 1SG.GEN AV-TR-kill ACC=snake
 ‘My child does not dare to kill the snake.’

Cross-linguistically, there is a strong tendency for controllees to be the grammatical subject of their clause. In addition to this syntactic requirement, semantic constraints may also apply. Many control predicates impose selectional restrictions which require that their complement clause expresses a volitional action, and with these predicates there is a strong cross-linguistic preference for the controllee to be the actor of the complement clause. Since the grammar of Kimaragang requires the controllee to be the nominative argument of the complement clause, complement verbs in such constructions tend to appear in actor voice, as in (17)c, (18)c. But examples like (17)a and (18)a show that this is not syntactically required. With respect to the current discussion, the requirement for controllees to be the nominative argument of their clause is difficult to explain under any analysis which claims that the actor is always the grammatical subject.

47.3.4 Ergative-Antipassive

An ergative analysis of the Philippine-type voice system is motivated by two primary factors: “patient preference” and typological familiarity.¹⁵ Cena (1977) and De Guzman (1992

¹⁵ Several authors have proposed ergative analyses within the Relational Grammar framework, including De Guzman (1988) and B. Blake (1988) for Tagalog, and Gerdts (1988) for Ilokano. Payne (1982), Brainard (1994, 1997), and Liao (2004) argue for ergative analyses from a functional-typological perspective. Edith Aldridge

[1979]) present morphological and syntactic arguments for the claim that, other factors being equal, the preferred voice marking in Tagalog is the one which selects the patient as pivot. This claim is supported by text frequency (Cooreman, Fox & Givon 1984) and acquisition data (Tucker 1971; Segalowitz & Galang 1978; Galang 1982), which appear to show that active voice is more highly “marked” than the non-active voices, for semantically transitive verbs.

If, based on these arguments, we accept the “patient-voice” form in (19)a as the basic transitive clause pattern, the Tagalog case-marking system can be seen as ergative. Ergativity is recognized by comparing transitive with intransitive clauses, as illustrated in the following examples:

- (19) Tagalog
 a. *B<in>ili-Ø ng=babae ang=isda.*
 <PFV>buy-PV ERG=woman ABS=fish
 ‘The woman bought the fish.’
 b. *D<um>ating ang=babae.*
 <AV.PFV>arrive ABS=woman
 ‘The woman arrived.’ (Aldridge 2012: 192)

We observe that the same marker *ang* is used for transitive undergoers (P) and intransitive subjects (S); so it must be analysed as marking absolutive case. The transitive actor (A) gets a distinctive marker, in this case *ng*, the marker of ergative case. The split in subjecthood properties described by Schachter, summarized in Table 47.3 above, is readily accounted for: Actor properties are held to be properties of syntactic subjects, while relativization and quantifier float are assumed to be properties of absolutive arguments (S or P).

Under the ergative analysis, “actor focus” clauses like (20) are analysed as antipassive constructions, in which the patient is demoted to oblique argument status, creating an intransitive clause. The actor, as the single core argument of the clause (S), gets absolutive case, while the demoted patient takes oblique case marking. Since the infix *-um-* appears in both basic intransitive clauses like (19)b and derived intransitive (=antipassive) clauses like (20), it cannot be regarded as a marker of antipassive voice. Instead, it is analysed as a marker of intransitivity.

- (20) Tagalog
B<um>ili ang=babae ng=isda.
 <AV.PFV>buy ABS=woman OBL=fish
 ‘The woman bought a fish.’ (Aldridge 2012: 192)

The transitive verb form in (19)a is unmarked for voice, if we regard the infix *-in-* as marking perfective or realis aspect. The other voice markers, (e.g. *-an*, *i-*, *i-paN-*) are analysed as applicative affixes, which promote an oblique or adjunct to direct object. This applied argument, as object of a transitive clause, gets absolutive case. The “patient focus” suffix *-in*, which appears in imperfective/irrealis clauses, is analysed by Aldridge (2004) as a marker of transitivity.

argues for a Minimalist version of the ergative analyses in her 2004 dissertation and a series of subsequent papers.

The great advantage of the ergative analysis is that it reduces the degree of typological “strangeness” of Philippine-type voice systems, accounting for many of their distinctive characteristics in terms of linguistic features that are familiar from other language families.¹⁶

The strength of the ergative hypothesis lies in the fact that it offers an explanation of voice system behavior that does not require postulating mechanisms that are unique to Austronesian. (Erlewine et al., 2017: 379)

However, Erlewine et al. (2017) argue that many of these distinctive characteristics are shared by languages which cannot be analysed as ergative, both within the Austronesian family (e.g. Balinese) and in other parts of the world (e.g. Dinka). If the distinguishing features of Philippine-type voice systems are independent of ergativity, this would remove the strongest theoretical motivation for adopting the analysis.

The most serious empirical challenge for the ergative analysis is related to the claim that “actor focus” clauses like (20) are antipassives. The defining feature of an antipassive construction is the demotion of the patient (underlying object) of a transitive verb (Polinsky 2017: 309). The demoted patient may either be expressed as an oblique argument or be left unexpressed. Thus, the crucial question is whether patients in “actor focus” clauses are obliques or core arguments.

The evidence that is most frequently cited for identifying the patient in “actor focus” clauses like (20) as an oblique argument is the strong tendency for *ng*-marked patients in these clauses to be interpreted as non-specific. The patient of an antipassive does tend to be interpreted as indefinite or non-specific in a number of languages, although as Polinsky (2017: 316) points out, this is by no means always the case.

Richards (2000) notes several contexts where a *ng*-marked patient may get a definite interpretation. These include clauses in which some constituent other than the agent or patient is extracted, and constructions such as gerunds and the recent past which do not allow voice-marking morphology on the verb. These observations suggest that the non-specific interpretation of “actor focus” patients is not syntactically encoded, but the result of a pragmatic inference. Kroeger (1993a: 47–48) presents syntactic evidence which suggests that the patient of an AV clause is a core argument rather than an oblique.

47.3.5 Voice as Nominalization

It is often pointed out that the distinction between nouns and verbs in Philippine-type languages is not clear cut. Three principal reasons for this are (a) the use of genitive case for non-pivot actors, which makes actors and possessors formally identical; (b) the very productive use of headless relative clauses (21), which allows “verbal” clauses (minus the pivot) to function as NPs in argument positions; and (c) the lack of a copula with nominal and adjectival predicates, which means that nouns and adjectives can function as clausal predicates in much the same way as verbs (22).¹⁷

¹⁶ See Payne (1982) and B. Blake (1988) for explicit comparisons of Tagalog with ergative + applicative systems in other languages.

¹⁷ In fact, Gil (1993) argues that on purely distributional grounds, there is no basis for distinguishing lexical categories N, V, A, or P; there is only a single category of content words. Himmelmann (1991b) cites Lemaréchal (1982) as making a similar claim. However, there are clear morphological grounds for distinguishing these categories, especially in the case of adjectives. Some distributional criteria for identifying verbs will be discussed below.

(21) Tagalog
ang mga b<in>ili-Ø ko
 NOM PL <PFV>buy-PV 1SG.GEN
 ‘the ones/things that I bought’ (Schachter & Otnes 1972: 151, 61, 64)

- (22) a. *Maganda ang=babae.*
 beautiful NOM=woman
 ‘The woman is beautiful.’
 b. *Bato ang=bahay.*
 stone NOM=house
 ‘The house is stone.’

Moreover, the Philippine voice markers also have lexically specific nominalizing functions in most if not all Philippine-type languages. Starosta, Pawley, and Reid (1982) suggest that the Proto-Austronesian voice markers (*<um>, *-<an>, *-<an>, *Si-) were originally nominalizers specified for semantic roles, like the English suffixes *er* for agent or instrument and *ee* for patient or affected argument. Clauses involving these voice markers were originally equative in structure, consisting of two juxtaposed NPs. The nominalized forms were subsequently re-analysed as verbs, creating a “normal” verbal clause structure, as illustrated in (23) using Tagalog examples:

- (23) Tagalog
 a. [*B<um>ili ng=isda*] [*ang=lalake*].
 <AV.PFV>buy GEN=fish NOM=man
 original: ‘The man was the buyer of fish.’
 reanalysis: ‘The man bought fish.’
 b. [*B<in>ili-Ø ng=lalake*] [*ang=isda*].
 <PFV>buy-PV GEN=man NOM=fish
 original: ‘The fish was the purchased thing of the man.’
 reanalysis: ‘The man bought the fish.’
 c. [*B<in>ilh-an ng=lalake ng=isda*] [*ang=tindahan*].
 <PFV>buy-DV GEN=man GEN=fish NOM=store
 original: ‘The store was the place of the man’s purchase of fish.’
 reanalysis: ‘The man bought fish at the store.’
 d. [*I-b<in>ili ng=lalake ng=isda*] [*ang=bata*].
 BEN-<PFV>buy GEN=man GEN=fish NOM=child
 original: ‘The child was the beneficiary of the man’s purchase of fish.’
 reanalysis: ‘The man bought fish for the child.’ (Foley & Van Valin 1984: 135)

A number of authors have adopted a similar approach to the synchronic analysis of Philippine-type languages. For example, Dahl (1951: 121) states that verbal clauses in Malagasy have the structure of an “equation”. Capell (1964) provides an extended argument for identifying the non-active voice forms in Philippine languages as nouns derived from verbs, or “verbal nouns”. Cecilio Lopez (1928; 1937) refers to the Tagalog verb forms used in (23) as “quasi-verbs”, arguing that they are actually nominal in character.¹⁸

¹⁸ See Capell (1964), Himmelmann (1991b; 2005a: 140–141), and Kaufman (2009b) for further discussion of the history of the nominalist proposal.

The quasi-verb is not a real verb, for it is treated like a *nomen* [‘noun’] in the sentence and the enlargements, according to their forms, are considered as attributes and not as objects. (Lopez 1928: 51)

More recently, Himmelmann (1991b; 2008) and Kaufman (2009a,b) have built a strong case for the nominalist analysis of Tagalog, and by extension of Philippine-type voice systems in general. This work has been extremely influential, and a full discussion is beyond the scope of the present chapter. Here we will just mention some empirical challenges for the nominalist proposal. Some of these have been addressed by Himmelmann and Kaufman, but (we believe) not fully resolved.

a) **Word order:** The nominalist hypothesis predicts that the most basic word order should place the pivot in clause-final position, as seen in (23). In fact, this order is attested in Malagasy, Toba Batak, and some Formosan languages including Seediq, Atayal, and Tsou (Chung 2006); but otherwise appears to be relatively uncommon among Philippine-type languages.¹⁹ Languages like those discussed in §47.3.3, in which “nominative-third” (N3) is the fundamental order of clausal constituents, present an even greater challenge.

b) **Control complements:** Richards (2009a,b) points out for Tagalog that control complements provide distributional evidence for distinguishing nouns from verbs. Only verbal clauses can occur as complements to control predicates; with all non-verbal clauses, the copula *maging* ‘be, become’ is obligatory. In main clauses the copula normally expresses a change of state, as in (24)c; no copula is required for the stative reading in main clauses, as illustrated in (24)b.

- (24) Tagalog
- a. *Nag-aaral ako.*
AV.IPFV-study 1SG.NOM
‘I am studying.’
 - b. *Doktor ako.*
doctor 1SG.NOM
‘I am a doctor.’
 - c. *Naging doktor ako noong 1977.*
PFV.COP doctor 1SG.NOM when:LNK 1977
‘I became a doctor in 1977.’ (based on Richards 2009a: 181, 183)

In control complements, however, the copula can express either the stative or change of state reading. Example (25)b is designed to rule out the change of state reading. If *magaral* and *doktor* are both nouns, we would expect them to be interchangeable in this context. However, as the contrast in (25) demonstrates, the copula is impossible with *magaral* but obligatory with *doktor*.

- (25) Tagalog
- a. *Ayo=ko na=ng [(*maging) mag-aral].*
don’t.want=1SG.GEN now=COMP AV.INF:be AV-study
‘I don’t want to study any more.’

¹⁹ Himmelmann (1991b) discusses the relatively free word order observed in Tagalog, arguing that there is less variation in natural texts than in isolated examples, and that the dominant order observed in natural texts is consistent with the nominalist hypothesis.

- b. *Ayo=ko* *na=ng* [*maging* *doktor*].
 don't.want=1SG.GEN now=COMP AV.INF:be doctor
 'I don't want to be a doctor any more.'
- c. **Ayo=ko* *na=ng* [*doktor*].
 don't.want=1SG.GEN now=COMP doctor
 cannot mean: 'I don't want to be a doctor any more.'

Himmelman himself (2005a: 141; 2009: 117–118) points out that apparently only voice-marked forms (i.e., those forms traditionally analysed as verbs) can occur as predicates of a control complement. He considers this fact “to be one of the two most difficult empirical challenges to the nominalist hypothesis.”

c) **Island constraints:** Kaufman (2009a) argues that the structure of (26)a is the same as that of (24)b, because the predicates *sumayaw* ‘dance’ and *doktor* ‘doctor’ are both nouns. In support of this analysis, he shows in (26)b that *sumayaw* can be modified by the normal range of NP dependents, including demonstratives and numerals.

(26) Tagalog

- a. *S<um>ayaw* *diyan* *ang=mga=pinsan ko*.
 <AV.PFV>dance there NOM=PL=cousin 1SG.GEN
 ‘My cousins danced there.’
- b. *Iyo=ng dalawa=ng sumayaw* *diyan ang=mga=pinsan ko*.
 that=LNK two=LNK <AV.PFV>dance there NOM=PL=cousin 1SG.GEN
 ‘My cousins are those two who danced over there.’ (Kaufman 2009a: 34)

In comparing the two sentences in (26), Kaufman states: “There is, as can be expected, a difference in the predicational vs. specificational reading between these two sentences but I am not aware of any evidence for substantial differences in their underlying structure” (2009a: 34, fn. 34). Richards (2009b) points out that one difference between the two sentences concerns extraction: the location can be questioned in (26)a but not in (26)b:

(27) Tagalog

- a. *Saan s<um>ayaw* *ang=mga=pinsan mo?*
 where <AV.PFV>dance NOM=PL=cousin 2SG.GEN
 ‘Where did your cousins dance?’
- b. **Saan iyo=ng dalawa=ng sumayaw* *ang=mga=pinsan mo?*
 where that=LNK two=LNK <AV.PFV>dance NOM=PL=cousin 2SG.GEN
 ‘*Where were those two who danced your cousins?’ (Richards 2009b: 144)

Under traditional analyses, (26)a is a simple (monoclausal) verbal clause but (26)b begins with a headless relative clause. The contrast demonstrated in (27) is expected under the traditional analysis, because relative clauses (headless or not) are typically “islands”, i.e., constituents from which nothing can be extracted. It is not clear how to explain these facts under the nominalist analysis.

47.4 Voice in Borneo and Sulawesi

47.4.1 Borneo (& Madagascar)

47.4.1.1 Sabah interior languages

In Borneo, the boundary between Philippine-type voice systems and systems that are closer to the Indonesian-type roughly follows the southern border of the Malaysian state of Sabah. The indigenous Philippine-type languages of Sabah include three primary subgroups: Dusunic, Paitanic, and Murut-Tidung (Prentice 1971; Wurm 1983; Blust 2010b). Languages of all three groups preserve the classic Philippine voice, case marking, and word-order patterns (including 2nd position clitics), as discussed in more detail in Kroeger and Smith (this volume). Northern Dusunic and northern Paitanic varieties preserve the full inventory of Philippine voice categories. As an example, the voice markers of Kimaragang Dusun are in listed Table 47.4.²⁰ (Sentences illustrating the use of these forms are presented in Kroeger & Smith, this volume.)

VOICE CATEGORY:	AFFIXATION:
ACTOR (AV)	R<um>OOT (intrans) <i>m-poN</i> -ROOT (trans) <i>Ø-po</i> -ROOT (trans)
OBJECTIVE (OV)	ROOT- <i>on₁</i>
DATIVE (DV)	ROOT- <i>an</i>
CONVEYANCE (CV)	<i>i</i> -ROOT
INSTRUMENTAL (IV)	<i>poN</i> -ROOT
LOCATIVE (LV) (INTRANS)	ROOT- <i>on₂</i>
CIRCUMSTANTIAL (CIRCV)	<i>poN</i> -ROOT- <i>an</i>

Table 47.4: Kimaragang Dusun voice affixes

In languages located farther to the south and west we observe a simplification of the voice inventory. This simplification involves a reduction in the number of voice categories, beginning with the loss of the conveyance voice prefix (*i-*), the reflex of PAN **Si-*. (Tatana', a language in the southwest corner of Sabah, stands as an exception to this generalization; it preserves six of the seven voices listed in Table 47.4.)²¹

Four semantic functions are reconstructed for PAN **Si-* (Wolff 1973). It was used to mark the subject of the clause as being (i) an instrument, (ii) a beneficiary, (iii) the displaced theme of verbs of transfer or conveyance, or (iv) the patient of a morphological causative. As far as we know, the benefactive use of *i-* is not attested in any Borneo language. This fact is consistent with a pattern reported by Liao (2008b), who shows that the benefactive use is largely restricted to Taiwan and the northern half of the Philippines; it is quite rare south of Manila.

The Murut and Tidung languages occupy the border areas between Sabah and northern Kalimantan. (We focus on the Murutic languages here, because relatively little information is available about Tidung syntax in general, and voice in particular.) All of the Murutic

²⁰ The distinction between *-on₁* vs. *-on₂* is motivated by a difference in allomorphy. *-on₁* is realized by a zero allomorph in past tense and in non-volitive (a.k.a. potentive) mood, whereas the form of *-on₂* is unchanged in these contexts.

²¹ Dillon (1994) states that the seventh, locative voice, does exist in Tatana, but no longer seems to be productive; the LV suffix occurs in a handful of verbal forms, but is used more often in nominalizations.

languages have lost the prefix *i-* entirely, but they have acquired a third voice-marking suffix (*-in*), which Prentice (1971) refers to as “referent focus”. The contrast between referent focus and “associate focus” is neutralized in past tense, atemporal, and non-volitive forms, as shown in Table 47.5.

Voice Category	Non-past	Past	Atemporal
Actor	<i>m-</i> / <i>-um-</i>	<i>n-</i> / <i>-imin-</i>	∅-
Objective	<i>-on</i>	R< <i>in</i> >OOT-∅	<i>-oʔ</i>
“Referent”	<i>-in</i>	R< <i>in</i> >OOT- <i>an</i>	<i>-iʔ</i>
“Associate”/Locative	<i>-an</i>	R< <i>in</i> >OOT- <i>an</i>	(n.a.)
Instrumental	<i>paN</i> -REDUP-	<i>p<in>aN</i> -REDUP-	(n.a.??)

Table 47.5: Voice paradigms in Timugon Murut (Prentice 1971; R. Brewis 2004: 915)

The existence of three contrastive voice suffixes (*-in*, *-an*, *-on*) in Murutic is unusual.²² We are not aware of any other Austronesian language with three voice suffixes.

47.4.1.2 Languages of central Borneo

Beatrice Clayre (1996; 2014) describes the voice system of Lun Bawang (described in §47.4.4.2 below) as being transitional between the Philippine-like voice systems of NE Borneo and the much simpler systems of central Borneo languages such as Berawan, Melanau, Penan, Kayan, and Kenyah, spoken in northern Sarawak and adjacent areas of Kalimantan. The distinctive typological characteristics of central Borneo languages are discussed in more detail in Kroeger and Smith (this volume, §27.3.2). In this section we focus on the issues of voice, transitivity, and coding properties.

In contrast to the multi-voice systems of the Philippines and NE Borneo, central Borneo languages generally exhibit a simple two-way contrast between AV vs. UV or passive, and actor voice is the more basic or preferred form for transitive verbs. (The issue of symmetrical or non-demoting voice has not been addressed for most of these languages, apart from Kelabit (Hemmings 2016) and Begak-Idaan (Goudswaard 2005). For the others we will follow Clayre in referring to the non-active voice as undergoer voice, but recognize that in some or all of these languages the constructions could turn out to be true passives.)

Central Borneo languages generally lack case marking in common noun phrases and for third person pronouns. First and (for some languages) second person pronouns have distinct genitive forms for actors and possessors, but no distinction between subject and object forms. Because of this lack of case marking, word-order tends to be fairly rigid, with the non-subject core argument immediately following the verb. SVO order is preferred in many of these languages, especially in actor voice.

Although these two-voice systems are sometimes identified as “Indonesian-type” languages, they are distinct from the Indonesian prototype in lacking applicative suffixes. Dative- and benefactive-shift are possible in at least some of these languages, but not

²² Jason Lobel (p.c.) argues that the “associate focus” suffix (*-an*) is not a productive voice marker but rather a nominalizer. We follow here the descriptions of Prentice, and Brewis (2004), but this is an issue that requires further investigation.

morphologically marked.²³ An example is presented in (28), with data from Dalat Melanau (Iain Clayre, 1972). The AV-UV alternation is illustrated in (28)a-b, and benefactive-shift is illustrated in (28)c.

- (28) Dalat Melanau
- a. *Akou melei ubat ?ih gim a pedih.* [ACTOR VOICE]
 1SG AV:buy medicine this for person sick
 ‘I am buying this medicine for a sick person.’
- b. *Ubat ?ih b<en>elei kou gim a pedih.* [UNDERGOER VOICE]
 medicine this <UV>buy 1SG.GEN for person sick
 ‘I bought this medicine for a sick person.’
- c. *A pedih b<en>elei kou ubat ?ih.* [UV with benefactive shift]
 person sick <UV>buy 1SG.GEN medicine this
 ‘I bought this medicine for a sick person.’ (I. Clayre 1972: 355)

The voice morphology in many Central Borneo languages exhibits complex allomorphy which is only partially predictable from the phonological form of the root. In some of these languages there is an interaction between voice inflection and tense-aspect, with UV inflection occurring only or primarily in past tense or completive aspect. (The old non-past UV suffix *-en* is retained in nominalizations and fossilized verb forms.)

In addition, a periphrastic undergoer voice is attested in a number of these languages, which competes with or replaces UV morphology. Beatrice Clayre (1996: 76–80) states that this periphrastic undergoer voice is the only productive UV construction remaining in Kayan and Murik. In these languages, the auxiliary which marks UV is reduced to a single invariant syllable, *en*. (In some other central Borneo languages, e.g. Lun Bawang/Lundayeh, the UV auxiliary is the UV form of the verb which means ‘make’ or ‘do’.) The main verb follows the auxiliary, appearing in the AV form. The actor NP occurs after the auxiliary and before the main verb. The undergoer-subject may occur either before the auxiliary or following the main verb. A Kayan example is presented in (29). The undergoer-subject NP is underlined.

- (29) Kayan
- Hiap atih en Anyiq ngaput(N-kaput) mena?a di.*
 chicken that PASS Anyi AV-tie a.little.ago PART
 ‘The chicken was tied up by Anyi a while little ago.’ (Clayre & Cubit 1974; as cited by Soriente 2013)

As noted in the following section, similar constructions are also attested in at least two languages of Sabah, namely Bonggi and Begak. In fact, the periphrastic undergoer voice construction seems to be quite widely distributed in Borneo. It is found not only in Bonggi, at the extreme northeastern corner of the island, but also in at least some of the Land Dayak varieties in western Borneo.

47.4.1.3 Transitional languages

As noted above, Beatrice Clayre (1991; 1996; 2014) describes the Lundayeh voice system as transitional between the richer Philippine-type systems to the northeast and the simpler two-voice systems characteristic of central Borneo languages. Two other languages which might be seen as transitional in certain respects are Bonggi (spoken on Banggi and Balambangan

²³ Hemmings (2016) describes a periphrastic construction in Kelabit which can be used to promote oblique arguments to subject, like an applicative.

islands, between Borneo and Palawan) and Begak (a dialect of the Ida'an language, spoken in southeastern Sabah).²⁴ The genetic classification of both of these languages has been somewhat controversial; see Smith (chapter 8, this volume) for discussion.

The transitional features of these languages are summarized in Table 47.6. As this table shows, Bonggi voice morphology preserves a fairly typical Philippine-type system of four contrastive voices, which in our terminology we refer to as AV, UV, DV and IV. Boutin (2002) notes that IV (his instrumental passive) is extremely rare in natural speech. Clayre (1991; 1996; 2014) identifies three productive voice affixes in Lundayeh: AV, UV, and IV. She notes (1996: 60) that IV is less common than AV or UV. Hemmings (2016) states that in the closely related Kelabit language, IV is not fully productive as a voice marker; with some roots it has only a nominalizing function. However, Kelabit also has a periphrastic construction involving the auxiliary *inan* which can be used to promote oblique arguments (including instruments) to subject, much like an applicative. Begak has a typical Bornean 2-voice system, AV vs. UV. On the other hand, Begak preserves the Philippine-type preference for UV over AV, whereas AV is the most frequent voice category in Bonggi and Lundayeh.

LANGUAGE FEATURE	KIMARAGANG (Philippine-type)	BONGGI	LUNDAYEH/ KELABIT	BEGAK	Core Central Borneo pattern
# of morph. voice categories	7	4	3	2	2
preferred/highest frequency voice	non-active	AV	AV	UV	AV
basic word order	V-initial	SVO	AV: SVO UV: VOS ²⁵	AV: SVO UV: VOS	SVO
case marking	all NPs: 3 cases	1/2 pers: 3 cases proper name: 2 cases common NP: no case	sg & 3 rd pl pro: 3 cases all others: no case	1/2 sg: 3 cases 1/2 pl: 2 cases 3 rd pers: no case	pronouns: 2 cases all others: no case
periphrastic UV	no	yes	yes	yes	yes

Table 47.6: Transitional features summary chart

47.4.1.4 Malagasy

Malagasy is spoken on the island of Madagascar, but is genetically most closely related to Ma'anyan and the other Barito languages of SE Borneo (Dahl 1951). Unlike the Barito languages, however, Malagasy preserves many features of a Philippine-type voice system. The voice marking affixes of Malagasy seem to provide evidence of a change in progress

²⁴ Information about Bonggi is based on Boutin (2001; 2002). The information about Begak is from Nelleke Goudswaard's (2005) dissertation.

²⁵ Based on frequency counts for Kelabit, from Hemmings (2016: 457).

from an earlier five-voice system, highly reminiscent of the NE Borneo voice systems discussed in §47.4.1.1, to a three-voice system similar to that of Lun Bawang.

Dahl (1986) recognizes five distinct voice-marking affixes, which he labels using traditional Philippinist terminology as shown in Table 47.7. Pearson (2001) recognizes the same five categories, but uses case-like labels to refer to them.

MARKER	DAHL (1986)	PEARSON (2001)	KEENAN (1976b)
<i>maN-</i> , <i>mi-</i>	Actor Focus	Nominative-pivot	Active Voice
<i>-ina</i>	Object Focus	Accusative-pivot	Goal Voice
<i>-ana</i>	Referent Focus	Dative-pivot	
<i>a-</i>	Instrument Focus	Translative-pivot	Intermediary Voice
<i>aN-ROOT-ana</i> ~ <i>i-ROOT-ana</i>	Circumstantial Focus	Circumstantial-pivot	Circumstantial Voice

Table 47.7: Malagasy voice-marking affixes

Keenan (1976b: 257) combines the suffixes *-ina* and *-ana* into a single category, which he labels goal voice. Paul (2000a: 23) and Pearson (2001) also treat these suffixes essentially as variant forms of a single morpheme, on the grounds that the choice between the two forms in modern Malagasy is lexically determined: it “appears to be an idiosyncratic feature of the verbs in question” (Pearson 2001: 48). However, there is a residual contrast between the two suffixes. At least thirteen roots have been identified which accept both *-ana* and *-ina*, with different semantic functions (Rahajarizafy 1960; Keenan & Polinsky 1998: 623; Pearson 2001: 50, fn. 14). Pearson (1998) notes that the *-ana* form tends to occur where NE Borneo languages would use *-an*, and *-ina* tends to occur where the NE Borneo languages would use *-on*.

While Keenan (1976b) distinguishes goal voice vs. intermediary voice on semantic and morphological grounds, in his discussion of syntax he treats both of these as “passive” forms, resulting in just three syntactic voices. Guilfoyle, Hung, and Travis (1992) adopt the same three-voice analysis for Malagasy, and this has become the standard view in most recent work on the formal syntax of the language. The basic intuition is that there is a single syntactic process which promotes underlying objects to the subject/pivot/trigger position. Goal voice and intermediary voice affixes select different classes of arguments as underlying primary objects; see Paul (2000a) for one version of this analysis.

Synchronically, the contrast between goal voice vs. intermediary voice seems to be productive enough to justify recognizing them as distinct morphological categories. Pearson (1998) and Paul (1999; 2000a,b) identify at least three classes of verb roots for which the prefix *a-* occurs in contrast to a “suffixed passive” form. In such cases the semantic functions associated with the two forms are largely parallel with analogous forms (prefixed CV vs. suffixed OV and DV) in languages of northeastern Sabah: *a-* is used for displaced theme and instrument subjects, while *-Vna* is used for patient and goal subjects.

However, both Keenan (1976b) and Paul (2000a) note a tendency for *a-* to be replaced by the goal or circumstantial voice forms with particular roots; and, more generally, “a growing tendency for verbs to take only one of the ‘passive’ forms” (Keenan 1976b). If this tendency continues to the point that the contrast is no longer productive, the resulting voice inventory will be much like that of Lun Bawang: actor voice, undergoer voice, and circumstantial voice. The various markers of undergoer voice (*a-* vs. *-Vna*) would be best treated as lexically conditioned allomorphs, with a residual contrast preserved between prefixed vs. suffixed passive forms for a limited number of roots.

While the Malagasy voice paradigm preserves evidence of a rich Philippine-type voice system, this is not the case in modern languages of SE Borneo, and in particular the Barito languages, which are genetically the closest relatives of Malagasy. One such language, Ma'anyan, is discussed in the next section.

47.4.1.5 Ma'anyan

Ma'anyan, a Barito language of SE Borneo, is closely related to Malagasy but preserves few if any traces of a Philippine-type voice system. In many ways, the grammar of Ma'anyan (as described by Gudai 1985) is quite Malayic in character.²⁶ NPs are not case marked, aside from distinct genitive forms of the singular pronouns (used for both possessors and passive agents). SVO appears to be the dominant word order in both active and passive clauses.

Gudai (1985: 213 ff) describes two types of passive construction, one marked by the prefix *na-* and the other marked by a null prefix. (Active transitive verbs generally bear the prefix *N-*.) With the prefixed passive, the agent is marked with the preposition *daya* (homophonous with the particle meaning 'because'). This agentive PP can optionally be omitted when it is understood from the context. When it is expressed, it can occur in various positions, including sentence-initial (before the subject) and sentence-final. When the agent phrase immediately follows the verb, the preposition may optionally be omitted, like *oleh* in the Malay *di-* passive.

With the zero passive, however, the agent is obligatory, is never marked with a preposition, and must always occur immediately after the verb. In these respects, it is similar to the UV construction in Balinese. The zero passive is preferred over *na-* when the agent is a pronoun, and only the zero passive is possible when the agent is 1st or 2nd person. Proper names and common noun phrases can appear as agents in both types of passive. Gudai (1985: 228) states that for both types of passive, the subject NP must be definite or specific. However, it is not clear to what extent this might also hold for subjects of active clauses.

Gudai (1985: 225) describes a third type of passive, marked by the prefix *ta-*, which he labels the ACCIDENTAL passive. In fact, *ta-* has both active and passive uses, as illustrated in (30)a-c.

- (30) Ma'anyan
- a. *Ijap ta-qalap sapidaq=ku.*
Ijap ACCIDENT-take bicycle=1SG
'Ijap has taken my bicycle by mistake.'
 - b. *Sapidaq=ku ta-qalap (daya) Ijap.*
bicycle=1SG ACCIDENT-take by Ijap
'My bicycle has been taken by Ijap by mistake.'
 - c. *Ulun yeruq ta-dinung daya=ku rahat manrus.*
person that ACCIDENT-see by=1SG PROG take.shower
'I accidentally saw the man taking a shower.' (Gudai 1985: 225, 226)

We might be tempted to assume that the accidental passive is simply a zero passive formed from a stem that contains the accidental prefix. However, the constraints on the agent in the accidental passive construction are different from those in either of the other passive types. The agent is obligatory in the accidental passive, but can optionally be marked with the preposition *daya*, even when the agent is 1st or 2nd person (30)c.

²⁶ It is likely that some of the similarities are the result of contact-induced change, since Gudai reports that virtually all Ma'anyan speakers are bilingual in Banjarese.

The prefix *i-* also attaches to transitive roots, with an interesting range of detransitivizing functions. The derived intransitive formed with this prefix may occur with no object NP (31)a, or with a bare non-specific object NP (31)b. Gudai (1985: 188) describes this second pattern as being equivalent to noun incorporation in a language like English. This verb form cannot take an object NP that is definite (31)c or quantified (31)d. In order to express these kinds of meanings, the normal transitive form must be used as in (31)e.

- (31) Ma'anyan
- a. *Waweh yeruq i-wuwiq.*
 woman that DETRANS-wash
 'That woman is washing.'
- b. *Waweh yeruq i-wuwiq lumbah.*
 woman that DETRANS-wash dish
 'That woman is dish-washing.'
- c. **Waweh yeruq i-wuwiq lumbah yiti.*
 woman that DETRANS-wash dish this
 (intended: 'That woman is washing this dish.')
- d. **Waweh yeruq i-wuwiq dime kawuwaq lumbah.*
 woman that DETRANS-wash five CLF dish
 (intended: 'That woman is washing five dishes.')
- e. *Hi ineh muwiq(N-wuwiq) lumbah yiti.*
 HON mother AV-wash dish this
 'Mother is washing this dish/these dishes.' (Gudai 1985: 187, 188, 114)

The prefix *i-* is also used to form reflexive verbs, and occurs optionally on reciprocals. It is also used to derive a wide range of intransitive denominal verbs. We do not know whether this prefix might be an inherited reflex of PAN **Si-*. The form is identical to the conveyance voice prefix in the conservative NE Borneo languages, but its functions are quite different.

47.4.2 Sulawesi

In Sulawesi, as in Borneo, we find Philippine-type languages in the far north. The Minahasan languages preserve a Philippine-type voice system which may be in some ways even more conservative than the NE Borneo languages. For example, Sneddon (1978) reports that in Minahasan, the prefix *i-* is still used for benefactive as well as conveyance and instrumental functions. Totoli, spoken in northern Central Sulawesi, has been argued to constitute an intermediate type between the prototypical Philippine-type and the Indonesian-type systems (cf. Riesberg et al., forthcoming).

The predominant voice pattern of South Sulawesi languages is strikingly different from those found in the north of the island. We illustrate it here with examples from Bugis. Laskowske (2016) describes a symmetrical alternation between AV vs. UV, as illustrated in (32). The UV form is the most basic and frequent transitive construction, and is characterized by ergative and absolutive agreement clitics on the verb. In the AV form, the verb bears only an absolutive agreement clitic, which agrees with the actor rather than the undergoer. However, Laskowske argues that the AV clause is syntactically transitive, with the undergoer retaining its core argument status as indicated by the lack of preposition or oblique case marking, and the fact that it is obligatory.

- (32) Bugis
- a. *Na=uno=i ula-é Popi.* [undergoer voice]
 3ERG=kill=3ABS snake-DEF Popi
 ‘Popi killed the snake.’
- b. *M-uno=i ula Popi.* [actor voice]
 AV-kill=3ABS snake Popi
 ‘Popi killed a snake.’ (Laskowske 2016: 2)

In addition, Bugis has detransitivizing passive and antipassive constructions, as illustrated in (33)a and b.

- (33) Bugis
- a. *I-uno=i ula-é ku Popi.* [passive voice]
 PASS-kill=3ABS snake-DEF OBL Popi
 ‘The snake was killed by Popi.’
- b. *Mabb-uno ula=i Popi.* [antipassive voice]
 ANTIP-kill snake=3ABS Popi
 ‘Popi was killing snakes.’ (Laskowske 2016: 2)

In contrast to the AV undergoer, the undergoer of an antipassive cannot occur as an independent NP. It may be expressed as an oblique PP, as in (34)a; it may be incorporated, occurring between the verb stem and the absolutive clitic as in (33)b and (34)b; or it may be omitted entirely, as in (34)c. None of these options is possible with the AV undergoer (cf. Laskowske 2016: 63).

- (34) Bugis
- a. *Mas-sémpeʔ=i Saénal lao ri asu-é.*
 ANTIP-kick=3ABS Saénal OBL dog-DEF
 ‘Saénal kicked at the dog (but didn’t necessarily hit it).’
- b. *Mas-sémpeʔ asu=i Saénal.*
 ANTIP-kick dog=3ABS Saénal
 ‘Saenal kicked dogs/a dog’
- c. *Mar-oki=kaʔ.*
 ANTIP-write=1SG.ABS
 ‘I’m writing.’ (Laskowske 2016: 65, p.c., 85)

Similar voice systems are found in closely related languages such as Konjo and Makassarese, although Jukes (2013) identifies the Makassarese analogue of AV as a “semi-transitive” construction, rather than fully symmetrical.²⁷ Laskowske argues that the more distantly related Seko Padang also has the same voice inventory as Bugis.

Quick (2007) describes a Bugis-like voice inventory for Pendau, including a symmetrical alternation between AV (marked with *N-poN-*) and the “inverse voice” (our UV, marked with *ni-*). In addition, Quick describes detransitivizing passive and antipassive constructions, marked with *no-* and *N-pe-* respectively.

Many other Sulawesi languages can be seen as transitional between the Minahasan and Bugis prototypes. A number of languages exhibit a two-way symmetrical distinction between AV and UV. Often, these languages display a passive voice in addition to the two symmetrical

²⁷ Laskowske suggests that the reason for this difference in analysis is that Jukes uses a different definition of symmetrical voice from the one assumed by Laskowske (compare also with Jukes 2005; 2006).

voices. Balantak (van den Berg & Busenitz 2012), for example, appears to have a zero-marked UV that contrasts with a prefixed agentless passive. In languages where there are two distinct undergoer voice markers, such as Totoli, the choice between the two is lexically determined. In these languages Philippine voice affixes may be preserved, but with grammatical functions that are different from the functions found in Philippine languages.

In a Philippine-type language, every voice category has an associated voice marker (although UV is typically zero-marked in past tense or perfective aspect). In Bugis, UV verbs are identified only by the presence of the ABS and ERG agreement clitics; they do not bear a voice-marking affix. Pendau might be viewed as transitional in this respect. In irrealis verbs with a first or second person singular actor, the normal UV irrealis prefix *ro-* can optionally be replaced by an agentive clitic pronoun:²⁸

- (35) Pendau
 a. *ro-oli=ʔu* ~ *ʔu-oli* ‘I will buy (UV)’
 UV.IRR-buy=1SG 1SG-buy
 b. *ro-oli=mu* ~ *mu-oli* ‘You will buy (UV)’
 UV.IRR-buy=2SG 2SG-buy (Quick 2007: 371, 375)

In realis verbs with a first person singular actor, the normal UV realis prefix *ni-* can optionally be replaced by a portmanteau prefix that encodes information about voice, mood, and person.

- (36) Pendau
ni-oli=ʔu ~ *noʔu-oli* ‘I will buy (UV)’
 UV.REAL-buy=1SG 1SG.REAL.UV-buy (Quick 2007: 371, 375)

- (37) Pendau
 a. *paey ni-ʔito nu=too aʔu*
 and.then UV.REAL-see GEN=person 1SG
 ‘and then people saw me’
 b. *apa sura butu baliung moo noʔu-ʔomung-ʔomung apa ndau ʔe-piso*
 since only just axe this 1SG.UV.REAL-carry-RDP since NEG HAVE-machete
 ‘since I am only just carrying this axe, (and) since I don’t have a machete’ (Quick 2007: 371, 375)

Similar portmanteau prefixes are obligatory in all persons in *Tukang Besi*, although the contrast between realis vs. irrealis is neutralized in the first person singular. Unlike Pendau, the prefixes in *Tukang Besi* do not encode voice. The prefix agrees with the single core argument of an intransitive clause (including passives), and with the actor in all transitive clauses. The contrast between AV vs. UV is indicated by the presence or absence of a pronominal enclitic which cross-references the undergoer in UV forms.

Example (38)a illustrates the AV pattern: the verb is marked only by the S/A prefix, the actor argument gets nominative case and functions as the subject of the construction, and the undergoer gets the non-subject core marker *te*. Example (38)b illustrates the UV pattern: both actor and undergoer are cross-referenced on the verb, with the nominative undergoer functioning as subject and the actor marked as a non-subject core argument.

²⁸ In a number of other languages this use of actor marking, restricted to first or first and second person singular, occurs only in non-realis mood (e.g. Da’a, Tajio, Totoli).

- (38) **Tukang Besi**
- a. *no-kiki?i te iko?o na beka*
 3.REAL-bite ART 2SG NOM cat
 ‘the cat bit you’
- b. *no-kiki?i=ko na iko?o te beka*
 3.REAL-bite=2SG.U NOM 2SG ART cat
 ‘the cat bit you’ (Donohue 1999a: 53)

Grammatical subjects in *Tukang Besi* are identified on the basis of relativization, possessor ascension, and quantifier float. Donohue (2002: 87) argues that the AV-UV alternation is best analysed as symmetrical, rather than an ergative-antipassive or active-passive alternation.

Mori Bawah is another South Sulawesi language that makes use of portmanteau clitics which encode S/A indexing plus future vs. non-future aspect/mood. Example (39)a and b illustrate the 3SG non-future clitic =*i*. Object agreement enclitics are obligatory in transitive clauses, but do not occur in intransitive clauses, including the passive and antipassive constructions, marked with *-in-* and *poN-* respectively. The three-way voice contrast is illustrated in (39). The undergoer of the antipassive construction receives an indefinite/non-specific reading (39)b. As in *Tukang Besi*, the passive in *Mori Bawah* is actor-deleting, i.e., the actor argument can never be overtly expressed in a passive construction (39)c.

- (39) **Mori Bawah**
- a. ...*ka=i pepate=?ira ana-o*
 and=3SG.NOM kill=3PL.ABS child-3SG.GEN
 ‘...and she killed her children’
- b. ...*ka=i pom-pepate singa*
 and=3SG.NOM ANTIP-kill lion
 ‘...and he killed a lion’
- c. *ta p<in>epate*
 3SG.FUT <PASS>kill
 ‘he will/shall/must be killed’ (Mead 2005: 698)

We have seen that some Sulawesi languages have symmetrical voice systems, whether these involve multiple voice categories (e.g. *Minahasa*) or just AV vs. UV, as in *Bugis* and *Pendau*. Other Sulawesi languages exhibit only asymmetrical voice alternations, like *Mori Bawah*. Finally, there are languages which don’t exhibit any voice at all, and which use other means for foregrounding or backgrounding arguments. *Muna* is an example of this latter type.

Basic word order in *Muna* is SVO, as seen in (40)a). There are two marked word orders that are functionally similar to passives. In both cases the subject is moved into sentence final position, with the object realized either by a pronominal suffix ((40)b), or as a full NP which then occurs in sentence initial position ((40)c).

- (40) **Muna**
- a. *ai-hi-ku minaho da-[m]ande-ha-ane*
 younger.sibling-PL-1SG.GEN not.yet 3PL.IRR-know-INTNS-it
hula-no ama-mani
 face-LNK father-1PL.EXCL.GEN
 ‘my younger siblings still did not know our father’s face’

- b. *no-wora-e-mo dahu*
 3SG.REAL-see-him-PFV dog
 ‘he was seen by a dog’
- c. *dadi o karambau no-talo-e o bhiku*
 so ART buffalo 3SG.REAL-defeat-him ART snail
 ‘so the buffalo was defeated by the snail’ (van den Berg 2013[1989]: 163, 166, 167)

Van den Berg notes that in the latter two constructions, the object is taken as “point of departure” and the subject is backgrounded, as in a passive. Native speakers usually translate these structures as passives in Indonesian (van den Berg 2013: 165). However, unlike a true passive construction, there is no re-linking of semantic roles to syntactic functions. In all three examples in (40), the actor is the subject, cross-referenced on the verb by the subject prefix, and the undergoer is the object, cross-referenced by the object suffix.²⁹ When both subject and object are third person and have the same number value, a structure like the one in (40)b is formally ambiguous, allowing the post-verbal NP to be interpreted either as subject or as object. In spoken speech, however, this ambiguity does not arise, as the two interpretations correlate with two different intonation patterns. If the post-verbal NP is the object, it carries the intonational nucleus. If the post-verbal NP is the subject, the nucleus is on the verb (van den Berg 2013: 167).

47.5 From west to east – a cline of voice in the Sundic Islands and beyond

47.5.1 Western Indonesia

Several languages in western Indonesia have been analysed as having the same basic inventory of voice categories as Balinese, illustrated in (1) in §47.2.2 above: an undergoer voice, typically marked by \emptyset -; an actor voice, typically marked by a nasal prefix; and a true passive. These languages include: Malay/Indonesian (Guilfoyle, Hung & Travis 1992; Arka & Manning 1998/2008; Musgrave 2001; Arka 2009a; Cole, Hermon & Yanti 2008); various Sama-Bajaw languages (Miller 2007; James 2017); and Acehnese (Legate 2012; 2014).

The undergoer voice in these languages is fully transitive, because the actor is a core argument; but there are restrictions on the kind of NP that can be used to express the UV actor. James (2017) states that in Central Sinama, the actor in a UV clause is obligatory and must be expressed as an enclitic pronoun on the verb. This contrasts with the actor of a passive, which is an oblique argument marked by a preposition, is freely ordered within the clause, and may be omitted entirely. Miller (2014) cites Sama Bangingi’ and Southern Sinama as examples of other Sama-Bajaw languages in which the actor in a UV clause is obligatory and must be expressed as an enclitic pronoun on the verb. In addition, he states that in Sama Bangingi’ the UV actor is normally 1st or 2nd person, and only rarely occurs as a 3rd person pronoun.

In Indonesian, Sneddon (1996: 249–50) states that the UV actor must be expressed as a free pronoun form as in (41)a, a clitic pronoun as in (41)b, or a “pronoun substitute” (i.e., a kinship term or proper name used with 1st or 2nd person reference) as in (41)c and d. Moreover, the UV actor phrase is obligatory and must appear immediately before the verb, in contrast to the prepositional actor phrase in the true passive construction (in which the verb is

²⁹ The subject agreement marker on the verb is obligatory, whether or not the clause contains a free subject pronoun or lexical NP. The object pronominal suffix is optional. It can co-occur with a lexical NP object, as seen in ((40)a&c), but not with a free object pronoun.

marked with *di-*). The passive actor is flexible in its ordering and may optionally be omitted when it is understood from context, or may simply remain unspecified.³⁰

(41) Indonesian

- a. *Mobil itu dapat kita Ø-perbaiki.*
 car that get 1PL.INCL UV-repair.
 ‘We can repair the car.’ (Chung 1976: 60)
- b. *Buku ini harus kau=Ø-baca.*
 book this must 2SG=UV-read
 ‘You must read this book.’ (Sneddon 1996: 249)
- c. *Surat ini harus adik Ø-tandatangani.*
 letter this must younger.sibling UV-sign
 ‘You (younger sibling) must sign this letter.’ (Dalrymple & Mofu 2009)
- d. *Buku itu sudah Tini Ø-kembalikan.*
 book that already (speaker’s name) UV-return
 ‘I (Tini) have already returned the book.’ (Sneddon 1996: 250)

Person restrictions can be observed in Malay/Indonesian as well. First and second person pronouns are strongly disfavoured as the actor of a *di-* passive, and are considered ungrammatical in this function in the standard varieties, Malaysian and Indonesian.³¹ Conversely, as Chung (1976: 60) points out, some authors have stated that UV actors must be a 1st or 2nd person pronoun. Chung observes that this was true at an earlier stage of the language, and Safiah Karim et al. (1987: 91) seem to imply that this continues to be at least a preference in modern standard Malaysian. In modern Indonesian, however, 3rd person pronouns are fully acceptable as UV actors.

The status of the passive construction in Acehnese has been a controversial issue. Lawler (1977) analysed the construction in (42)b as a passive, in spite of the fact that the verb agrees with its prepositional actor phrase. This proposal triggered much discussion, since agreement with oblique arguments seems to be vanishingly rare across languages.³² Durie (1985, 1988) argued in reply that the so-called passive construction in (42)b is merely topicalization of the object NP, and does not involve any change in grammatical relations.

(42) Acehnese

- a. *Uleue nyan di-kap lôn.* [AV]
 snake DEM 3.FAM-bite 1SG
 ‘The snake bit me.’
- b. *Lôn di-kap lé uleue nyan.* [passive]
 1SG 3.FAM-bite by snake DEM
 ‘I was bitten by the snake.’

³⁰ The preposition that marks the passive actor, *oleh*, may optionally be dropped if the actor phrase immediately follows the verb.

³¹ Sneddon (1996: 249) and Nomoto and Kartini (2014) state that such examples are attested in natural conversation, even among educated speakers. However, the corpus data in the study by Nomoto and Kartini indicate that 1st and 2nd person actors occur in the *di-* passive with very low frequency, as compared to 3rd person actors.

³² Montana Salish has been cited as another instance of this; transitive subjects trigger verb agreement even when marked with the oblique particle (Baier 2013).

c. *Lôn uleue nyan kap.* [UV]
 1SG snake DEM bite
 ‘The snake bit me.’ (Legate 2012: 497, 498)

In more recent work, Legate (2012; 2014) argues that Lawler was correct in analysing this construction as a passive. She uses evidence from control, weak crossover, and pronominal binding to argue that the sentence-initial patient is in fact the subject of (42)b. The *lé*-marked actor in (42)b is argued to be an oblique PP based on the following properties: (a) it can be topicalized, occurring before the subject, unlike other core arguments; (b) it cannot be questioned with the Wh- question pattern that makes use of the complementizer (or relativizer) (*n*)*yang*; (c) it cannot launch floating quantifiers; (d) it is freely ordered with respect to other prepositional phrases; (e) it is omissible, unlike the UV actor in (42)c, and when omitted receives a non-specific, existential reading rather than a specific, pro-drop reading.³³

In addition to the three-voice systems discussed above, symmetrical two-voice systems (no passive) are attested in Toba Batak (Schachter 1984; Cole and Hermon 2008; Erlewine 2018), Besemah (McDonnell 2016b) and Madurese (Davies 2010). Recent work on Toba Batak has retained the traditional label “passive” for the UV, but makes it clear that this construction is quite different from the English-type passive:

Following previous literature... I refer to the prefix *maN*- ... as ‘active’ and *di*- ... as ‘passive’, though I should warn against conflation with Indo-European active/passive alternations. In particular, the passive is not valence-decreasing: for example, the agent ... continues to be a nonoblique core argument in the passive... (Erlewine 2018)³⁴

Such comments raise an important issue with respect to the numerous languages of western Indonesia that have been analysed as having the same basic voice inventory as English, namely active vs. passive. In many cases, a non-active voice may have been labelled “passive” without ever considering the possibility of a symmetrical alternation or applying any diagnostics to distinguish passive from UV. A counter-example to this tendency is the careful study by Cole, Hermon and Yanti (2008) comparing the voice systems of Jambi Malay dialects (south-central Sumatra). They demonstrate that the Sarolangun and Sarang Lan dialects have the same basic voice inventory as standard Indonesian: AV, UV, and passive. The Mudung Darat dialect, in contrast, lacks UV, and so instantiates a simple active vs. passive voice system.

However, in many grammatical descriptions of western Indonesian languages the term “passive” continues to be used without consideration of the distinction between UV and passive. For this reason, it is probably impossible at the current time to estimate how widespread the Indonesian type of symmetrical voice system might be in this region.

47.5.2 Voice – and lack of voice – in Eastern Indonesia

Turning east from Bali, we find that the use of voice morphology decreases and that languages become more isolating the further east we get. These tendencies are observed even in Sasak, Balinese’s closest (geographic) neighbour to the east. In Sasak the matrix verb is frequently preceded by an auxiliary which hosts a pronominal clitic that cross-references the

³³ Under the formal analysis that Legate proposes, the passive verb does not “agree” with its actor in the technical Minimalist sense. However, Legate concedes that on a descriptive level, this does seem like agreement (2014: 33): “It is clear that in a broad sense the prefix may be termed agreement: it is a dependent morpheme that registers the features of an argument” [specifically, in this case, person and politeness — PK&SR].

³⁴ Similar comments are made by Cole and Hermon (2008).

subject. An additional free subject NP is optional. Like Balinese, Sasak has verbal forms with nasal prefixes, and it has bare verb forms. The functional difference between these two, however, has been partly lost in some of the Sasak varieties, as illustrated in (43), where either *bace* or *mbace* ‘read’ can be used.³⁵

- (43) Sasak Ngeno-Ngené
aku jengke-ng=ku bace / mbace buku=ni
1SG PROG-LNK=**1** read N:read book=this
 ‘I am reading this book’ (Arka 2009b: 250)

As Arka (2009b) shows, however, there are certain contexts in which the difference between bare and nasal verb form is not neutralized. This is, for example, the case when an undergoer question word is fronted, as in (44). In this context, only a bare verb can be used. A parallel example to this can be found in Balinese, where clearly only the (bare) undergoer voice form, but not the actor voice verb can be used.

- (44) Sasak Ngeno-Ngené
*epe te Amir paleng / *maleng rubin?*
 what PART Amir steal N:steal yesterday
 ‘what did Amir steal yesterday?’ (Arka 2009b: 250)

- (45) Balinese
 a. *apa ane paling cai?*
 what REL UV:steal 2
 ‘what did you steal’
 b. **apa ane cai maling*
 what REL 2 AV:steal (Arka 2009b: 250)

Comparing (44) and (45), it seems tempting to analyse the bare verb in Sasak, just like the Balinese bare verb, as an undergoer voice verb. However, the interchangeability of the bare verb and the nasal verb shown in (43) speaks against such an analysis. When the actor is third person, the order shown in (43) is possible, but strongly marked. Rather than (46)a, speakers prefer the construction in (46)b, where the actor occurs as a clitic in preverbal position, and can furthermore be optionally realized as a PP.

- (46) Sasak Meno-Mené
 a. *inaq mu-n kelor sebie odaq*
mother PST-**3** eat chili green
 ‘mother ate green chili’
 b. *mu-n kelor sebie odaq isiq inaq*
 PST-**3** eat chili green **by** **mother**
 ‘mother ate green chili’ (Musgrave 1998: 92)

This construction might at first sight constitute another candidate for an undergoer voice construction (because the verb occurs in its bare form) or for a passive (because the actor occurs as a PP). Musgrave (1998), however, argues that the preverbal pronominal clitic remains the subject of this construction (see also Arka 2009b). Shibatani (2008), on the other

³⁵ Austin (2010: 96) notes that, depending on the verbal form, the non-subject argument receives either a specific (with nasal verb) or a non-specific (with bare verb) reading. The translation of (43) should thus be ‘reading this book’ for *mbace* and ‘reading (some) books’ for *bace*. He agrees, however, that the use of the two different verb forms does not mark a difference in voice.

hand, argues that the two clauses in (46) constitute what he calls ACTOR FOCUS and PATIENT FOCUS, respectively, in the same way as Balinese AV and UV (which he also calls AF and PF), and shows that they exhibit different relativization properties:

- (47) Sasak Meno-Mené
- a. *dengan nine* [saq Ø *kelor sebie odaq*]=no *inaq=ku*³⁶
 person female [REL eat chili green=that mother=1
 ‘the woman who ate the green chili is my mother’
- b. **sebie odaq* [saq *inaq mu=n kelor Ø*] *besar*
 chili green [REL mother PST=3 eat] big
 for: ‘the green chili which my mother ate was big’
- c. *sebie odaq* [saq *mu=n kelor Ø isiq inaq*] *besar*
 chili green REL PST=3 eat by mother big
 ‘the green chili that my mother ate was big’
- d. **dengan nine* [saq *mu=n kelor sebie odaq (isiq) Ø*]=no *inaq=ku*
 person female REL PST=3 eat chili green by =that mother=1
 for: ‘the woman who ate green chili is my mother’ (Shibatani 2008: 885f)

The status of these constructions thus remains unclear. It is, however, clear that if (46)a and (46)b were to constitute a difference in voice, we would be dealing with a voice alternation without morphological marking on the verb.

Sasak does, however, have a canonical passive construction, in which the verb is marked by the passive morpheme *te-* and the actor argument is realized as an oblique, introduced by the preposition *isiq*.

- (48) Sasak Ngeno-Ngené
aku te-pantòk isiq lók Ali
 1SG PASS-hit by ART Ali
 ‘I was hit by Ali’ (Austin 2010: 95)

Thus, even if the status of the alternation between constructions like (46)a and (46)b remains unclear, we find an alternation between an active (as in (43)) and a passive (as in (48)).

Turning further east and looking at Sumbawa, we find that (the use of) the nasal prefix is not only neutralized, but has been lost as a marker of transitive verbs altogether.³⁷ Sumbawa has an ‘active’ construction parallel to the one described for Sasak, i.e. with an actor subject cliticized to an auxiliary and optionally realized as a free NP, if first or second person singular. Third person singular, however remains unmarked, so in these contexts, clause structure will be simply NP V NP (see (49)a). The verb in this construction, as in Sasak, is morphologically unmarked, and just like Sasak, Sumbawa also displays a canonical passive, with a passivized verb and an oblique actor (see (49)b). In addition to that, however, a passive construction is also possible without morphological marking on the verb, as in (49)c. Here the patient occurs in (preverbal) subject position, and the actor is demoted to oblique, but the verb remains in its bare form.

³⁶ The auxiliary is optional in most contexts. Matt Shibatani (p.c.) informs us that the auxiliary + subject clitic *mu=n* can also occur in subject relatives like (47a).

³⁷ The nasal form is only used when the verb is formally intransitive (Wouk 2002: 300).

- (49) Sumbawa
- a. *Helmi sapu kamar ta.*
 Helmi sweep room DEM
 ‘Helmi is sweeping the room’
- b. *Ka-ajak-ku ling dengan-ku lalo ko Moyo.*
 PASS-invite-1SG by friend-1SG go to Moyo
 ‘My friend invited me to go to Moyo.’
- c. *Andi pikul ling Iwan.*
 Andi hit by Iwan
 ‘Andi was hit by Iwan.’ (Wouk 2002: 301, 302, 303)

Bima (Sumbawa, Flores), like Sumbawa, has different passive constructions with and without verbal morphology. To the east on Flores, languages like Rongga and Manggarai have this ‘bare’ passive (as illustrated in (49)c) as the only means of voice alternation (for examples see Arka and Kosmas (2005), Arka (2009b), and Arka and Wouk (2014)). That is, in these languages there is no verbal morphology to indicate voice on the verb. There is, however, clear demotion of the actor argument to oblique status, signalled by post-verbal position and prepositional marking.

In eastern Flores we find further attrition, with languages which exhibit voice alternations in which there is neither voice marking on the verb, nor demotion of the actor argument to oblique status. In these languages, the change of linking is solely achieved by a change in word order. Consider the examples from Sikka (Flores) in (50).

- (50) Sikka
- a. *Petrus gita ilin ia.*
 Petrus see mountain that
 ‘Petrus saw the mountain.’
- b. *Ilin ia Petrus gita.*
 mountain that Petrus see
 ‘The mountain, Petrus saw.’
- c. **Ilin ia toma gita é?i Petrus.*
 mountain that can see by Petrus (Arka & Wouk 2014: 318)

(50)a constitutes what Arka and Wouk (2014: 318) call the “active” construction in Sikka, in which the actor occurs in subject function and directly precedes the verb. In (50)b the undergoer is fronted into sentence-initial position. Importantly, however, the undergoer in this P-A-V construction is not simply topicalized into pre-clausal position, but is actually promoted to be the grammatical subject. The actor remains obligatory and, as illustrated in (50)c, cannot be demoted to oblique. Other languages reported to exhibit the kind of “structural” voice alternation illustrated in (50) are Lio (Arka & Wouk 2014) and Palu’e (Donohue 2005c). For Palu’e, Donohue (2005c: 77ff) argues that the P-A-V construction should be analysed as a passive, because the actor cannot launch floating quantifiers, which is a core-argument property in Palu’e. Arka and Wouk, on the other hand, show that the actor in this construction actually does show a number of core properties, such as, among other things, the ability to bind core reflexive arguments (see Arka and Wouk (2014: 319) for more details). They therefore conclude that the P-A-V construction in Palu’e should better be analysed as a (symmetrical) undergoer voice, similar to the undergoer voice in Balinese or Totoli (see §47.2.2).

In other languages of this region, such as Ke’o (Flores), Kambera (Sumba), or Waima’a (East Timor), there is no evidence for canonical passives or any other kind of voice alternations. To achieve the pragmatic effect of different voice constructions (i.e. foregrounding or backgrounding of different arguments), these languages make use of different strategies, such as topicalization, cleft-like structures, or other word order options similar to those found in Muna, illustrated in (40) in §47.4.2. Some of these are illustrated for Kambera in the examples below, where the first example shows unmarked word order with the object following the verb, while in the second example the object is “in focus” (Klamer 1998: 337) and occurs pre-verbally. Example (51)c is a cleft-like construction involving an object relative.

- (51) Kambera
- a. *na tau wútu na-palu-ka nyungga*
 ART person be.fat 3SG.NOM-hit-1SG.ACC 1SG
 ‘the big man hit me’
- b. *nyungga na-palu-ka tau wútu*
 1SG 3SG.NOM-hit-1SG.ACC person be.fat
 ‘I (was) hit by a big man’
- c. *nyungga [pa-palu-na nyuna]*
 1SG REL.O-hit-3SG he
 ‘I (am) (the one who) (was) hit by him’ (Klamer 1998: 337)

A lack of voice alternations has also been reported for most of the Central Malayo-Polynesian (CMP) languages of the Moluccas and the South Halmahera-West New Guinea (SHWNG) subgroup, i.e. the languages east of the Sundic Islands (cf. Musgrave (2007) for a general survey). Many of these languages use word order alternations, as illustrated for Kambera in example (51), while others use impersonal constructions to de-emphasize the actor and to shift the focus to the undergoer argument. Consider the example in (52) from Ambel, a SHWNG language of the West New Guinea branch in Raja Ampat, a group of islands north of the Bird’s Head.

- (52) Ambel
- a. *béle, y-asáw to, ape nik bisa pa,*
 cross-cousin 1SG-marry IAM but GEN.I-1SG wife ART
mé l-ál ki=i to
 person 3PL.ANIM-take EMO=3SG.ANIM.OBJ IAM
 ‘Cousin, I’m married, but my wife has been taken.’
 (or: ‘Cousin, I’m married, but as for my wife, people have taken her.’)
- b. *sehingga yé wa-lu-ma, l-úl an*
 so island DEM.CONTR-sea-DIST 3PL.ANIM-call 3SG.INAN
be Maurom a-pa
 OBL Maurom DEM.NCONTR-MED
 ‘So that island at sea there is called Maurom.’
 (‘So as for that island at sea there, they call it Maurom.’) (Arnold 2018a: 362, 363)

In both Ambel examples above the undergoer argument – *nik bisa pa* ‘my wife’ in (52)a, and *yé waluma* ‘that island at sea there’ in (52)b – occurs in pre-clausal position and is co-referential with the object pronoun of the clause. In (52)a, the subject of the clause is the generic noun *mé* ‘person’, in (52)b the subject is unspecified. In both cases, however, the

verb carries third person plural animate subject marking (cf. Arnold 2018a: 362). Other West New Guinea languages that, like Ambel, lack syntactic voice alternations, are Wamesa (Gasser 2014), Iraputu (Jackson 2014), and Woi (Sawaki 2016). Biak, on the other hand, is reported to have a passive, but one which is rarely used. As van Heuvel (2006) notes, not all Biak transitive verbs can be passivized. Furthermore, in his corpus of natural speech, passives only occur with 3rd person singular subjects (cf. van Heuvel 2006: 297). Much more widespread than this restricted passive construction are impersonal constructions, similar to the Ambel construction illustrated in (52)b, in which the actor argument remains unexpressed but the verb is marked with an impersonal 3rd plural subject marker (cf. Heuvel 2006: 297).

Taba, on the other hand, which belongs to South-Halmahera branch of the SHWNG group, exhibits a detransitivizing prefix. This prefix marks non-volitionality when applied to intransitive verb stems, but it also removes the actor argument from transitive verbs and thus derives intransitive undergoer verbs (Bowden 2001: 218ff), as illustrates in (53).

- (53) Taba
- a. *I nbhes niwi*
 i n=bhes niwi
 3SG 3SG=husk coconut
 ‘She husked the coconut.’
- b. *Niwi tabhes do.*
 niwi ta-bhes do
 coconut DETRANS-husk REAL
 ‘The coconut has been husked’ (Bowden 2001: 219)

To summarize this section, we can see a decrease in the use of voice morphology, and in the availability of voice alternations in general, the further east in the Indonesian archipelago we move. In the languages of Sumatra, Java, and Bali, we usually find an actor voice, an undergoer voice, and a passive. In Sasak (Lombok), the typical Austronesian nasal voice prefix is still part of the morphological inventory, even if its functional load is partly neutralized in some Sasak varieties. In Sumbawa (Sumbawa) this prefix has been lost. In addition to a prototypical morphological passive, Sumbawa displays a morphologically unmarked passive. Other languages, like Waima’a (East Timor) or Kambara (Sumba), have lost both the morphological and the syntactic means of voice alternation. Languages east of the Sundic Islands, i.e. the languages of the Moluccas and the SHWNG languages of Halmahera and New Guinea, display an (almost) complete lack of voice alternations (both morphological and syntactic).

47.6 Voice in Chamorro and Palauan

Chamorro and Palauan, spoken on Palau, Guam, and the northern Mariana Islands east of the Philippines in the Pacific Ocean, are the eastern-most outliers of the Western Malayo-Polynesian (WMP) linkage. Blust (2013a), who assumes a binary split of Malayo-Polynesian (MP) into Western- and Central-Eastern Malayo-Polynesian, considers both Chamorro and Palauan members of the former branch. Other, more recent approaches favour a ‘diverse’ model of MP, in which Chamorro and Palauan are two (of a number of) primary branches (Smith 2017b, this volume, chapter 2). Zobel (this volume) presents a third view.

This section provides some very basic information on the two languages, which have received contradictory treatment in the literature. In particular, it shows once again how any claim about alignment (nominative, ergative, symmetrical) crucially depends on transitivity and a detailed, language specific analysis of grammatical relations.

47.6.1 Chamorro

Chamorro can probably be best analysed as an asymmetrical voice language, similar to Mori Bawah described in §47.4.2. It has a morphologically unmarked active construction, a marked antipassive and two passive constructions. The antipassive is syntactically intransitive and patterns with ordinary intransitive clauses in its use of pronouns: only in intransitive, but not in transitive clauses pronominals vary depending on the mood of the clause (i.e. realis vs. irrealis).

- (54) Chamorro
- a. *hu-li?e?* *i* *lepblo*
1SG.ACTR-see ART book
'I saw the book'
- b. *man-(t)aitai* *yo?* *lepblo*
ANTIP.REAL-read 1SG.ABS book
'I read a book'
- c. *mam-(p)atek* *hao* *gi* *ga?lagu*
ANTIP.REAL-kick 2SG.ABS LOC dog
'you kicked at the dog' (Zobel 2002: 412, 413)

Just as in the Mori Bawah example in (39)b, the non-subject patient argument of the antipassive in (54)b has to be interpreted as indefinite or non-specific. However, with certain transitive verbs, a definite patient can be reintroduced, which then has to be marked by the locative marker *gi*, as in (54)c. This rather unusual construction is discussed in more detail for Palauan in §47.6.2. The two Chamorro passives, one marked by the infix *-in-*, the other by the prefix *ma-*, distinguish between singular actors and plural or undefined actor arguments (for pragmatic differences between these two passive constructions see Cooreman (1987), chapter 5).

- (55) Chamorro
- a. *si nana-hu* *ch<in>atge* *gias* *tata-hu*
ART mother-1SG.GEN <PASS>smile OBL father-1SG.GEN
'my mother was smiled at by my father'
- b. *todu na taotao ni mang-gaige Guam guihi na tiempo*
all LNK people REL PL-be Guam there LNK time
man-ma-takpangi
PL-PASS-baptize
'all the people that were in Guam at that time were baptized' (Cooreman 1987: 50)

The passive and antipassive analysis of clauses like (55) and (54)b is probably the most widespread approach in the literature on Chamorro (e.g. Chung 1982, 1994; Gibson 1992; Zobel 2002, chapter 38, this volume). Topping (1973), on the other hand, and later more explicitly Donohue & Maclachlan (2000), argue that Chamorro is a Philippine-type language with a (symmetrical) voice system similar to Tagalog (§47.3). Under their approach, the passive is analysed as an undergoer voice and the antipassive as an actor voice, while the transitive construction in (54)c is assumed to be an innovation without any Philippine-type voice morphology. Once again, much relies on the analysis of the non-subject argument. While Zobel and others argue that the undergoer in (54)c. is a prepositionally marked oblique, and we are thus dealing with an antipassive, Donohue and Maclachlan claim that it is marked "as

non-oblique (but not subject or object)” (Donohue and Maclachlan 2000: 123), and that this construction is therefore better analysed as actor voice.

47.6.2 Palauan

In many respects, Palauan is very similar to Chamorro, but there are a few morphosyntactic complexities that make the analysis of Palauan voice even less straightforward than that of Chamorro. Like Chamorro, Palauan distinguishes three different voice-like categories, but there has been little consensus as to how to interpret certain aspects of these constructions. In this section, we will contrast two approaches to Palauan verbal morphosyntax and briefly discuss them in light of our definition of voice given in the introduction to this chapter. Consider the following examples:

- (56) Palauan
- a. *ak kilisii a kiokl*
 ak k<il>ios-ii a kiok-l
 1SG.IRR <??>dig-3SG.OBJ ART dig-GER
 ‘I (completely) dug the hole’
- b. *ak milengiis a kiokl*
 ak **mile**N-kios a kiok-l
 1SG.IRR ??-dig ART dig-GER
 ‘I was digging holes’
- c. *ak milengiis er a kiokl*
 ak **mile**N-kios **er** a kiok-l
 1s.IRR ??-dig ?? ART dig-GER
 ‘I was digging the hole’ (Zobel 2002: 418, 419)

The first example is a transitive clause, in which object agreement is obligatory. The second and third examples look parallel to the Chamorro antipassives illustrated in (54)b and (54)c: both are unmarked for object agreement, and just as in Chamorro, the non-subject phrase is indefinite unless it is introduced by a preposition-like element. In contrast to Chamorro, however, the activity has to be interpreted as ongoing.

The two approaches we will discuss here differ (among other things) as to whether the difference between (56)a on the one hand and (56)b and c on the other hand, should be analysed as a difference in VOICE (active vs. antipassive), or as a difference in ASPECT (perfective vs. imperfective). Let’s first consider the second option, i.e., the approach that analyses *kilisii* and *milengiis* as perfective and imperfective forms of the verb *kios* ‘to dig’, respectively. This view is put forth in Josephs’ *Palauan Reference Grammar* (Josephs 1975; see also Wilson 1972; Georgopoulos 1991). In this analysis a perfective verb obligatorily carries an agreement suffix that marks its objects, and it is marked by a “verb marker” which is infixes after the initial consonant of the verb stem, if in realis mood.³⁸ Imperfective verbs also take this verb marker if in realis mood,³⁹ this time as a prefix, followed by the past tense marker (if past tense), followed by an imperfective marker. Imperfective verbs never take object agreement.

The alternative approach, represented by Zobel (2002; this volume), analyses (56)a as the active construction, and (56)b and c as antipassives, as we have seen for Chamorro. Under his analysis, *-il-* is the marker for active (past), and *mileN-* marks the antipassive (past). Both

³⁸ Note that this verb marker is replaced by the past tense and thus does not show in (56)a.

³⁹ Georgopoulos analyses the verb marker as a realis marker, because a verb without this marker is irrealis (Georgopoulos 1991: 26f).

analyses agree that the construction which involves the presence of an object-indexing suffix is truly transitive. It has an actor subject and a (definite) undergoer object, and can thus be considered to be the ‘active’ construction. The second construction is (semantically) less transitive in that the non-subject argument is either absent, or receives an indefinite, non-specific reading, as in (56)b. Interestingly, and rather unusually, this construction allows for the reintroduction of a definite non-subject phrase, marked by *er*, as in (56)c. Its imperfective semantics, however, might still give reason to consider this construction (semantically) less transitive than the active, as does the fact that unlike the active object, the patient argument is not cross-referenced on the verb. These observations would justify an analysis of these two clauses as antipassive constructions, parallel to the Chamorro analysis in §47.6.1.

Again, the relevant question is, what is the *syntactic* status of the two non-subject phrases in (56)b and (56)c? For the latter, the answer to this question crucially depends on the analysis of the element *er*. And again, there is little consensus in the literature. Josephs (1975: 52) postulates two homonymous words, a specific article, as in *er a kikul* ‘the hole’ in (56)c, and a preposition, as seen, for example, in a phrase like *er a Kuam* ‘from Guam’ (Georgopoulos 1991: 39). Georgopoulos (1991) and Zobel (2002; chapter 38, this volume) treat both instances as a preposition or oblique marker. This could be taken as evidence that the *er*-marked phrase in the apparent antipassive in (56)c is not a core argument, though neither Georgopoulos nor Zobel (2002) make this claim. Rather, Georgopoulos treats the use of *er* in (56) as an instance of differential object marking: definite objects are marked by the preposition *er*; other objects remain unmarked. She further notes that it also occurs in “various oblique phrases” (Georgopoulos 1991: 29). This view is also advocated by Nuger (2008; 2016), who offers the most detailed analysis of object marking in Palauan. Like Josephs, he distinguishes two homonymous elements: one preposition, which marks obliques, and one accusative marker, which marks direct objects (Nuger 2008: 20f). Nuger explicitly argues against the antipassive hypothesis and shows that both active and imperfective (apparent antipassive) verbs can equally well occur as matrix predicates in so-called *raising-to-object* constructions.

- (57) Palauan
- a. *ak mo rul-leterir [a re-chad er a Ekipten]_i*
 1SG=AUX.FUT make.PFV-3PL.HUMO [DET PL-person PREP DET Egypt]
el mo mengull er a re-ched-ak ___i.
 LNK AUX.FUT respect.IPFV ACC DET PL-person-1SG.GEN
 ‘I will make the Egyptians respect my people.’
- b. *kom mengiil [er a re-chad er a Ekipten]_i*
 2PL= expect.IPFV [ACC DET PL-person PREP DET Egypt]
el mo oltobed
 LNK AUX.FUT take.out.IPFV
a kuruma me a re-chad er a uos el mei ___i!
 DET chariots and DET PL-person PREP DET horse LNK come
 ‘You expect the Egyptians to send (you) chariots and cavalry!’ (Nuger 2016: 120, 121)

Under an antipassive hypothesis, so Nuger argues, the raising verb should not be able to appear in the imperfective/antipassive form, as it does in (57)b, because “if it cannot Case license a direct object, it should not be able to license the embedded subject of an infinitival clause complement either” (Nuger 2016: 120). Given that the non-subject arguments in (56)

behave syntactically alike, the difference between the a. example and the examples in b. and c. would indeed be an aspectual one, rather than a difference in voice.

47.7 Summary

Our survey of voice systems among the Malayo-Polynesian languages of Southeast Asia reveals several interesting points. First, these systems exhibit a strikingly broad range of variation. Second, a substantial number of these languages exhibit some form of the typologically unusual pattern referred to as “symmetrical” voice, which means that they are able to express semantically transitive eventualities in two (or more) different clause structures, both of which are syntactically transitive. Unlike more familiar voice alternations, such as active-passive or ergative-antipassive, these symmetrical voice systems are not valence decreasing.

We have made use of the widely cited distinction between Philippine-type and Indonesian-type voice systems, although, as discussed in §47.2.1, this dichotomy is not unproblematic. Especially for the latter category, it is difficult to provide a rigorous definition. Philippine-type voice systems are found not only in the languages of the Philippines but also in northern Sulawesi, northern Borneo, Taiwan, and (for some authors) Madagascar. These systems have a number of distinctive features, and for that reason have received a great deal of attention in both formal and typological literature. In both Borneo and Sulawesi we identified a cline along the north-south-axis from (more) Philippine-type to (more) Indonesian-type voice systems.

We have also illustrated how voice morphology, and voice distinctions in general, become more sparse when moving across Indonesia from west to east. While many of the languages of Sumatra, Java, and Bali display Indonesian-type symmetrical voice systems, the languages east of Bali gradually seem to lose this feature. Most languages of the Moluccas and the Austronesian languages of Papua have no voice alternations at all, but make use of other means to encode the prominence of arguments, such as word order alternations and impersonal constructions.

Finally, we have briefly described the voice systems of Chamorro and Palauan, the two eastern-most languages of the Western Malayo-Polynesian linkage. We note, however, that the data available for these languages, and even more so for the languages of eastern Indonesia, is sparse in comparison to the data and analyses available for major languages of the Philippines and western Indonesia.